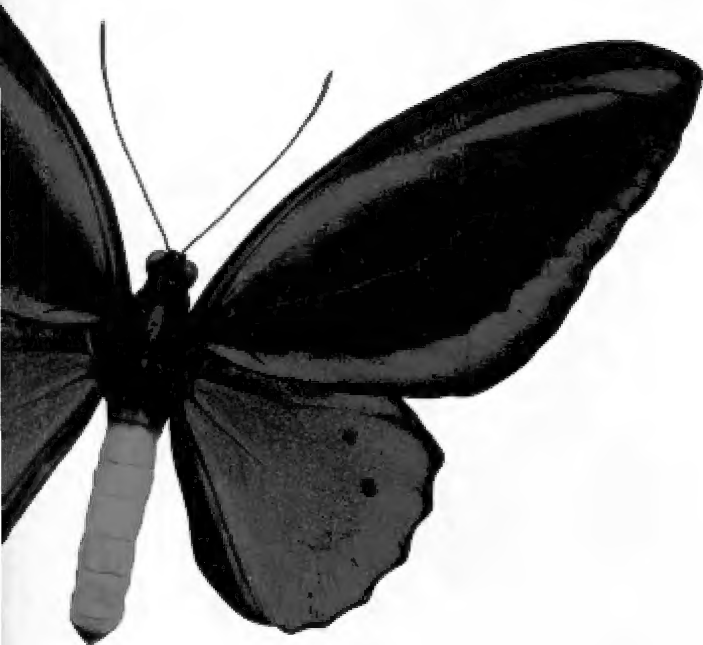


A TIME FOR A MUSEUM

The History of the
Queensland  Museum
1862-1986



Featured in the museum's logo and on the front cover of this volume is the male of Queensland's tropical Birdwing Butterfly, *Ornithoptera priamus*.

A TIME FOR A MUSEUM

The History of the
Queensland  Museum
1862-1986

PATRICIA MATHER

with N.H. Agnew (assistant editor), A. Bartholomai, R. Belcher, R.A. Coleman,
J.C.H. Gill, D.K. Griffin, G.J. Ingram, G.B. Monteith, M.C. Quinnell,
D.J. Robinson, I.G. Sanker, S. Turner, D.P. Vernon, E.P. Wixted, M.J. Wade.

Published as volume 24 of the *Memoirs of the Queensland Museum*

Dedicated to past directors of the
Queensland Museum, and to those who
worked with them, unremittingly, to
build a museum worthy of 'this great and
varied territory.....' (Board of Trustees
Annual Report 1879-80)

Previous page: The southern sky from the Darling Downs, where the first free immigrants to Queensland had taken up land in 1840 (photograph by courtesy Bryan Bridge).

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The Contributors

The authors of this history are all closely associated with the Queensland Museum. J.C.H. Gill is chairman of the board of trustees; D.P. Vernon is a long-time member of the staff now retired; E.P. Wixted is the museum librarian; N.H. Agnew is scientist in charge of materials conservation; D.K. Griffin is officer-in-charge of the education section; Susan Turner is an honorary associate; and architect R. Belcher is the museum display officer. Other authors are curators in the Queensland Museum. The design of the volume is the work of staff artist, Paul Ramsden.

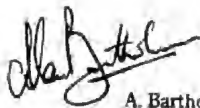
There are others who have helped. Janet Hogan of the Queensland Art Gallery read the manuscript and gave it careful and constructive appraisal. Professor S.A. Prentice contributed the account of the Queensland Hall of Science, Industry and Health Development Committee in Chapter 11; Peter Heyworth of the Historic Buildings Section of the Department of Works supplied information on the work done on the Gregory Terrace Building in Chapter 2; the discussion of the architecture of the Gregory Terrace Building was contributed by Teresa Robertson. Stephen Cook searched the museum's negative files and found many of the illustrations and he searched time books and correspondence files to help produce the list of staff in Appendix 2. Contributors have also benefited from the assistance of staff in Queensland State Archives, the John Oxley Library and the Parliamentary library.

Through his knowledge of the history of Queensland and of the museum, Daniel J. Robinson, curator of history and technology, has contributed to the accuracy of many sections of this work, and his copied and abstracted documents from museum and state archives have removed the necessity for many long searches. Donald P. Vernon, through his involvement with the museum spanning 36 years, his first hand experience and often participation in many of the events recounted, his sensitivity and understanding of the personalities involved and of the pressures and restraints that affected decisions of the time, has enhanced the quality and humanity of this history. Neville Agnew, as assistant editor, has contributed to style and consistency throughout.

In addition to her responsibilities as editor and her sole and joint authorship of a number of chapters, Patricia Mather has collaborated closely with the other authors. She has made a significant contribution to the content and presentation of all sections of the work and to the planning and co-ordination of the whole volume — from the inception of the project in November 1984 up to its publication.

The authors of each respective chapter are set out below:

THE STAGE IS SET — D.J. Robinson
SHEER WANT OF SPACE — P. Mather, R. Belcher
LOYAL AND ZEALOUS SERVICE — P. Mather
SHOW AND TELL — D. Vernon, B.M. Campbell
DIALOGUE — D.J. Robinson, D.K. Griffin
ALL THAT GLITTERS — I.G. Sanker
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IN PERPETUITY — A. Bartholomai
BIOGRAPHICAL NOTES — P. Mather (C. Coxen,
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(K.T. Staiger); S. Turner (H.A. Longman); D.P. Vernon
(K. Broadbent, G. Mack)
THE STAFF — P. Mather



A. Bartholomai
Director,
Queensland
Museum

Preface

In this, its 125th year, the Queensland Museum has opened in its new building in the Queensland Cultural Centre. The occasion is celebrated in this account of the museum's history—written principally by members of its staff, and published by its board of trustees as a special commemorative volume of the *Memoirs of the Queensland Museum*.

The museum was founded by the Queensland Philosophical Society on 20 January 1862 and right from the beginning the Queensland government was involved with its operation. The government had provided a room for the museum as well as a £100 grant to further the society's aims—and one of its principal aims was the establishment of a permanent, public museum. To this end the society had built up its own collections of natural history and was caring for mineralogical collections made by the government geologists. Although the government set up a display of this mineralogical material toward the end of June 1871, the Philosophical Society was reluctant to relinquish its responsibilities for that material until the terms of its custodianship had been satisfied—until a permanent public museum was erected. The society's scruples were removed when, in October 1871, the minister for Public Works appointed the Philosophical Society's vice-president—Charles Coxen—as honorary curator of the museum. The government had thus acknowledged its responsibility for staffing the museum—albeit by an honorary appointment—as well as providing its accommodation. Custodian Karl Theodor Staiger, the first permanent member of the museum staff, was eventually appointed by the government in 1873.

In the pages that follow, the commitments and endeavours of the men and women who served the institution are recounted. They worked to record and to understand the colony—ultimately the state—of Queensland and to bring that understanding to the people.

That their efforts were fruitful is evident in the Queensland Museum of today. It is an institution respected in the world of science as well as by Queenslanders from every corner of the state who use its services.

I congratulate the Queensland Museum on its past achievements and wish it an ever increasing measure of success and prosperity on the South Bank of the Brisbane River.



The Hon. Peter McKechnie MLA,
Minister for Tourism, National Parks,
Sport and the Arts.

Peter McKechnie

Peter McKechnie,
Minister for Tourism, National
Parks, Sport and The Arts



MEMOIRS OF THE QUEENSLAND MUSEUM

BRISBANE

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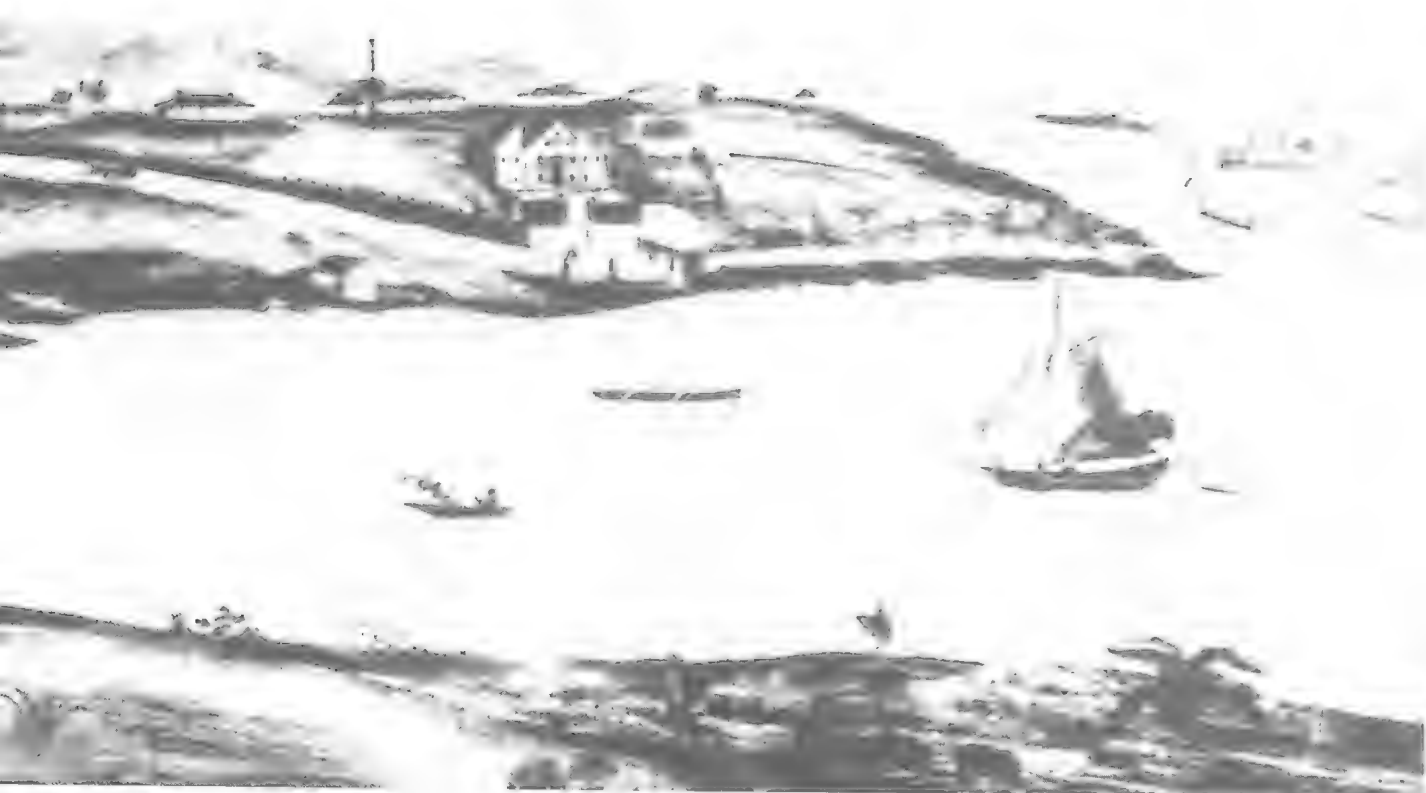
A Guide to Authors is displayed at the Queensland Museum web site

A Queensland Government Project
Typeset at the Queensland Museum

1

THE STAGE IS SET

Queensland
in the 1860s





The colony of Queensland was created on 6 June 1859. On that day it was separated from New South Wales by Letters Patent under the Seal of the United Kingdom of Great Britain and Ireland, and over the signature of Queen Victoria¹. Sir George Ferguson Bowen KCMG was duly appointed governor. On arrival in its capital, Brisbane, some five months later, on 10 December 1859, he proclaimed the colony and set about the appointment of the first parliament.

For 18 years this frontier of Queen Victoria's empire, that was to become Queensland, had been growing. The operation of the Moreton Bay penal settlement was being wound up from 1839², and in 1842 Captain Wickham RN had become police magistrate of the newly proclaimed free town of Brisbane. Settlers, previously excluded from the area within a 50 mile radius, could now use Brisbane's port facilities, and many moved north from New South Wales to join the first pioneers in taking up the rich agricultural and grazing lands that were known to exist on the Darling Downs and to the north. Between 1842 and 1862 there were also many settlers who came direct from Europe to this northern district of the colony of New South Wales—Moreton Bay. The new settlement was fortunate in the quality of its immigrants for many were men of ability,



Previous page: Brisbane 1830. The Windmill, later to become the first home for the museum, is on the skyline. To its right is the Convict Barracks building that was to be the museum's second home (painting, by Cedric Flower after a contemporary sketch in the Mitchell Library, in the Civic Art collection. Reproduced by courtesy of the Brisbane City Council).

energy and some means. Some of the outstanding leaders in the community had arrived in one or another of the three ships chartered by Dr John Dunmore Lang, who had returned to Europe in 1840 with a vision of a new England in the South Seas. He set out to induce 'skilled and scholarly men of sound moral and religious principles'³ to migrate to what he referred to as 'Cookslant'—Moreton Bay. Not content with mere representation in the parliament in Sydney, these men worked successfully for separation and the constitutional autonomy of an independent colony. Primarily they were motivated to achieve the just and democratic regulation of property.

Like other parts of Australia, Queensland was dominated by its urban communities. It was a product of the industrial revolution^{4,5}. Instead of taking up land for farming and grazing, many newcomers had settled in the towns, becoming merchants and traders, manning the ports, and starting industries to serve the growing urban and rural communities. Even the pastoral and agricultural ventures were run as businesses rather than the feudal peasant farms from which European communities had developed.

At the time of separation from New South Wales there were about 28,000 Queenslanders of European origin. About half lived in the country,



Sir George Ferguson Bowen KCMG, captain general and first governor of the colony of Queensland.

St. Patrick's Tavern, east side of Queen Street, Brisbane, between Edward and Albert Streets, about 1860 (photograph by courtesy Monier Roof Tiles).



The Reverend John Dunmore Lang who persuaded many of the 'skilled and scholarly men', who subsequently became leaders of the Brisbane community, to migrate to Cooksland—Moreton Bay—before its separation from New South Wales.



The Hon. R.G.W. Herbert, first colonial secretary and premier of Queensland.

scattered over an area that extended north to Rockhampton and inland about 250 miles. The other half were equally divided between Brisbane-Ipswich and the smaller provincial towns⁶.

Work was plentiful everywhere and property ownership was high. Graziers, in particular, were desperately short of labour but there was also a sound level of employment in the cities. Schemes that were suggested to supply a cheap work force included reintroduction of convict transportation or importation of labourers from India or China. These ideas were not developed. Efforts were made, however, to attract migrants from Great Britain. On 9 October 1860, on the recommendation of a Select Committee on Immigration, a certain Henry Jordan was appointed as Queensland's representative in London to encourage immigration. The enticements offered were grants of land under a land order system, and an assisted passage scheme. It was a very active public relations programme that Jordan pursued. In his final report he stated that between January 1861 and December 1866 he had delivered 192 lectures to a total audience of 161,200 people and had despatched 85 ships carrying 35,725 persons⁷—more than 20% of the number he had addressed.

The Queensland government also sent a representative—John Heussler—to Europe to recruit migrants under the land order system. Dr Lang, the influential supporter of immigration, strongly supported the idea of having some from Germany. Heussler himself had come from Germany, so it was not surprising that most of the migrants he recruited came from that country—where political unrest made his job easier⁸. Many of the Germans who came to Queensland had a farming background, and rather than remain in the towns as many of Jordan's settlers did, they chose to settle in rural areas⁹.

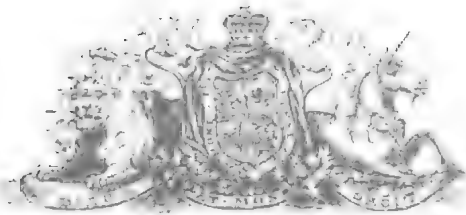
Governor Bowen reported on the Queensland of 1860 in glowing terms—thereby increasing the influx of immigrants: public revenue was nearly three times the average of that for Great Britain; housing was generally of a good standard¹⁰. Again quoting Bowen—after his trip to the Darling Downs in 1860:

I have also found in the houses of the long chain of settlers who have entertained me with such cordial hospitality, all the comforts and most of the luxuries and refinements of the houses of country gentlemen in England¹¹.

It was an exciting time as this great flood of migrants poured into Queensland. Most came to make their fortunes and many believed that this could be done through the acquisition of land.

However, there were few people with experience of either government or politics. To make up for the lack of a legislature, Queenslanders had adopted, enthusiastically, the use of public meetings to resolve political differences¹². Brisbane had elected its first municipal council only two months before the governor's arrival¹³, so experience, even at a local government level, was lacking.

When Bowen arrived in Brisbane and proclaimed separation from New South Wales, a public service had to be created and legislation enacted. As an interim measure, the first Executive Council and legislature were not elected but were appointed by the governor. As premier, Bowen appointed 29 year-old R.G.M. Herbert who had accompanied him to Queensland. Despite his youth and lack of local experience, Herbert was well qualified for the job, for he previously had been Gladstone's private secretary and had a knowledge of government that was rare in the colony¹². The first elections for the Legislative



QUEENSLAND
Government Gazette.

PUBLISHED BY AUTHORITY.

No. 1.] SATURDAY, 10 DECEMBER, 1859.

PROCLAMATION.

By His Excellency SIR GEORGE FERGUSON BOWEN, Knight Commander of the Most Distinguished Order of St. Michael and St. George, Captain-General and Governor-in-Chief of the Colony of Queensland and its Dependencies, and Vice-Admiral of the same, &c., &c., &c.

WHEREAS by an Act passed in the Session of Parliament holden in the eighteenth and nineteenth years of the Reign of Her Majesty, entitled, "An Act to enable Her Majesty to assent to a Bill as amended of the Legislature of New South Wales to confer a Constitution on New South Wales, and to grant a Civil List to Her Majesty," it was amongst other things enacted that it should be lawful for Her Majesty, by Letters Patent, to be from time to time issued under the Great Seal of the United Kingdom of Great Britain and Ireland, to erect into a separate Colony or Colonies, any territory which might be separated from New South Wales, by any alteration therein was mentioned, of the northern boundary thereof; and in and by such Letters Patent, or by Order in Council, to make provision for the Government of any such Colony, and for the establishment of a Legislature therein, in manner as nearly resembling the form of Government and Legislature which should be at such time established in New South Wales as the circumstances of such Colony will allow; and that full power should be given in and by such Letters Patent, or Order in Council, to the Legislature of the said Colony, to make further provision in that behalf. And whereas Her Majesty, in exercise of the powers so vested in Her Majesty, has by Her Commission under the Great Seal of the United Kingdom, bearing date the sixth day of June, in the year of our Lord one thousand eight hundred and fifty-nine, appointed that from and after the publication of the said Letters Patent in the Colonies of New South Wales and Queensland, the Territory described in the said Letters Patent should be separated from the said Colony of New South Wales and be erected into the separate Colony of Queensland: Now, therefore, I SIR GEORGE FERGUSON BOWEN, the Governor of Queensland, in pursuance of the authority invested in me by Her Majesty, do hereby proclaim and publish the said Letters Patent in the words and figures following, respectively.

QUEENSLAND.

LETTERS PATENT erecting Moreton Bay into a Colony, under the name of QUEENSLAND, and appointing SIR GEORGE FERGUSON BOWEN, K.C.M.G., to be Captain-General and Governor-in-Chief of the same.

VICTORIA, by the Grace of God, of the United Kingdom of Great Britain and Ireland, Queen, Defender of the Faith, to Our trusty and well-beloved SIR GEORGE FERGUSON BOWEN, Knight Commander of Our most distinguished Order of St. Michael and St. George.

GREETING:

WHEREAS, by a reserved Bill of the Legislature of New South Wales, passed in the seventeenth year of our reign, as amended by an Act passed in the Session of Parliament holden in the eighteenth and nineteenth years of our reign, entitled, "An Act to enable Her Majesty to assent to a Bill, as amended, of the Legislature of New South

Wales, to confer a Constitution on New South Wales, and to grant a Civil List to Her Majesty," it was enacted that nothing therein contained should be deemed to prevent us from altering the boundary of the Colony of New South Wales on the north, in such a manner as to us might seem fit; and it was further enacted by the said last recited Act, that if We should at any time exercise the power given to Us by the said reserved Bill of altering the northern boundary of our said colony, it should be lawful for Us by any Letters Patent, to be from time to time issued under the Great Seal of our United Kingdom of Great Britain and Ireland, to erect into a separate Colony or Colonies any territories which might be separated from our said colony of New South Wales by such alterations as aforesaid of the northern boundary thereof, and in and by such Letters Patent, or by Order in Council, to make provision for the Government of any such separate colony, and for the establishment of a Legislature therein, in manner as nearly resembling the form

Proclamation of the colony of Queensland.

Assembly were held on 27 April 1860¹⁴. The right to vote was limited to males and was based on the ownership of property. The success of Queensland's early settlers in acquiring property is evident in the fact that the percentage who voted was almost as great as that in New South Wales, where property ownership was not a prerequisite.

The traditional view of Queensland political life at the time of separation has been one of conflict between conservative squatters in the country and town liberals. However, since 'all classes were aiming at the acquisition of property and the removal of all obstacles thereto'¹², the real political activity was that of 'faction among different types of property owners, rather than of growing party schism on a basis of principle'¹². Because the worker still hoped to become a property owner there was no strong Labour movement in local political life—though the beginnings of this show in the arrival of the eight hour day movement in Brisbane in March 1861.

In the first session of the Queensland parliament, four Land Bills were passed, defining the conditions under which pastoral and agricultural land could be held¹⁵. The first sections of the public service to be set up were land titles offices, a survey office, and a police force. Thus the taking up of land had been expedited. Law and order now could be enforced. Communities were becoming affluent and stable.

In the first four years the Queensland population had more than doubled⁶. By 1864 there were 37,710 Queenslanders who had come from Great Britain and 9,592 had been born in the colony, 7,205 had come from other Australian states and New Zealand and 6,360 were foreigners⁶. Foreigners included 4,395 German immigrants, some of whom had set up a mission to the Aborigines at Zion Hill, Nundah, in 1838 and stayed on as settlers after the failure of the mission. From 1861 on there was a regular flow of migrants from Germany and other parts of war-torn and depressed Europe¹⁶. Trade and commerce, skilled artificers, providers of food, drink and accommodation, and hired servants accounted for almost 25% of the workers between the ages of 15 and 60. Approximately 25% were women engaged in unpaid domestic duties, and there was a handful, 3%, of public servants, legal, clerical and medical men and teachers. More than 25% of



A view from Wickham Terrace looking southwest, in the year of separation from New South Wales—1859 (photograph from *Queensland 1900*, Alcazar Press, Brisbane).

the 40,000 people of working age were engaged in agricultural or pastoral activities, reflecting the popular belief in land as the way to fortune.

At the same time, the Aborigines, whose tribes had occupied this land for more than 40,000 years, were dispossessed. Timbergetters, graziers and farmers excluded them from traditional hunting grounds, and tribal boundaries and the fabric of the ancient ways of life were breaking down. In May 1860 Governor Bowen reported on the distribution of clothes and blankets to Aborigines. The occasion was the Queen's birthday and 'about 500 Blacks of different clans and speaking different dialects had assembled'¹⁷ from their camps around Brisbane, including the present day suburbs of Toowong, Enoggera, Alderley and Clayfield¹⁸. By 1870 many of the Aboriginal traditional ceremonies had died out and many of the people had succumbed to European diseases — such as smallpox, measles and venereal disease — to which they had no natural immunity.

In their single-minded pursuit of the development of the economic welfare of their colony, and of their own fortunes, the settlers were excluding the ancient people who had occupied the land before them. As newcomers they were ignorant and careless of the evidence of Aboriginal cultures and were alienating large parts of the natural environment. The level of education in the Queensland of the early 1860s was, by present standards, low and the people, mostly, seemed not to recognise their impact on both the indigenous people and the natural environment of the land they had occupied.

At separation in 1859 there were two national schools, one at Drayton and one at Warwick. The Brisbane National School opened at the end of the year. In addition to these government operated schools there were six run by the Church of England, four by the Roman Catholic Church, and over 30 private schools, some with church affiliations, in the colony¹⁹. The 1864 census listed 17,893 students, but of these 13,814 were receiving tuition at home and only 5,079 were attending school. Nevertheless, the 1864 census statistics on literacy indicate that only 38,409 of the 61,467 people in Queensland could read and write. It was not until 1870 that fees at state schools were abolished, leading to a considerable increase in school attendance. Secondary education did not come to Queensland until



the Ipswich Grammar School was established in 1863. It was followed by Brisbane Grammar School in 1869²⁰.

Fortunately, there were some who were not insensitive to their adopted land and its native people, both of which were being changed so radically and abruptly. At this time, there was wide European interest in Australia and all things Australian. The early collecting efforts by Sir Joseph Banks in northern Queensland had created an avid interest in its plants, animals and inhabitants. This interest was reflected in the enthusiasm of the great museums of Europe for acquiring collections of material from Australia; and it filtered through to those who lived in the new colony, some of whom, no doubt, felt pride in their remarkable environment that was the subject of so much international attention. The settlers could not fail to be impressed that scientists invariably accompanied expeditions of exploration—for instance, the North Australian Expedition led by A.C. Gregory, setting out from Brisbane in August 1855, included a geologist, a botanist, a naturalist and a collector²¹. Charles Coxen, the founder of the Queensland Museum, was certainly influenced by the visit of his brother-in-law, the famous naturalist, John Gould, who came on a collecting trip to New South Wales in 1839²². Governor Bowen, a scholarly man who had been president of the University of Corfu, and who was an enthusiastic supporter of exploration and scientific study, wrote to Newcastle expressing the hope 'hereafter to be the promoter of exploring expeditions which, while developing the almost unlimited resources of Queensland, will add new conquests to Civilization and to Science.....'²³. Many of the early settlers, such as those who had arrived as migrants under the auspices of Dr Lang, had received a broad, general education in Great Britain. They may have known something of natural history studies and understood the excitement

Looking south along Queen Street from Edward Street, Brisbane, in 1860. The Parliamentary building—originally the Barracks building—that became the second home for the museum is at the top of the street on the right (photograph from *Queensland 1900*, Alcazar Press, Brisbane).



associated with Charles Darwin's theory expressed in the *Origin of Species* published in November 1859.

Thus, in this Queensland community — otherwise so intent on property and profit — there existed a nucleus of settlers who were aware of their unique inheritance and, in an otherwise raw colony, sought intellectual stimulation and a cultural focus. When Charles Coxen and others formed the Queensland Philosophical Society²⁴ in March 1859, these people were brought together. They shared strong interests in the science and technology of the day, and considerable curiosity about Australia and a desire to understand it and its Aboriginal people. The government gave temporary use of rooms in the Windmill on Wickham Terrace and a grant of £100 in 'furtherance of the aims of the society' and, toward the end of January 1862, the Philosophical Society began to display its collections²⁵. The press of the day reported on the event, the *Moreton Bay Courier* stating:

A large room has been set aside in the Windmill to receive contributions of specimens of natural history for classification and arrangement. It is to be hoped this will provide the nucleus of a Queensland Museum. This followed action by the Philosophical Society²⁶.

So, the Queensland Museum was founded on 20 January 1862, two years after the colony had been proclaimed²⁷. It was operated by the Philosophical Society with some assistance from the government until, from 1871, the government assumed the primary responsibility for it²⁸. The windmill overlooked a Brisbane that was a scattered assembly of buildings set along dirt streets and dominated by churches and a few structures of more than one storey²⁹; and —

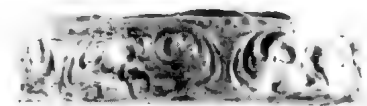
looking towards the western suburbs, little could be seen but forest trees, with an occasional patch of cleared ground, cultivated for the production of maize, potatoes, pumpkins and lucerne, while the banks of the small creeks which entered the river on the Milton Reach held tangled vine scrub³⁰.

In December 1862, with 29 members, the society elected its first office bearers — the governor, Sir George Bowen, president; Coxen, vice-president; and a council of five that included H. Rawnsley and S. Diggles³¹ — and its first report was read, in which were stated its intentions in regard to the museum:

to procure a site for a permanent Museum in such a location as shall be accessible to those who desire to consult the specimens and preparations it may contain, and also to render the collections as complete and valuable as the means at the disposal of the Society will admit of³².

Many citizens, beginning to appreciate their unique environment, donated items to the society, and in due course the museum became a scientific and cultural focus for residents and visitors to the colony. In fact, until the university was founded in 1910, it was the only scientific institution in Queensland.

In New South Wales the Sydney Colonial Museum had been established in 1829 with the appointment of a carpenter, W. Holmes, as custodian — the same man who in 1831 was accidentally shot and killed while collecting at Moreton Bay³¹⁻². Five years after its foundation, its name 'Colonial Museum' was changed to the 'Australian Museum'. This name, which the New South Wales state museum — the largest and oldest of all the state museums — retains to this day, reflects the history of the



Ceramic medal celebrating the proclamation of Queensland. The medal is in the museum's collection.

settlement of Australia³¹. It seems likely that the men responsible for the establishment of the Queensland Museum had some of their guidance from the museums of Europe, especially from the British Museum. However, despite the six to eight days sailing time between Sydney and Brisbane, there were ties and communication with the museum in Sydney. Although Charles Coxen had sent collections of birds back to the London Zoological Society and the British Museum, he also sent material to the Australian Museum³¹; and while in Sydney in 1839 John and Elizabeth Gould had stayed with Dr George Bennett—the honorary secretary of the Australian Museum—before their four months long visit to Elizabeth Gould's brothers, Charles and Stephen Coxen, on their property near Scone, NSW³³. From 1861 under the effective direction of Gerard Krefft, and accommodated in its handsome building, the Australian Museum did, indeed, provide a model for the Queensland colonists to emulate³¹. After he had visited it in 1871, when the fledgling Queensland Museum occupied two small rooms in the Parliamentary building, Silvester Diggles 'longed



'Pastoral tenant of the Crown'—building a new homestead (from a hand-coloured photograph by Richard Daintree in the museum's collection).

for the time when we should have a similar library and a similar museum established amongst us in Brisbane'³⁴.

The realisation of the Philosophical Society's aspirations for its museum was not immediate. There were more pressing priorities that reflected the needs of the majority of the voters. Although the general impression was one of prosperity and rapid progress, not everything was satisfactory. Many of the migrants attracted to Queensland by Henry Jordan's activities in England were less than content, as an anonymous composition shows:

Now Jordan's land of promise is the burden of my song,
Perhaps you've heard him lecture, and blow about it strong;
To hear him talk you'd think it was a heaven upon earth.
But listen and I'll tell you now the plain unvarnished truth.

Here snakes and all vile reptiles crawl around you as you walk,
But these you never hear bout in Mr Jordan's talk;
Mosquitoes, too, and sandflies, they will tease you all the night,
And until you get colonized you'll be a pretty sight.

To sum it up in a few short words, the place is only fit
For those who were sent out here, for from this they cannot flit.
But any other men who come a living here to try
Will vegetate a little while and then lie down and die³⁵.

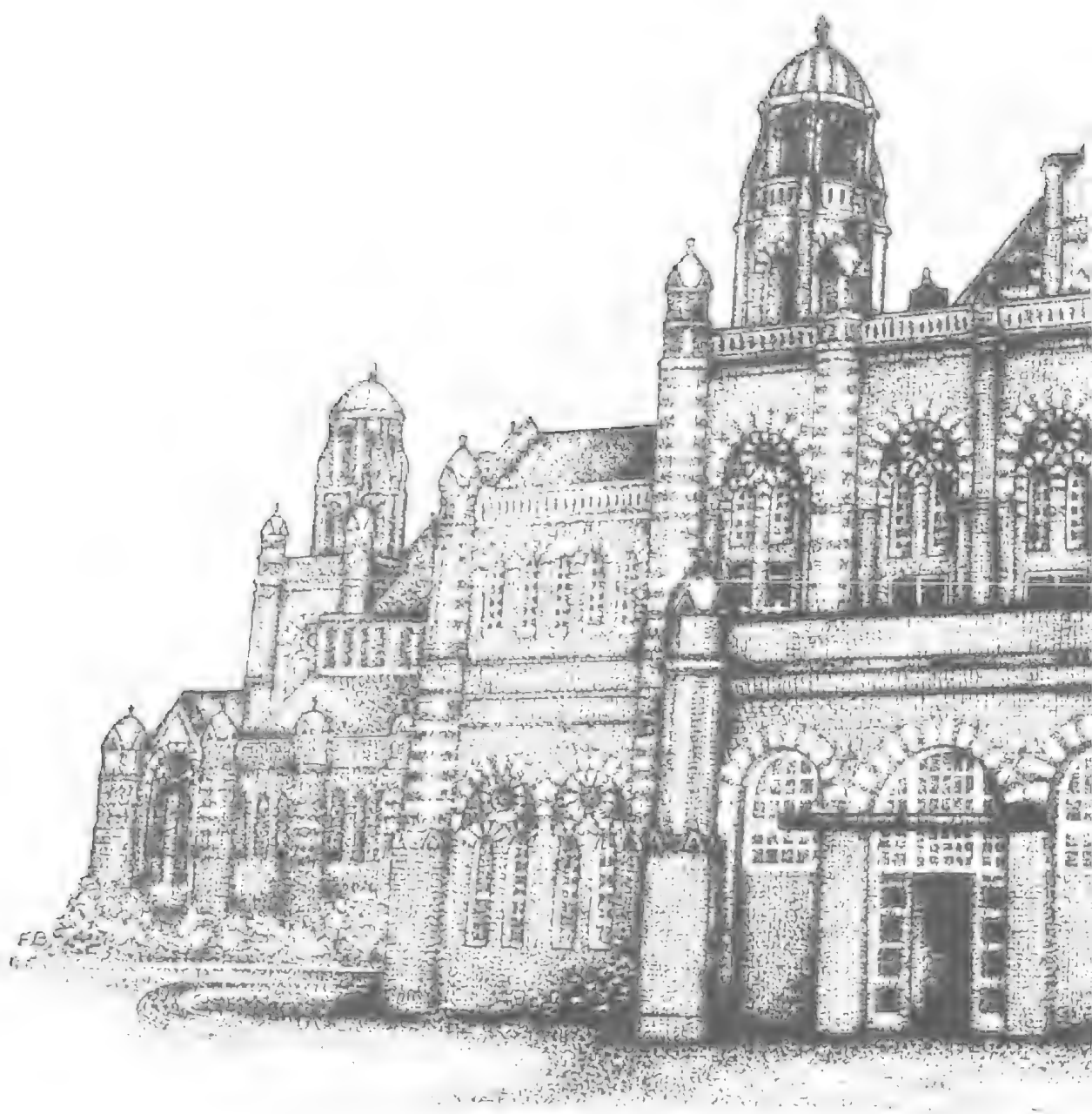
Accommodation was one of the main problems. In 1864, there were reported to be 2473 dwellings in Brisbane, of which 383 were brick, 1923 were of sawn timber, 150 were slab and 15 were aboard vessels⁶. The *Courier* referred to 'the want of decent house accommodation at a reasonable rent.....' and 'paltry humpies which are neither air-tight nor water-tight in flooring, walls or roofs.....'³⁶. Parts of Elizabeth and Queen Streets were described as 'an open cesspool'³⁷. The further one moved from Brisbane, the rougher the dwellings became and the quality of other amenities deteriorated. The lack of public sanitation was to lead to a rapid deterioration in health. Already in 1857 typhoid fever was occurring in Brisbane³⁸. Conditions deteriorated during the following two decades to the extent that in 1878 Brisbane suburbs were recording an infant mortality rate of 47%. Typhoid was not controlled until the epidemic of 1884 led to the *Public Health Act 1884* which resulted in gradual improvements³⁹.

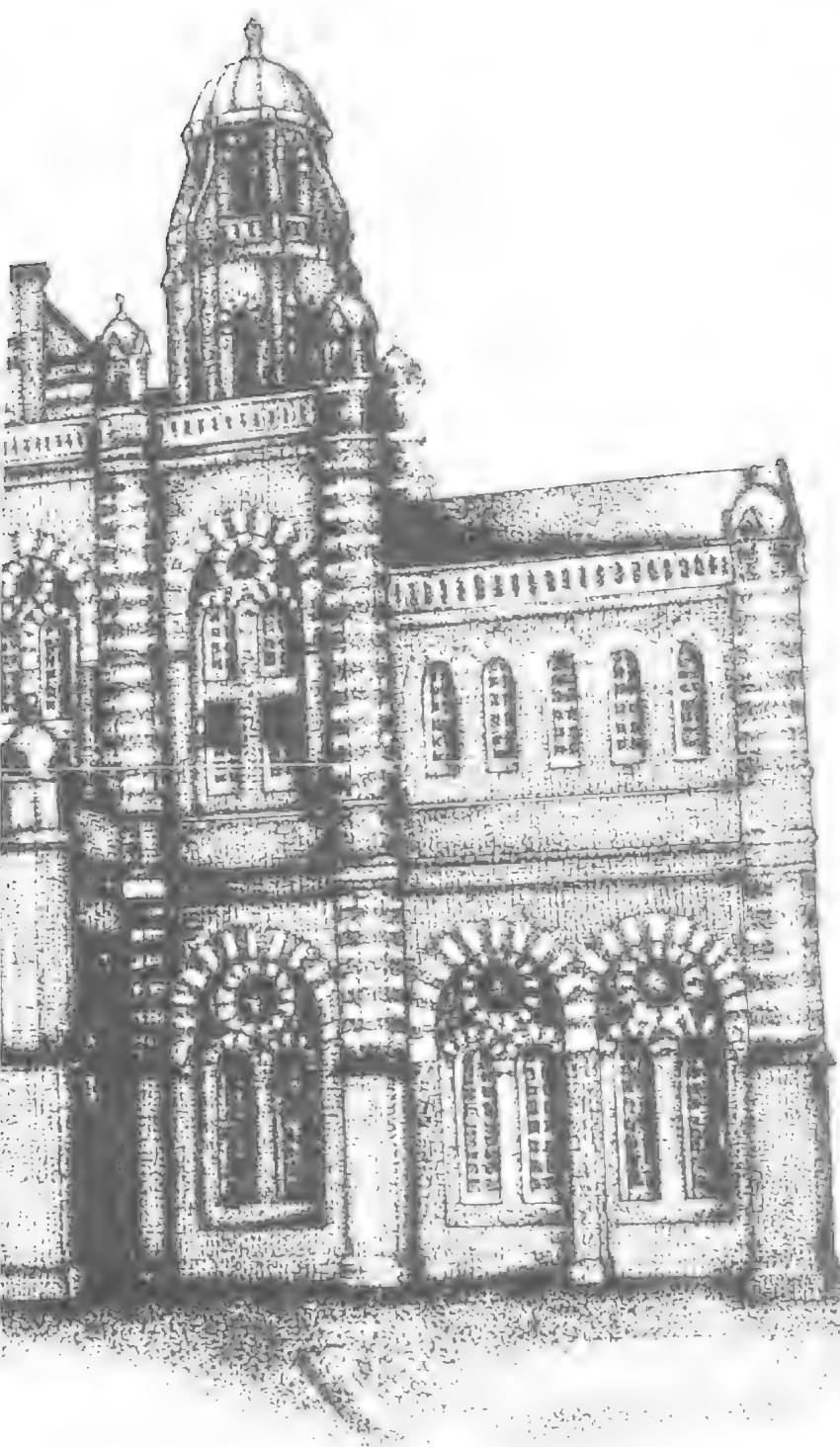
It is not surprising that the government took no strong interest in developing the museum until, during the mineral booms of the late 1860s, it was persuaded that displays of minerals could help prospectors in their identification of further profitable discoveries.

It was a slow development, from that beginning on 20 January 1862, to this Queensland Museum of 1986. As we trace its history in the pages that follow, the museum of today, from its new home on the south bank of the Brisbane River, pays its tribute to the relatively small band of men and women who are part of that story. They are the staff members of the museum, and supporters and friends in public life and from amongst the general public. They worked, often in political and social environments that understood neither the need for, nor the role of a museum; and they worked through years of economic depression, poorly paid and in understaffed and inadequate buildings with few facilities and little equipment. Nevertheless, from the beginning, they made a contribution to knowledge and to the quality of life in this state. It is not a new museum that you see today, but one that has come of age, that was conceived by the Philosophical Society in the Brisbane of 1862.



Midday Camp (from a hand-coloured photograph by Richard Daintree in the museum's collection).





2

SHEER
WANT OF
SPACE

Museum
Buildings



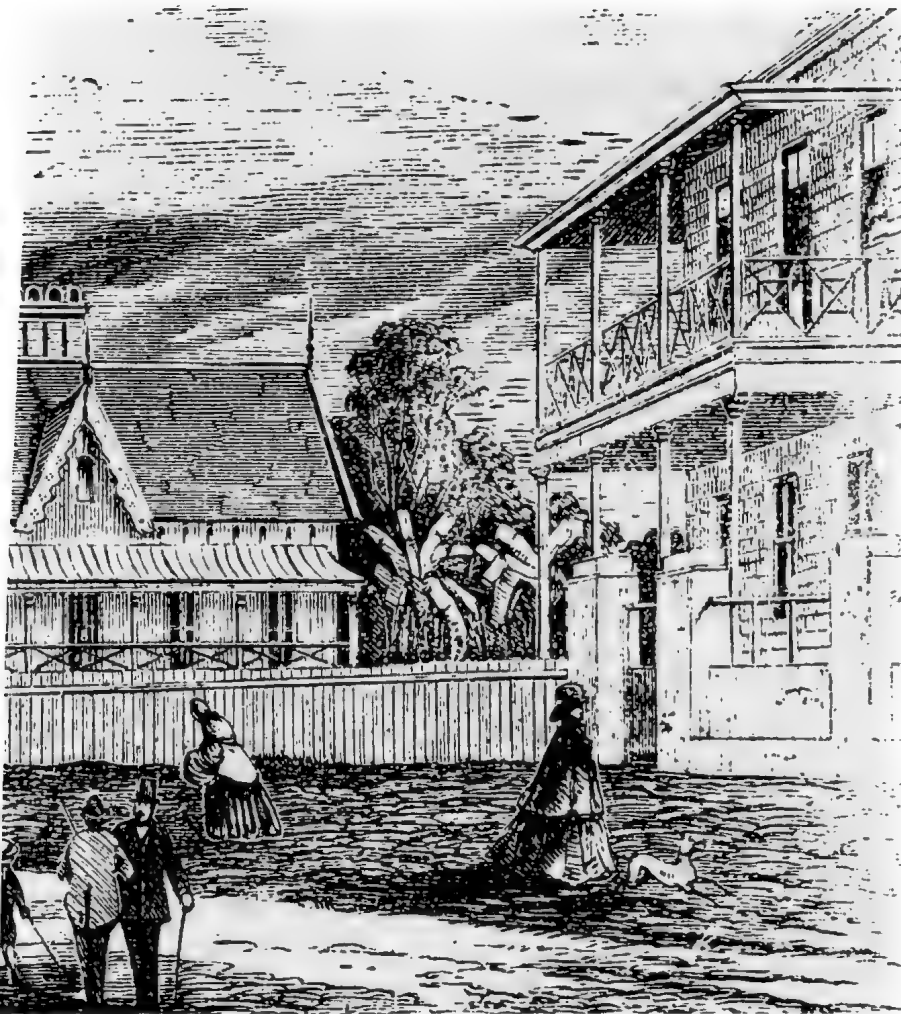
Through the 125 years of its history, from 1862 to 1986, the Queensland Museum has had many homes. Only twice—once in 1879 and now, in 1986—have buildings been designed and built specifically for it. Perhaps the institution's drive and vitality grew from the efforts and personal commitments that were needed to make its second-hand accommodation functional. Despite inconveniences caused by a sometimes critical unsuitability for museum purposes the buildings reflect the development of Brisbane from a convict settlement to the large modern city that it is today.

The Windmill

The first housing for the fledgling Queensland Museum, triumphantly announced by the *Moreton Bay Courier* in January 1862, was a 'large room..... in the Windmill'¹. In December 1862 the Philosophical Society, in its first report, refers to the 'temporary' space granted to it by the government for the 'nucleus of a museum of natural science' in the 'Windmill Tower'. It was modest accommodation indeed.

The Windmill still stands, high on Wickham Terrace, overlooking the city in which it is the oldest surviving building and now one of only two that remain from the penal settlement, the other being the Commissariat

Previous page: The Exhibition building.

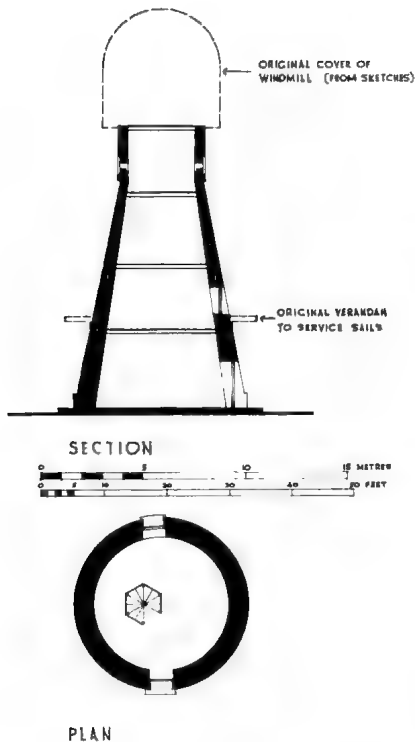


The Windmill, 1865. It was already operating as a telegraph and signal station and the Philosophical Society's museum had been installed there from 1862 (wood engraving first published in the Australian Journal 1868. By courtesy John Oxley Library).

Store. It was built between 1827 and 1828 under Commandant Logan to grind the colony's corn and wheat^{2,3}. Because of inadequate maintenance and repair it did not perform properly under the prevailing winds and often it was out of service altogether. Therefore a treadmill to be worked by convicts was erected beside it. The treadmill could accommodate up to 25 convicts at one time, but was operated by as few as six when used as punishment². However, as there was no resident millwright in Brisbane, things often went wrong, and then it was necessary to send to Sydney for a convict millwright to carry out repairs. This could take several weeks as the sea journey each way took from six to eight days under favourable sailing conditions. In 1835 the windmill completely broke down. Some months later—

On the 20th February 1836 lightning struck the upper most arm of the Windmill, shattering to pieces the sweep and backstock, and entering the Tower by the opening for the windshaft, in its descent struck the spur wheel tearing away all the brackets, bursting 2 arms and one of the quarters of the wheel and descending onto the platform floor, broke the Treadmill hopper to pieces and bursting open all doors that way escaped³.

Such severe damage was not repaired for a long time. It was May 1837 before both the windmill and treadmill were working again. Later



PLA N
The Windmill—architectural drawings (redrawn from dimensions in Steele, 1975 ?).

that year the newly appointed foreman of works in the penal settlement, Andrew Petrie, arrived from Sydney and discovered that the machinery had never been properly assembled. That was probably the reason for it being in continual need of repair².

The windmill appears to have become derelict between 1841 and 1849 and was advertised for sale—for removal. However, then, as now, there were people who wanted to preserve their city's landmarks. The *Moreton Bay Courier* observed on 8 December 1848 that—

we are glad to learn that an effort is to be made to secure this building for the public. It would be a great pity to destroy a structure which.....adds so much to the picturesque beauty of the town.

Later, on 5 January 1850, under the headline 'Another Appeal for the Old Windmill', that same newspaper in 'advocating its preservation' quotes 'for cursed is he that removeth his neighbour's landmark'³. Apparently the government retained possession and it was not pulled down. In 1855 there is a suggestion that the tower be a signal station and in October 1861 its conversion for use as a telegraph as well as signal station was complete³. The conversion was planned by colonial architect Charles Tiffin, a prominent member of the Philosophical Society. Tiffin submitted his estimates to the principal under secretary on 20 February 1861 for—

removal of old arms, wheels, top and other ponderous timbers inside, laying floors on each storey, putting in new doors and windows and a new weatherproof floor on top with iron railing, a new staircase or ladder from bottom to top, repairing the stone and brickwork and plastering, building two brick rooms for keeper 12 feet by 12 feet each with water closet and fencing a small triangular plot of ground to make the whole complete³.

So when the Philosophical Society's museum was set up in its large room in the windmill tower, it was a fully operational signal and telegraph station—signalling arrivals of steamers and sailing vessels, from Sydney, northern ports and other colonies, strangers from British or foreign ports, warships, ships with English mail or with immigrants on board, schooner, brig or barque³. A time ball was hoisted each day at five minutes to 100 pm and dropped precisely on the hour—by which clocks in the colony could be set right, for there was no observatory in Brisbane at the time. Telegraph signals were transmitted to and from Sydney.

The Parliamentary Building

For a while the windmill accommodation was adequate, but at the December 1866 meeting of the Philosophical Society an occurrence was reported that was to be repeated many times in the museum's history—'the cases in the Windmill have suffered considerably during the late heavy rains'⁴. So in October 1868 the society was given the room formerly occupied by the parliamentary library in the Parliamentary building in Queen Street. In January 1869 it was moved to a smaller room in the same building—so small that most of the specimens remained in their boxes.

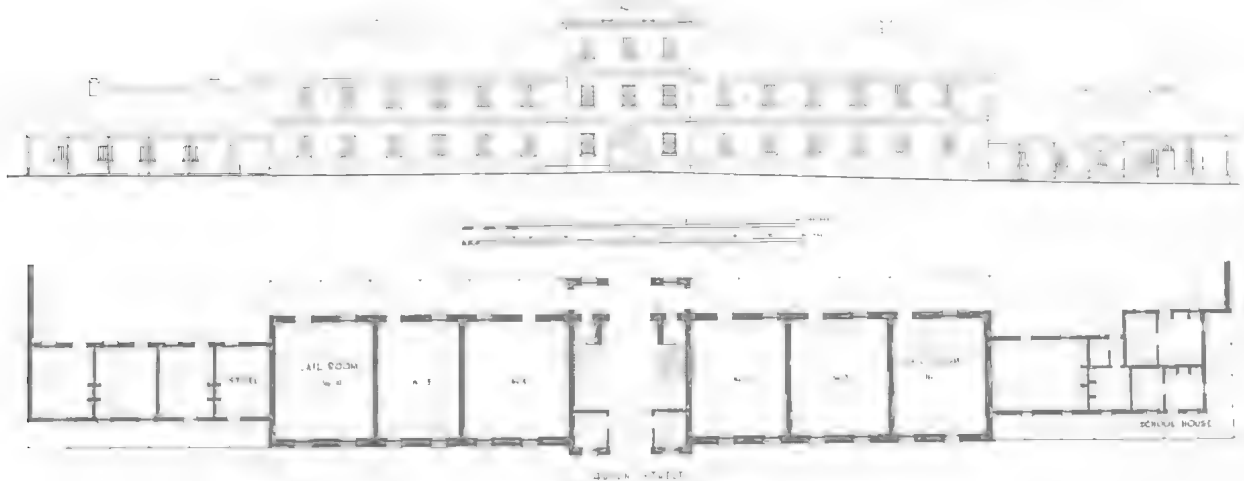
In June 1869 the parliament had resolved that a sum of £300 be set aside 'to initiate the formation of a Free Library and Museum in Brisbane'⁵ and there seemed every possibility that there would be a new building. However, the government was persuaded that a mineralogical museum would boost the mining boom—then showing signs of slowing down, and in 1870 only £100 was set aside solely for a mineralogical museum⁵. Former government geologist, C. D'Oyly Aplin, noting the £100 that was available, wrote to the minister on 1 June 1871 suggesting that rooms be made available in the Parliamentary building for a mineralogical

museum, and offering his services⁶. So, that same month a second room was found in which D'Oyly Aplin arranged the mineralogical specimens—those that he had collected as well as those collected by the other government geologist, Daintree, that had been held by the Philosophical Society. The two small rooms in the Parliamentary building that Karl Staiger refers to as containing the museum when he was appointed custodian in 1873 were the one containing the minerals and the other the zoological specimens⁷. Although, in April 1871, Coxen, Diggles and Bancroft—prominent members of the Philosophical Society—had again raised the need for a museum building with the minister for Public Works, who had appeared to favour the idea, the government appears to have forgotten all about the proposal for the time being.

The Parliamentary building, located on the north-western side of Queen Street from the present corner of Albert Street towards George Street, had been erected as a convict barracks in 1826–1829⁸. In 1839 part of it was used as a police court—the first in Queensland. Much later, in May 1857, the Supreme Court was also accommodated in the building. In 1860 part was converted to provide a temporary home for the first Queensland houses of parliament⁹. They moved to their new building at the end of George Street in 1868, just before the museum moved down from the Windmill. However, parliamentary messengers and the clerk of the Legislative Assembly stayed in the old Parliamentary building until about 1879⁹. In that year—1879—the Supreme Court moved to its new location and the old building was demolished soon after, in 1881. There are no available records of the alterations carried out to adapt it to its changing uses, although the original plan is preserved.

For the museum, the move from the Windmill to premises in a conspicuous and central location was advantageous, for here it became a well established part of the life of the community. Indeed, the building itself was particularly conspicuous for when Brisbane had become a free settlement in 1859 the surveyors had submitted various plans for the town to Governor Gipps in Sydney. In all plans Queen Street was to be the main street and about one and one half chains (20 metres) in width, the remaining streets to be one chain wide. Governor Gipps rejected this plan and ordered all streets to be one chain wide. His statement was 'Oh! the idea of wasting such a lot of land for a street in a place that will be nothing

The Barracks building, subsequently the Parliamentary building. The museum was moved to a room here in 1869. Between 1871 and 1873 it occupied two of the rooms (redrawn from archival drawings in Steele, 1975 ?).



else but a paltry village⁷. Subsequently, Queen Street was made the originally specified width by moving back the north-western side of the street, leaving the old convict barracks building projecting into the street.

Although the building was central and accessible as well as being familiar and conspicuous, the space in it occupied by the museum was far too small⁷. On 26 July 1872 Coxen wrote to the secretary for Works directing his attention to the museum's needs:

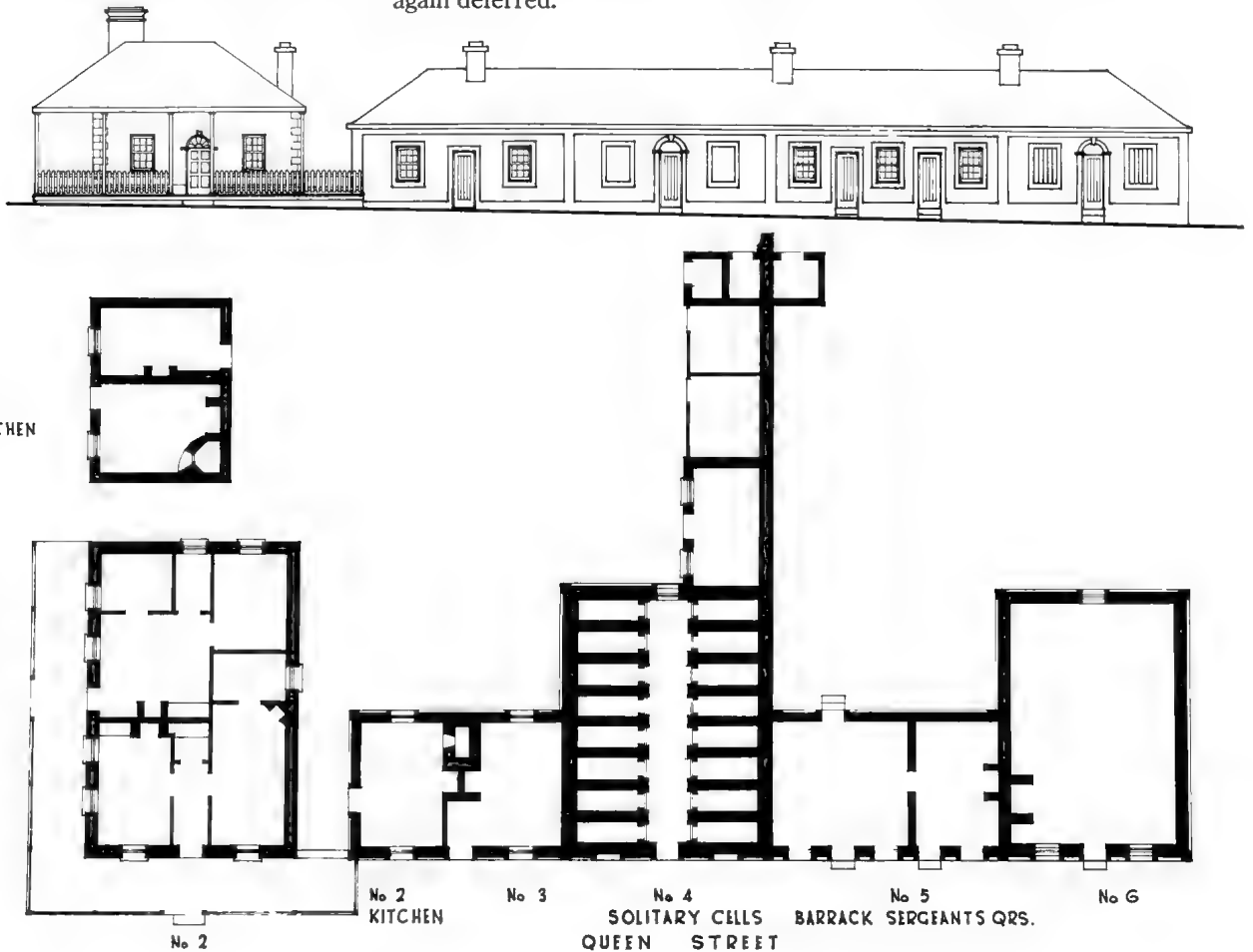
the pressing desirability for providing more suitable accommodation and space than now exists¹⁰.

Written in the margin of that letter is the minister's response:

Inform Mr Coxen that the colonial architect has orders to prepare plans of a museum with a view to immediate steps being taken to build one¹⁰.

F.D.G. Stanley, the colonial architect, recommended that the Servants Home in Ann Street — which is today the restored School of Arts building — be purchased and altered to provide a home for the museum. He estimated that £246 would be needed for the alterations but £30 could be saved if the upper floor was left unfinished¹¹. This plan was soon abandoned. Meanwhile a third temporary home had been found for the museum — further up Queen Street, in the accommodation vacated by the General Post Office, when, in 1873, it moved to its present location at the other end of the same street. Planning for a new museum building was again deferred.

Apartment 3 of this building became the Post Office and, in 1873, the museum. The additional space the museum subsequently acquired in this building included the Long Room — but it is not known which room this was (redrawn from archival drawings in Steele, 1975²).





The General Post Office and the new Brisbane City Hall about 1864. The museum moved into the Post Office building in 1873. The arched doorway to the right of the Post Office was the entrance to the solitary cells in the days of the convict settlement (photograph by courtesy Oxley Library).

The Post Office Building

The building, standing between the site now occupied by Lennons Hotel and George Street, had originally consisted of six apartments, comprising barracks and sergeants quarters (Apartments 5, 6), solitary cells (Apartment 4) and a house for the superintendent of convicts. In 1839, a free-man, William Whyte, in charge of the records in the commandant's office and described as the commandant's clerk and postmaster, moved into apartment 2 which became the Post Office. In 1864 a verandah was added to apartment 3 and to the kitchen of apartment 2 and both these rooms were combined to provide space for the General Post Office. Apartments 5 and 6, which were where that part of Lennons Hotel nearest George Street now stands, were demolished for construction of the Brisbane Town Hall which was completed in 1864⁸.

In 1873 Staiger obtained rooms for an office and laboratory and a larger one for a mineral display⁷ and the next month asked for, and received, additional space — the Long Room in the building¹². However, it was not long before it was recognised that the old Post Office building was not an ideal home for a museum. Early in 1875, only two years after it had moved in, A.C. Gregory, the Queensland government surveyor and distinguished explorer reported to the secretary of Public Works:

The museum is at present located in the Old General Post Office, the entrance being by a narrow passage from Queen Street. The specimens.....are contained in a wooden building 20 feet by 72 feet..... The laboratory is 19 feet x 21 feet, badly lighted and imperfectly ventilated. The lecture room is 15 feet x 26 feet and an office and store room for arrangement of specimens is about 18 feet x 24 feet, giving a total floor space of 1216 sq feet. These buildings.....are unadapted to the purpose of the museum and there is no available space for additions¹³.

Gregory recommended its sale, the land being of great value for commercial premises, to realise —

a sum equal to the cost of building suitable premises in a better position, for the main street of a city is not suited for such a purpose, not only on account of the dust, but also (because) the class of



Built in 1879, this was the first building constructed for the museum, which occupied it until 1899. After the museum moved to Gregory Terrace this building became the State Library (photograph by courtesy Oxley Library).

persons who visit Museums prefer a more quiet approach and space where carriages can stand without risk of disturbances.

Further, Gregory thought it was —

not desirable that laboratory experiments and assays of minerals should be conducted in a densely occupied locality.

Gregory's idea of a museum was that it would have space not only for a building to contain specimens of minerals and natural history but also for a laboratory with a small crushing machine and other machinery (including furnaces) for the assay of metallic ores. The only three portions of land in the hands of the government that appeared to him to be suitable for this purpose were at the corner of George and Ann Streets on a site occupied by the Volunteer Drill Room; vacant land at the corner of George and Turbot Streets; and the irregular portion of land bounded by Roma Street, Saul Street, and a street unnamed. The site he most strongly recommended for a museum was the Brisbane Grammar School — since it had been suggested that the school be removed following resumption of some of its land for the Roma Street Station. In fact, his letter contains details of the ways that the school buildings could be adapted to accommodate the museum.

In 1876 the Queensland government gave, as the first task for the museum's new board of trustees, the job of deciding on the site (see Chapter 14). While these negotiations went on, the board sought temporary accommodation into which the museum could expand. In June 1876 the

trustees acquired the detectives' room in the Post Office building, but their efforts, in July 1876, to have the hospital dispensary moved were not so successful. Therefore, when, on 6 February 1877, they were offered the use of the railway messengers' waiting room at the Brisbane Station for museum storage, the trustees saw a solution. On 29 May 1877 they wrote to the minister—

strongly representing that the hospital dispensary should be removed to the (Railway) messengers quarters and the two rooms at present used for the former purpose be placed at the disposal of (the) Board, attention being drawn to the desirability of this course, particularly with regard to the injury caused to the museum by the presence of so many Hospital patients and also the risk of fire caused by the explosive materials.....being stored on the premises by the hospital authorities¹⁴.

On 18 July 1877 the hospital dispensary at last vacated its two rooms in the Post Office building which the custodian hoped then to be able to use for the geological and mineralogical collections¹⁵.

The First New Museum Building

The site that was eventually chosen for the first purpose-built Queensland Museum was in William Street. The building was completed in 1879 and cost £10,706. It still stands—as the State Library and John Oxley Library. The building was designed in the Colonial Architect's Department under the supervision of the colonial architect, F.D.G. Stanley. The building has concrete foundations, front walls of stone, the remainder of brick finished with stucco, with a roof of copper. There was a basement with a large room in which the board met and which was used for a library; the curator's office — in which the Philosophical Society met from 20 April 1881 until de Vis was appointed curator in 1882; and a taxidermist's room. The main entrance floor and an upper floor with a mezzanine floor, 13 feet (4 metres) wide, were used for displays. Additional space was created on 16 February 1881 when the rest of the area beneath the building was levelled for use as storage for specimens and other materials, although the floor was asphalted only in June 1882. In October 1882 the basement was lit by gas. It was all a very great



The ground floor of the State Library in 1930. Apart from the mezzanine floor which was added after the museum moved out 30 years before, it is much as it was when it was the museum. The internal stairs to the basement can be seen beneath the mezzanine—behind the reception desk; the front entrance is to the right of the photograph and the stairs to the first floor are in the upper right corner (photograph by courtesy Oxley Library).

improvement on the previous accommodation available to the museum, which had vastly expanded its collections.

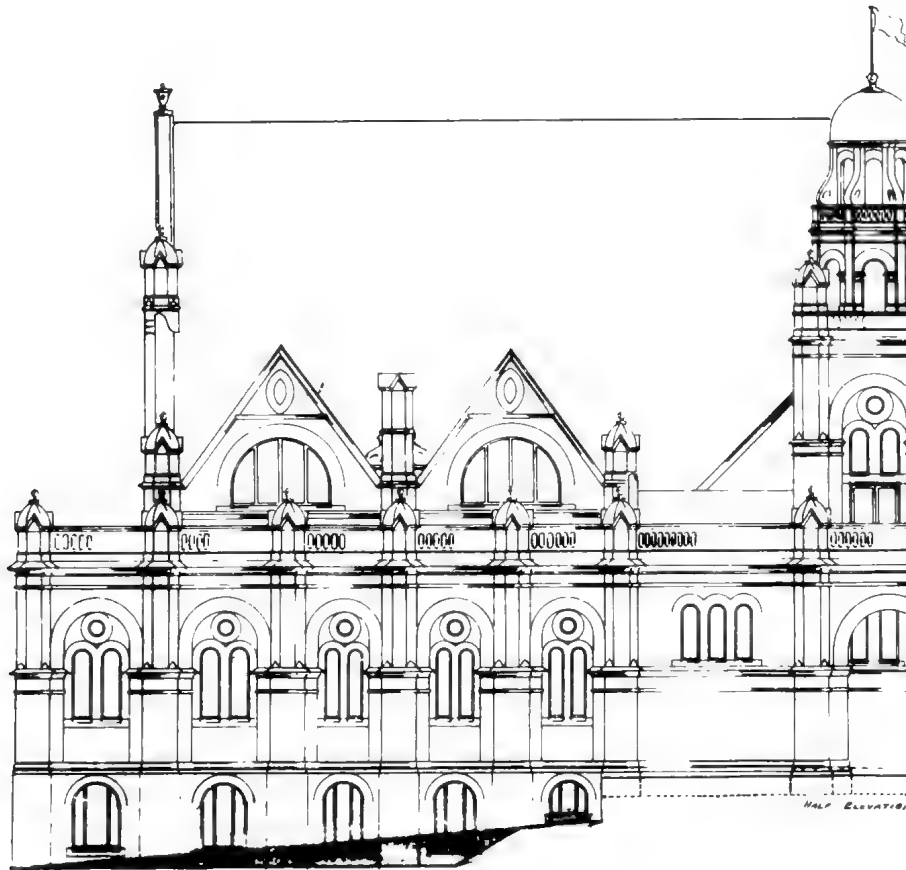
However, before long, as a result of the collecting programmes that started from 1882, even this building proved to be too small, and in 1884 the government set aside a sum of £40,000 for another new building. In a debate in the Legislative Assembly following this decision a Mr Morehead voiced a widely held view of the William Street building in terms that would do justice to some parliamentary debates today:

a more wretched abortion of a building was never evolved, even from the brain of a Stanley He (Mr Morehead) was glad to hear that something was to be done towards getting a new museum building and he hoped some hon. members would be preserved in it¹⁶.

Mr Archer, in the same debate, suggested that 'he thought a museum building should be on such a plan that it could be extended every ten or twelve years'¹⁶. Eventually tenders were called for a new building in 1890 but none were accepted and the idea appears to have been dropped. The depression occurred soon after, in 1893, and by the time it was over an alternative had been found.

In 1895 the National Agricultural and Industrial Association of Queensland (NAIAQ) was in financial difficulties and could not service the loan it had obtained for the construction of its new Exhibition building. Accordingly in 1897 the government took over the building and plans were put in hand to convert part of it for use as a museum¹⁷.

The Exhibition building from the air, 1981.



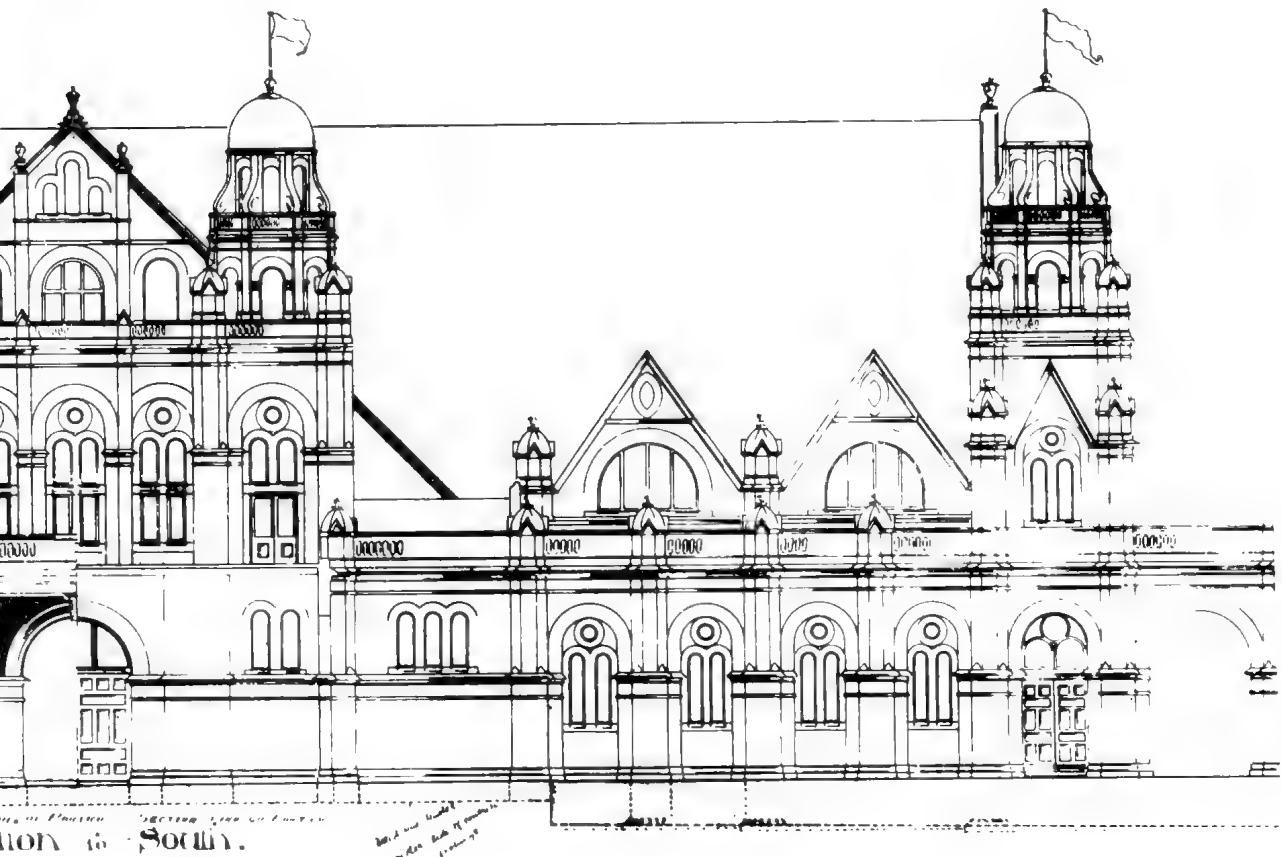
Exhibition building, elevation to south (original architectural drawing in the Works Department)

The Exhibition Building

The building, which was to be home for the Queensland Museum for 86 years, is an impressive blend of Romanesque, Byzantine and Baroque influences in polychromatic brick work in a style generally known as 'Victorian Revival' architecture. At the time it was built it was unique in Brisbane and it is one of the few examples of its style to be found in Queensland. It is a well-known and much-loved landmark, now listed by the National Trust of Queensland and the Australian Heritage Commission as part of the National Estate.

It was built after the original timber exhibition building of the NAIAG (later the Royal National Association) was destroyed by fire—an act of arson said to have been perpetrated by a lessee who used it for a skating rink¹⁷. The NAIAG decided to erect a more permanent structure and engaged G.H.M. Addison to design a building on a 17 acre (6.8 hectares) site in Bowen Park that was leased from the Acclimatisation Society¹⁸.

A contract was signed, on 9 February 1891, with the builder, John Quinn, at an estimated cost of £20,400. This figure was to rise to over £30,000 on completion. The contract time was 12 months, but the northern wing was ready for occupation within 23 weeks. The roofing iron left England in March and was in place by the 23 June 1891. Some 16 million locally made bricks from the Brick Manufacturing Association were used. The joinery was made on site where four steam engines were used to power the milling machines. When the brickwork was being done there were up to 300 men of all trades at work at one time¹⁹.



At the time the Exhibition building was under construction Queensland was in the grip of a severe economic depression and several hundred tradesmen and labourers would queue outside the site gates every morning in the hope of gaining employment. J.B. Chapel relates how his father, a bricklayer, would leave home with his tool bag over his shoulder at 4 am each day to walk from Greenslopes to the site so as to be near the front of the queue²⁰.

The architect, George Henry Male Addison, born in Llanely, Wales in 1857 or '58, a graduate of the Royal Academy School of Architecture in London, had come to Australia in 1883 soon after graduating. By 1886, when he first came to Brisbane to work on the London Chartered Bank building, he was a partner in the Melbourne firm of Terry, Oakden and Addison²¹. Presumably it was during this project that he made the contacts that resulted in his appointment as architect for the Exhibition building; and subsequently resulted in his move to Brisbane. His other buildings include Somerville House School, The Mansions in George Street and the Albert Street Methodist Church.

In 1891, the year the Exhibition building was completed, the Crystal Palace in London (also constructed speedily—in nine months) was then 40 years old, the Melbourne Exhibition building was 11 years old and the Royal Pavilion at Brighton nearly 70 years old. These all reflected the fashion for flamboyant exhibition buildings and the Brisbane Exhibition building was no exception. However, it was not only exhibition buildings that influenced Addison's design—although it was built for a social function, the Brisbane Exhibition building, externally, is reminiscent of a cathedral.

In a florid lecture delivered before the Queensland Art Society, the architect revealed his concept of the importance of architecture:

The Exhibition building, probably taken at the time of the 1897 International Exhibition, the year of Queen Victoria's Jubilee—celebrated in the banner hanging over the front entrance in this photograph.



.....the embodiment of noble aspirations in the monuments of one generation helps to keep those aspirations alive in the nextand if we are to continue to be a race capable of higher aims than accumulating money and eating good dinners, we cannot afford to ignore any of the agencies which help to develop man's higher ethical nature. Amongst the most potent of these agencies are Architecture and decorative Arts²².

Addison believed that every civilisation contributed its own characteristic elements to architecture, each 'an exact index to the national character that produced them'; and he believed in using these elements — drawing on the old with the aim of reassembling it anew. If he liked a feature and it could be of use, then he would fit it into the design.

In the Gregory Terrace building Addison combined many known styles of architecture and added other exotic motifs to enhance the facade. The decorative polychromatic brickwork and polygonal domes on the towers are Byzantine; there are Moorish tiles on the portico; the arches on the northern aspect are Romanesque and enclose decorative roundels; there are traces of medieval towers and turrets in the southern — concert hall — entrance; in the flat western facade there is a great Gothic cathedral-style window that contrasts with the towers, turrets, dormers, gable roofs and recessed arches of the other aspects of the building; and the roof is corrugated iron. Constructive features aid the ornamentation¹⁹. For instance the turrets contain internal staircases that once led to concert balconies and the roundels outlined in decorative brickwork sometimes contain a dormer window for extra light. However, although the facade is elaborate and fanciful, it covers a very simple and plain building.

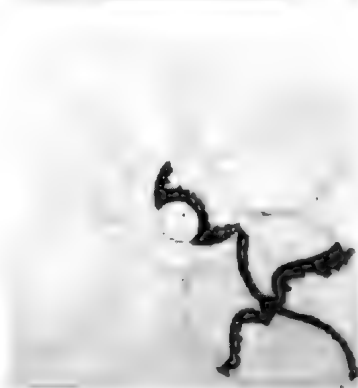
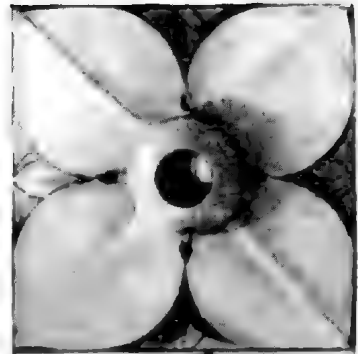
In England some buildings of the late Victorian era — Victoria Station, the Imperial War Museum in Lambeth, Westminster Cathedral and Keeble College in Oxford — illustrate the fact that Addison was not unique in collecting many styles under one roof — or dome²³. Eclecticism has really always existed as architects from the Romans to the 20th century have transferred remembered forms to new contexts. In the Exhibition building as in many late Victorian buildings, invention was stimulated by the great variety of forms from which to choose.

A Museum, A Concert Hall, An Art Gallery

The Exhibition building is T-shaped in plan. The northern wing (the top of the T) was originally one open, single-storied exhibition hall with a balcony at the eastern end and exposed steel Fink trusses supporting the steeply pitched corrugated iron roof²⁴. Arches led from this hall into the southern leg of the T which again was open and single storied — a concert hall with balconies on three sides.

In 1892 the NAIQA had installed, in the concert hall, a large four-manual organ from Henry Willis and Sons, London. In 1900 the Brisbane City Council leased the concert hall from the state government, and bought the organ — £1000 of the £6000 purchase price being raised by public subscription. Thus, the function of the concert hall did not change from that intended by the NAIQA when it was built²⁵. It was used for many functions. Paderewski gave recitals there and so did Dame Nellie Melba. It was also used for University of Queensland graduation ceremonies²⁶.

When the new Brisbane City Hall was completed in 1930 the City Council moved out of the Exhibition building, and the concert hall became the home for the Queensland Art Gallery. Changes that were made to the concert hall in 1930 to accommodate the art gallery included the removal



Addison's design for the terracotta tiles over the front entrance to the concert hall in the Exhibition building (original architectural drawing in the Works Department).



Demolition of the caretaker's cottage near the railway line, 1973. The site was used later as a car park.

of the concert platform and the jacking of the sloping floor up to a level surface. The balconies were cut back and boxed in to cover the tiered seating, platforms and partitions were erected to form offices and store rooms and, again, staircases were altered. Clear storey lights were installed in the roof. At some stage, possibly in the 1940s, a hessian ceiling was suspended by wires over the exhibition space. In the late 1950s new doorways were provided to the entrance.

It was the northern wing of the building, the exhibition hall, that was converted to house the museum. On 7 May 1898 Director de Vis inspected the building and discussed, with the colonial architect, the alterations that would be required. It was estimated that they would cost £8000 and take 18 months to complete. The museum moved in between October and the end of December 1899 and by that time the alterations had, indeed, been completed. Arches between the two halls of the building were bricked up and staircases had been altered. A first or mezzanine floor with three large light wells had been added, leading off the eastern balcony. This floor was supported on fluted columns of local hardwood with cornices and panelled dados. The mezzanine and ground floor were to house the displays and the basement of the building had been converted into offices for the museum staff. A caretaker's cottage had been built in the grounds. The specifications for the work included extensive repairs to brickwork and the replacement of cracked lintels²⁷—for, despite its much admired ornate exterior, the enthusiasm and excessive haste of its construction, along with the lack of foresight in detailing was the cause of major maintenance problems from the beginning. At the board of trustees meeting on 26 May 1900 attention was called—

to the want of drinking water in the building.....Dr Marks recommended.....the purchase of a Pasteur filter and the curator was authorised to procure one.....The need of a urinal for the use of the staff was also pointed out.

The trustees eventually left the matter in de Vis' hands. He intended to divert a waste water pipe from the laboratory sinks to the urinal, suggesting that chemical wastes and a constant flow of water 'would alleviate any nuisance'—the trustees being worried about the odours generated by a urinal. There is no further discussion of these problems

recorded in the board minutes and de Vis undoubtedly made some arrangements. However, 10 years later Robert Etheridge jnr, curator of the Australian Museum, was to describe them:

in a dark corner of the basement are some dirty hand basin(s) and contiguous to them an unenclosed urinal-basin²⁸.

There was no proper lavatory in the basement. Upstairs on the ground floor were the earth closets for the use of visitors to the galleries. The area was not sewered until 1927 and the museum was connected to the sewerage only in 1930.

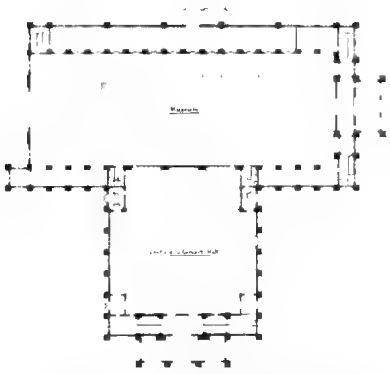
There was no love lost between the museum trustees and the original lessees of the concert hall—the City Council. For one thing, the trustees had wanted the concert hall for extra space for the museum. There was also an extra insurance premium to be paid because the concert hall was hired out for public functions; and, since the gas engine to operate the organ was in the basement of the museum, the organ blower needed access at difficult hours²⁹. In their annual report of 1902, the museum trustees refer to their neighbour in the Exhibition building:



Looking across the fields from the museum to the Brisbane General Hospital about 1920.



This much admired bushhouse, photographed in 1906, was the work of John Jordan, curator of the museum gardens from 1897 to 1929 (Chapter 3³³). Visitors could enter the museum through the bushhouse and the eastern verandah and so avoid the tell-tale at the front entrance to the gallery (photograph by courtesy Oxley Library).



Architectural drawings of the Exhibition building showing alterations made for the museum (redrawn from Works Department drawings in Queensland State Archives).

The erection of a Town hall in which to put their organ seems to be indefinitely postponed. Meanwhile we are compelled to pay thrice the ordinary premium for insurance against fire in consequence of the concert hall being held to be in dangerous contact with the museum.

At the board meeting of 31 March 1900 the trustees had decided that the Department of Agriculture— from which the City Council leased the concert hall— should pay the museum’s extra insurance premium. They reasoned that the department profited from the use that was made of the concert hall. Of course the department refused. So in November the board refused to pay a share of the rates. However, on 26 April 1902, its budget halved as a result of the depression of the 1890s, the board had to stop insuring the collections altogether and it finally agreed to contribute to the rates.

A Fire Trap and a Joke

When the museum moved into the Exhibition building at the end of 1899 it had more space than ever before. However, the collections continued their astonishing growth, and despite the alterations, the building was never altogether satisfactory for a museum. The annual report of the trustees for 1899 had predicted the problem of a shortage of space right from the beginning— when they had not been successful in getting the concert hall as well as the exhibition hall³⁰.

In 1933 a Mr S.F. Markham, honorary secretary of the Museums’ Association of Great Britain, visited Brisbane on behalf of the Carnegie Corporation of New York. He inspected the museum with Professor Richards of the University of Queensland and they reported that the risk of fire in the building was too high to be allowed to continue³¹. Almost a year later Markham’s report, in which he referred to the museum building as a fire trap, and a joke because it was so unsuitable, was released in London. The Brisbane press was aghast that it should have been the cause of such derision³². However the state was still in the grips of the great depression and although the situation was deplored, the *Courier Mail* editorial echoed what appeared to be the government’s view— that too many people took money out of Queensland instead of using it to endow institutions such as the museum. Premier Forgan Smith said that his government would welcome a new museum building, but should not bear its whole cost³². So the old one continued to age and deteriorate.



Attendants mopping up storm water in the main gallery in the 1960s.

In the late 1960s portions of the porch over the art gallery entrance collapsed, and the leaking roof was causing damage to the collections of both the museum and art gallery. At some expense the whole building was re-roofed and the brickwork repaired. Unfortunately, the many box gutters were repaired rather than replaced and the building continued to leak in an unpredictable manner, particularly during hailstorms when the gutters rapidly clogged with ice³³. Rain, with its consequent risk of water damage to the collections, was an ever-present fear, especially in the savage storms of the summer months. Cyclonic storms provided several anxious moments during the 1970s. One storm lifted the whole northern roof to the extent that the roof purlins came off the fixing cleats. On another occasion the large stained glass western window shook and threatened to collapse as rain and wind battered it incessantly. Fortunately, apart from an incident in 1917 when a projection lantern was knocked down in the bird display, there were never any fires.



Cramped accommodation, Queensland Museum 1982. The sections of molluscs and mammalogy shared one internal room, partially divided down the centre with shelving. The entrance to the shell collection is shown behind Curator J. Stanisic's desk.

With the promulgation of the *Queensland Museum Act 1970*, the new museum board was required to take over, from the government, responsibility for the museum's insurance. Similarly the art gallery was responsible for its own insurance. To satisfy their separate insurers, a brick fire wall was built between the museum and the art gallery. The museum installed a sensitive smoke detection system and moved the spirit store from the centre of the basement to a new fire resistant building in the grounds. At last there had been some response to Markham's criticisms of 1933.

In 1973 a large outbreak of termite infestation was discovered. Sporadic infestations had been recorded over the years. There is an account from Dibbs and Co. dating from the late 1890s referring to treatment for white ant²⁷. In more recent years five different species of termite have been found to be active in the building, the most troublesome being the introduced West Indian termite *Cryptotermes brevis*. However, the large holes in some of the hoop pine structural members that workmen thought were signs of an infestation of giant borers in the



Artificer's shed, Queensland Museum, 1982.



A corner of the metals workshop, Queensland Museum, 1982.



In 1974, after the Queensland Art Gallery vacated it, the art and photography sections of the museum occupied the south wing—formerly the concert hall—of the Exhibition building. Here the displays for the new building on the South Bank were prepared.

building were indeed the result of borers, but of marine borers that had invaded the logs as they were originally rafted to sawmills or port facilities in the Maryborough-Fraser Island or Logan river areas.

Investigations in 1973 resulted in the closure of the art gallery due to concern over the stability of the concert hall section of the building and continuing leaking during heavy rain. Roof trusses of hoop pine which were over-stressed to nearly 7 mPa in full section, had been eaten out by up to 10% of the section and some areas—fortunately under minor stress—had been eaten out completely. The roof trusses were repaired with steel cord stiffeners and tie rods and, in 1974, the museum expanded into the space vacated by the art gallery⁴³. It was used as work areas for the art, photography and geology sections of the museum and this alleviated the pressures elsewhere.

However, more and more adjustments had to be made to a building that was urgently in need of restoration and that was required to house a staff that had grown from four persons when it first occupied the building, to 25 in 1970, and that was to grow to 75 in 1980. More space was needed for staff accommodation, workshops and laboratories, storage for the growing collection and more and better display facilities to satisfy a more sophisticated public that was used to the visual impact of modern television presentations.

A large galvanised iron shed was used to house part of the technology collection and the workshop. Later, prefabricated buildings were set up in the grounds to house the conservation laboratory, preparators, artificers, education and maritime archaeology sections and the administration staff. In the main building, the earth-floored basements were sealed with concrete—although they continued to be referred to, affectionately, as the earth basements—to create storage areas for the ever-growing history, technology, and geology collections; and the five species of termite, thus disturbed from their usual routes, made new and alarming appearances. Every summer, storms created acute risk of water damage to valuable collection items. Damp walls creating high humidity were frequent hazards and required constant vigilance and enterprise on the part of curators—especially those responsible for anthropology and Australian ethnography collections that were housed along the outer walls.

A Museum worthy of the City and the State

The board of trustees, as one of its first tasks following its re-establishment in 1970, had begun to urge the state government to make provisions for adequate housing for its museum, and to consider sites for a new building (see Chapter 14). Eventually, it was the state government's decision to develop, on the south bank of the Brisbane River, a cultural complex that would include the museum, theatres and the state library, as well as the art gallery. The new museum building was stage 3 of this project.

Robin Gibson of Brisbane was the architect chosen for the Cultural Centre. The white concrete buildings, spread along the river bank opposite the main commercial and administrative centre of the city, have brought Brisbane to the forefront of urban architecture. The six climate-controlled levels of the museum building, rising behind the art gallery, include all the facilities needed—facilities that previously have not been available to the museum nor, indeed, to many museum's elsewhere.

There are three display floors comprising 5,000 square metres and an external geological garden. On the upper two stories are offices, laboratories, collection storage areas and the library. On the first floor,

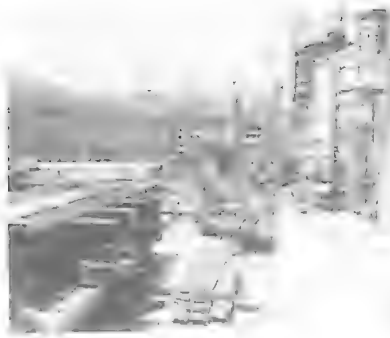


Collection storage in the 'earth basement', Queensland Museum, 1982.

which at its southern end contains lecture theatres and classrooms for the education section, are art and preparatorial sections, photography studios and dark rooms, artificers and metal workshops, aquarium room, live animal room, deep freeze, skeletal and fossil preparation and sorting areas. Architect Robert Wilson has been the consultant to the museum to help plan the fittings it would need in the new building. Solved, at last, is the problem of a refreshment room for visitors that confounded the board of trustees when, on 23 February 1901, it sent a deputation to discuss the matter with the minister. Solved also are the serious conservation problems arising from overcrowding, humidity, variable temperature and rainwater that through the years have challenged the museum's capacity to preserve the material record of the state's history.

The Queensland Museum will assuredly continue its development. Branches to interpret and display aspects of the state's history and to serve the communities in regional centres are now opening, and more are being planned. However, for the foreseeable future, the museum will have as its headquarters and focus of its activities this fine and well-equipped new building, that will help it to execute its wide and diverse responsibilities more effectively than at any other time in its history.





A new building for the museum in the Queensland Cultural Centre. *Left*: under construction, 1982; *below*, nearing completion, 1984 — the museum is in the centre of the picture, the windows of the two upper levels looking north across the roof of the art gallery (*centre foreground*).







3

LOYAL AND
ZEALOUS
SERVICE
The Staff



The staff establishment of the museum grew very slowly indeed, and from time to time suffered serious setbacks associated with the economic depressions and wars that alternated through the long middle years of its history. Between 1873 and 1945, through the good years, the retrenchments and subsequent recoveries, the staff sometimes numbered four and seldom was more than 12. Only once, in 1912, had the numbers risen to 15.

It was the successive curators-in-charge, ultimately called directors, who determined the direction that the institution took and who simultaneously did the work of administrators, accountants, public relations and education officers and curators right up to the expansion of the past two decades. However, almost without exception, those who served under these men did so with loyalty and zeal, for without both the museum could not have operated and it may not have survived.

The Slow Beginning 1862-1893

At first, in 1862, in the Windmill on Wickham Terrace, there were the members of the Philosophical Society: the vice-president Charles Coxen and H.C. Rawnsley who, with taxidermist E. Waller, had given collections of birds and shells¹. Probably Silvester Diggles, who was to be one of the society's honorary curators from 1869, was helping too. Elizabeth Coxen may have been there—arranging the shells. In 1868 they moved the collections down into the Parliamentary building in Queen Street after cases were damaged by rain in the Windmill. C. D'Oyly H. Aplin, formerly the government geologist for south Queensland, and his assistant, Hackett, worked there arranging and cataloguing mineralogical specimens from the end of June to September 1871. Despite Aplin's attempts to become the museum curator he was forestalled by Coxen, who almost certainly had a good prior claim and had friends in high places—the minister was a member of the Philosophical Society—whereas Aplin was a relative newcomer. However, the main reason was that although the government had requested that any geological specimens collected by government men and held by the Philosophical Society be handed over to Aplin for display, the Philosophical Society maintained that it was responsible for much of it until such time as a public museum was erected. So, in October 1871 the minister for Public Works did the next best thing. He satisfied the society's scruples by appointing its vice president—Coxen—as honorary curator of a public museum in the Parliamentary building^{1,2} (see Chapter 4). Aplin, having been informed 'that the government is not prepared to incur any further expenditure for increasing the collection or for continuing my services'³ was told to hand over the collections to Coxen. There were no other staff members—visitors were admitted by the parliamentary messengers² (see Chapter 2). Coxen's was the first official appointment to the museum. He worked there on his own until, in 1873, the government appointed a permanent officer, Karl Staiger, as custodian of the museum and government analyst, although Coxen appears to have had the primary responsibility for the museum until the board was appointed. The natural history and mineralogical collections must have been moved from the Parliamentary building to accommodation in the Post Office building soon after Staiger's appointment⁴.

Coxen observed that revenue from Staiger's assay work between November 1873 and July 1874 was 'more than equal to the salary received by Mr Staiger'⁵. Despite his involvement with assays, Staiger was concerned about the natural history collections, complaining that he did not have appropriate reference books to identify zoological material (see

Previous page: Museum staff in the early 1920s. *Standing L to R:* A. Fenwick, librarian; William Baillie, attendant; Thomas C. Marshall, assistant preparator; A. Gorman, attendant; R.V. Smith, attendant. *Seated:* Eileen Murphy, stenographer; Heber A. Longman, director; Henry Hacker, entomologist. *Absent:* E. Varey, attendant.

Chapter 13). It was probably Staiger's efforts that made it possible for the trustees to comment that —

In regard to the condition of the museum at the time the present trustees entered on their charge, they desire to record their opinion, that taking into consideration the great difficulties their predecessors had to encounter, the condition and arrangement of the collections reflects the highest credit on their administration⁶.

When the board of trustees was appointed, early in 1876, Coxen had relinquished his role as honorary curator. At the board meeting of 21 March 1876—a few months before he died—he seconded a unanimous resolution that the government be asked to formally appoint Staiger as curator as he was 'at present performing all the duties of that office without the title'. Apparently Staiger, rather than the board, had taken over Coxen's duties. Nevertheless, Staiger's title was not changed—he



Charles Coxen, founder of the Queensland Museum and its honorary curator from 1871.

REQUISITION for the under-mentioned ARTICLES for the use of Brisbane Museum

NAME OF ARTICLES REQUIRED.	QUANTITY OF EACH KIND OF ARTICLES		QUANTITIES OF EACH ARTICLE ACTUALLY IN POSSESSION.			STATE OF PRESERVATION OF ARTICLES NOW OBTAINED BY PURCHASE OR BY GIFT.	REMARKS BY THE CURATOR AND QUANTITY OF ARTICLES NOT OBTAINED.
	Length	Quantity	Specimens	Specimens	Specimens		
Small paper						1 ream	
Small envelopes						1 ream	
Medium paper						6 packets	
Large paper						6 packets	
Large envelopes						3 packets	
Bottom paper						1 packet	
Small paper						1/2 ream	
Small envelopes						1 bottle	
Small paper						1	
Small envelopes						1	

Approved

(Place and date) Brisbane Museum 5 January 1874

(Signature) Carl Loder Staiger
Curator of the Museum

Custodian Staiger's stationery requisition, authorised by the honorary curator Charles Coxen, 1874.

remained 'custodian'. Until relieved, in August 1878, by one of the trustees, Bernays, Staiger was also secretary to the board. Even the board minutes are in his hand up to March 1878, when a clerical assistant, Charles Chester, was appointed.

Also on the staff were an assistant, E. Curtis, who did the skinning and a museum porter/messenger, G. Walker. The board minutes of 8 October 1878 record that Walker was the hero of a fire—

made by some person in the large fig tree at the rear of the museum premises which, but for the vigilance of the messenger, might have caused the destruction of the whole building.

After Coxen's death, on 20 June 1876, the museum trustees considered a letter from his widow, Elizabeth, asking if she could, at the price of a small remuneration, continue her connection with the museum, and offering 'certain boxes, bird skins etc. for sale'. She was remarkable for her time—the only woman who ever attended a meeting of the Philosophical Society and, in due course, the first to become a member of the Royal Society. She was to become a regular attendant at Royal Society meetings and once read a paper on cowries¹. However, back in 1877, the trustees did not consider it appropriate that she should be appointed to the staff and, indeed, on 24 January 1877 they reacted strongly to that suggestion from the government, implying that it was an interference in a matter that was the board's prerogative. Instead, they set aside a sum of £50 for payments to her in return for her services 'at such times as might be found necessary'. Vouchers were passed for payments to Mrs Coxen from time to time until 17 February 1882. She was not only the first woman employee of the museum, but also the first person to be paid specifically to attend to the invertebrate collections. She appears usually to have been engaged in arranging the shells. However, she was able to help the trustees in many other ways, advising them on certain correspondence addressed to her late husband concerning museum business. For instance, on 6 February 1877 the trustees agreed to the wish of Mrs Coxen to send

'one of the bowers of the bower bird of which there are two on the premises' to a Mr Anthony of Harvard College in exchange for some bones. On 6 March 1883 the minutes record that while in England on a visit she had performed a commission for the board—she had purchased a stock of glass eyes for bird mounts. Long after that the meteorological reports she compiled from her house at Bulimba are regularly acknowledged in the list of donations to the museum.

Coxen had been responsible for the work done by F.M. Bailey, keeper of the herbarium established in the museum in 1874 following a proposal from the Acclimatisation Society⁷. After Coxen died the position of the herbarium was somewhat anomalous. Although it had been under Coxen's control, it was not under the control of the board of trustees and the trustees decided that these anomalies should be corrected⁸. The board does appear to have had some control over Bailey from that time—endorsing his independent reports on the herbarium and formally approving some of his projects. The minutes of the meeting of 16th April 1878 record the resolution that 'Mr Bailey be requested to record all letters received or sent out by him in connection with the herbarium and to furnish a short monthly report of his movements and work' Bailey, who appears to have been an ambitious man, was working hard for the development of the herbarium as something separate from the museum. On 1 September 1879, before the museum moved into its new building, he reported to the minister of Lands:

Although I have not been requested to send in a report of the general state of the Queensland Herbarium, yet doubtless it may not be deemed wrong for me, as the grant for its formation will shortly be before the House, to furnish you with a few remarks relative to the department. I am pleased to say that the colonists generally look to this department as the highest botanical authority in the colony, and that they are continually applying for information regarding nomenclature, etc., etc..... I may state that a very large proportion of the Queensland flora has been collected together, named, and classified, so as to be of easy access for persons desirous of referring there to.

I hope from the foregoing it will be seen that I have tried to lay the foundation of a useful Botanical Department, and that at comparatively little cost to the colony⁹.

He goes on to say that he does most of his work at his 'private residence.....there being no room at my disposal at the present museum', that the museum building and the herbarium cabinets are totally inadequate, that he hopes his department will be allocated all the space it needs in the new building, and he asks for a free railway pass⁹. Bailey and the herbarium, moved to William Street a few months later with the rest of the museum (see Chapter 4).

Meanwhile, on 21 November 1879, just before the museum moved into its new building, the board of trustees had begun to look for a curator—they wanted 'a suitable man of scientific attainments'. William Haswell's name was mentioned by several of the trustees as 'although quite a young man (he was) already well known in scientific periodical literature.....'¹⁰ and it was resolved to adjourn for a week to consult him. The trustees believed that he would be content with what they knew to be a very inadequate salary, but one that they could lay their hands on by diverting funds from those set aside for the collection. Fortunately they did not have to do that—Haswell's salary of £200 a year was chargeable to 'unforeseen expenditure', pending a vote by the legislature¹¹. Even Staiger as custodian



The gentleman here photographed with his wife is thought to be Karl Theodor Staiger, custodian of the Queensland Museum, 1879. Photo courtesy of Staiger's grandson, K. T. Staiger of Palm Beach, Queensland.

had received an annual salary of £350, while the head of the Queensland Geological Survey was receiving £700 a year. Although Haswell did accept the low salary, he was assured that it was temporary.

At the end of 1879, after Haswell had been appointed, Staiger clashed with one of the trustees—W.H. Miskin. It appears to have been a rather contrived complaint that Staiger made. Perhaps, as Miskin suggested², he was disappointed at not being promoted to the top job in the museum. What Staiger did was to spread a story, through taxidermist Alder—who also may have wanted to discredit Miskin, that Miskin had taken advantage of his position as a trustee by misappropriating butterflies from some cabinets purchased by the board for the museum. Miskin established that he had bought butterflies refused by the museum in 1876, and that those purchased by the museum in January 1878 had not been removed either by himself or anyone else—although they had been lost through neglect. In fact, Miskin's comments about Staiger are not at all kind, and it appears that the custodian may have fallen out of favour with the trustees (see Chapter 14). Haswell took up the position of curator on 27 December 1879 and Staiger left, taking his chemical assistant, R. Taylor with him (see Appendix 1).

QUEENSLAND MUSEUM.

Brisbane, Nov 16th 1878

Memorandum.

A monthly Meeting of the
Trustees will be held at the Museum, on
Thursday
11 a.m.
the 18th inst. at 2.50 p.m.

William A. Haswell
Curator.

◆◆◆◆◆
BUSINESS:

Haswell calls a meeting to inform the board that he has been offered a position in Sydney.

P. A. O.

To help Haswell establish the museum in the new building, an experienced taxidermist — E. Spalding — was appointed in June 1880 (see Chapter 4). There was a carpenter, Thomas Skinner, sometimes with an assistant and there were now two messengers, J. Cormack, who had been appointed in June, before Haswell arrived, and J. Lane who had succeeded Walker at the beginning of 1880. Haswell was secretary to the board and its proceedings are recorded in his youthful hand — the services of the clerk, R. Newton, having been dispensed with on the curator's arrival. The addition of a real taxidermist to the staff in place of Curtis who did the skinning in Staiger's time was undoubtedly an improvement, as was the additional messenger. However the museum's new building was very much larger than its previous home and there were still only five staff members and the keeper of the herbarium — not an overall improvement. Any hopes that might have been held for an expanding establishment were dashed when it became obvious that Haswell's salary would not be increased and he left in November 1880. At a special meeting of the board on 12 November 1880 —



William Haswell, curator of the museum 1879–80.

the Curator stated that he had contemplated sending in his resignation as curator in consequence of the apparent determination of the Government, as expressed in the recent Parliamentary debate upon the museum vote — with respect to the salary of the Curator. He laid before the Board an offer he had received by telegraph of an appointment in the Australian Museum at Sydney at a much higher salary.

At a subsequent meeting on 18 November, the trustees deliberated at length upon the matter, and decided to inform the government that the curator's salary should be increased and —

that unless such increase is sanctioned the Trustees will be unable to retain Mr Haswell's service or procure a competent person to act in his place and that under such circumstances the institution cannot be carried on either with credit to the Trustees or benefit to the public.

Then Haswell went to Sydney on leave. By 14 December he had resigned and the under secretary had appointed Bailey temporary curator. However, Haswell did not go immediately to the Australian Museum. He was a demonstrator in the zoology department of Sydney University in 1882; in 1883 he was acting curator of the Australian Museum while Ramsay, the curator, was away overseas; and in 1890 he was appointed to the chair of zoology in Sydney University¹¹⁴. As Mack has said, 'it is probable that Haswell would still have gone to Sydney even if his salary had been higher'¹¹⁵. Nevertheless it was a disappointment that it should have happened in less than a year. During his short tenure he had begun to improve the library and the displays and had given the board and the community a new confidence in the museum.

All through 1881 F.M. Bailey, the keeper of the herbarium, was temporary curator. The taxidermist, one carpenter and the two messengers were the only other staff members. Bailey was also secretary to the board, which was, no doubt, a chore he could have done without. Nevertheless he appears to have done it meticulously. He was a prodigious worker and had built up a good reputation for his botanical knowledge. He collaborated with the Rev. J.E. Tenison Woods in producing a *Census of the Flora of Brisbane* published in 1880 and had held an appointment as botanist to the board inquiring into diseases of livestock and plants at the same time as he was keeper of the herbarium in the museum. He also travelled around the state — the museum board had eventually got him a

free rail pass — building up the herbarium collections. The museum appears to have run smoothly while he was in charge but he was only a caretaker in the position and was more intent on advancing the cause of the herbarium than of the museum. Nevertheless, it is surprising that neither in T. Harvey Johnston's nor C. T. White's accounts of F.M. Bailey's life and work is there an accurate reference to his nine years in the museum. In fact, his surveys of poisonous plants, grasses and native pastures were all done while a member of the museum's staff¹⁶.

Bailey's hopes for space in the new museum building were not realised. In October 1883 L.A. Bernays, who had been a member of the museum board of trustees in 1878-9, and had worked consistently to develop the herbarium, was to write:

1882
To the Secretary of the Board of
Trustees
Queensland Museum

Sir,

Referring to your letter of the 18th
ult. received this day, wherein you
inform me that I have been appointed
Curator of the Museum, the appointment
to be dated from the 2nd inst., I have the
satisfaction of acknowledging the honor
conferred and of assuring the Board
that I shall use all diligence to arrange
my affairs here and be at my post in
Brisbane without avoidable delay.

I have the honor to be, Sir,
Yours very obediently.

Chas M De Vis

Sheelthore

Roxburghton

Feb 7, 26 1882.

I cannot conceive a more important Branch of Museum work (than economic botany)—with the assistance of Sir Joseph Hooker, Mr Bailey has made some progress toward an illustrative collection: which, however, I regret to find is, together with an Excellent Foundation for a Herbarium, gradually but surely being squeezed out of the Building, owing to insufficient accommodation for other branches of scientific illustrations¹⁷.

Soon after this Bailey was to be appointed colonial botanist and would leave the museum taking the herbarium with him.

Meanwhile, before Haswell left, there were some rumours about loss of specimens during the move to William Street¹⁸ (see Chapter 8). These rumours, probably compounded by Haswell's resignation, prompted the government to set up a select committee to enquire into the operation of the museum¹⁹. The trustees, in their annual report for 1882, thank the government for its response to their needs and it is probable that some of the improvements in the next decade resulted from this enquiry¹⁵. In fact the improvement started in 1881 when geology collector A. Macpherson was appointed.

On 2 February 1882 the 53 year-old Charles de Vis became curator on a salary of £400—exactly twice the sum Haswell had received. He was recommended by Mr Archer of 'Gracemere', just outside Rockhampton—where de Vis was then living²⁰. The Rev. Tenison Woods who was then collaborating with Bailey on botanical works also supported his application²¹. When de Vis took over, taxidermist Spalding was still on the staff, as were the carpenter and the two attendants. Newly appointed as clerical assistant was an entomologist, Henry Tryon, who also looked after invertebrates²². Kendall Broadbent was engaged as zoological collector at £3 per week from May 1882 until March 1883. de Vis did not think they would be able to do without him, and indeed it was not long before he had created a vacancy to which Broadbent could be appointed. On 1 May 1883 de Vis reported that 'he had been compelled to suspend' messenger Cormack because—

He came in a state of drunkenness to his post on Sunday last and after being sent home returned contrary to orders and still drunk.

Alexander Macpherson, the geological collector, was brought in from the field to replace Cormack and Broadbent was appointed collector in Macpherson's place. Broadbent was a zoological collector and he remained in that position from 1882 to 1893. By contrast there was a succession of geological collectors between 1882 and 1893—Macpherson, H.F. Wallman, E.B. Lindon, H. Hurst and H.G. Stokes (see Chapter 6).

From January 1885 Tryon's title was changed to assistant curator, but he continued with the clerical work until, in April 1887, de Vis reported to the board that—

the assistant curators investigation into the life histories of the various insect and other enemies encountered by fruit-growers and into the means if any of preventing their ravages.....had made it impossible for him to prevent clerical work falling into arrears.

So the board appointed a young man, Henry Hurst, on trial and without pay, to assist with the clerical and library work. Hurst became geological collector on 5 August 1887 after Lindon left, but for the time being he also continued with the clerical duties. On 7 December 1888 'a supernumerary officer', Mr Charles Hedley, later of the Australian Museum, had been retained 'at the rate of £100 per annum' to deal with the Mollusca, thus releasing Tryon to work on insects exclusively.

However, Hedley only stayed a year before he went to Sydney.

It is apparent from the minutes of the board, and also from the letters sent to the curator from collectors in the field, that there was a general enthusiasm to increase the collections. Broadbent wrote from Herberton in northern Queensland with the information that Australian Museum collectors were 'in the district, so I am informed. Birds I think are new. I must send you *quick to name*'²³. Henry Hurst, the shy, timid young geological collector wrote from Chinchilla that he was returning to Brisbane with 'nearly 3000 specimens'²⁴. Money was never plentiful but somehow the collectors managed. An extra hand, Patrick Wall, was employed in October 1887 to accompany Hurst on a 70-day collecting trip on the Darling Downs. Hurst wrote to de Vis from Chinchilla on 5 November reporting progress and including a plea:



Charles Walter de Vis, curator/director of the Queensland Museum 1882-1905.

Pat has begged to me to ask you to advance his wife a pound on account of wages. I don't know whether you are disposed to do so and I would not have troubled you had he not told me that she was next door to starving. If this is really the case it would be rather hard if she could not obtain it²⁴.

On 20 November, in another letter from Hurst telling de Vis of the fossils he is finding, the concluding paragraph reads —

Pat tells me you gave his wife £2.18.0 instead of £1 and says he did not want her to get so much²⁵,

On 4 January 1889 de Vis reported that he had instructed Broadbent to collect insects as well as birds, mammals, reptiles and fossils. Broadbent replied that he would, but 'next season'. de Vis offered his Sunday allowance to pay an insect collector 'if a subordinate' could replace him (de Vis) in the museum on Sundays. It is not clear where the money to pay the subordinate would have come from had de Vis' offer been accepted.

Instead, the trustees decided to appoint insect collector C.J. Wild. Then, on 5 June 1891, a 'boy assistant' to help with clerical duties, A. Preston, was appointed at six shillings a week to relieve Hurst and leave him free for mineralogical work. Thus, by 1891, in addition to the curator and assistant curator, there were two messengers, a taxidermist, a carpenter, three collectors, and a clerk/library assistant on the staff—the high point to that time.

On 5 June 1891 'inconveniences resulting from the decrepitude of the attendant, Alexander Macpherson, whose old age incapacitates him for the performance of the duties of his office' were reported, and he was replaced by Joseph Spiller. Hurst was dismissed toward the end of 1891 having abandoned his post—he had disappeared from Brisbane²⁷. He was next heard of as a member of the South Australian Museum's expedition to Lake Callabonna, helping to excavate and retrieve Pleistocene marsupials, including the first complete skeleton of a diprotodon²⁸. No doubt his experience as a geological collector on the Darling Downs was useful to him on this occasion. He was replaced as geological collector by Stokes.

Meanwhile, there had been problems developing in other departments of the museum. Tryon's relations with de Vis and the board had deteriorated from the beginning (see Chapter 9). A continuing source of friction was that Tryon's services were much in demand by the Department of Agriculture—conflicting with his work in the museum and undermining de Vis' and the board's authority. On 6 April 1888 the board minutes record that —

the assistant curator absent from duty during most of the latter part of the month. No official intimation that his services were required elsewhere had been received, but it is understood that he has received instructions from the Colonial Secretary.

On 7 December 1888 the curator informed the board that —

the official relations between himself and the assistant curator had been for some time strained in consequence of the disrespectful and antagonistic attitude assumed towards himself (by the assistant curator).

When the board suggested that a position of entomological assistant be created, de Vis, with alacrity, suggested that the position of assistant curator be dispensed with and the salary associated with it be transferred to the new position. It does not appear to be a device to get rid of Tryon, but to get rid of him as assistant curator. The trustees did not agree—they pointed out that as assistant curator Tryon was bound to accept de Vis'

directions and nothing would be gained by making a change in his title. So, they continued on together, the board reaffirming the curator's authority from time to time and insisting on its own initiatives in regard to Tryon's services to the Department of Agriculture. It was reported, on 5 July 1889, that Tryon had undertaken another report for the Department of Agriculture without the board's approval. It had, accordingly, withheld his salary for a month, and observed that he should be transferred to another department. On 3 January 1890 the board had intercepted Tryon's application, direct to the minister, for a railway pass—he was informed that the application would be made by the curator and he was reminded that 'all officers of the museum must address all official communications to the curator only from whom they will take instructions as to the work they will undertake'. Then Tryon tried to leave—he was an applicant for a post

Mr. Chas. Coxen
Care of
Miss Gould
33 Grosvenor Square
London

To the Trustees of the Museum
Gentlemen

It is my intention
to leave Brisbane for six
months to revisit England.

I hope to be able to
resume my duties at the
Museum on my return.

If I can do anything
in the way of exchange or
procuring the names of
shells I shall be very glad
to do so. I expect to be back
in the colony before Christmas.

I remain
yours obediently
Elizabeth F. Coxen
Hulme

April 7th 1882

Elizabeth Coxen writes to the trustees offering to execute commissions for the museum in London. She purchased a stock of glass eyes for bird mounts.

in the New South Wales Department of Agriculture in May 1890—but apparently was not successful. At one stage the board commented that the Department of Agriculture should get 'an officer of their own to do their work'. Neither the trustees nor de Vis were absolutely opposed to Tryon's expertise being used by other departments—it was an advertisement for the museum. What did irritate them was that the—

services of the assistant curator had been repeatedly given to the Department of Agriculture which had published the resulting information on its own authority without giving the museum the slightest credit for it as its only source²⁹.

Eventually the board resolved that Tryon's services could be available to the department only if his reports were addressed to the museum board—for communication 'at option' to the Department of Agriculture²⁹.

Tryon was in effect, the agricultural entomologist for the state—a fact the board recognised when on 5 August 1892 it suggested that the department supply some funds to support these activities. When, on 2 September, that was refused the board refused Tryon's services. On 6 January 1893 a letter in that day's *Courier* concerning friction between the agricultural department and the museum was referred to by the board as 'not worthy of further notice'. The museum may reflect now that it is unique in Australia in having provided to its government, albeit reluctantly and unacknowledged, 10 years of sound advice for the pastoral industry through Bailey's work on poisonous plants, grasses and native pastures and followed this with a further 10 years of advice from Tryon on applied agricultural entomology.

Just before the economic collapse of 1893 Tryon was accused of being less than discrete in his behaviour toward a young woman in the public galleries³⁰. It is clear that every effort was being made to establish some grounds for his dismissal. This was not successful. Tryon's defence was that he had been solicited. In those days, as in other museums in Australia and in the rest of the world, the museum, being open to the public, was a place often frequented by prostitutes (see Chapter 5). The charges against him were not substantiated and on 7 April 1893 Tryon's suspension was lifted. However, most of the trustees wanted him to be transferred and the chairman, Norton, just wanted him to go.

The Desperate Years, 1893-1910

Then, a few months later, in June 1893, the economic depression descended inexorably on the museum. The minister asked the board to reduce its estimates and to consider retrenchments. The board avoided this, the minutes recording—

that it did not feel it necessary to propose any change, either by dispensing with the services of any member of the staff or by the reduction of salaries, as it was generally understood that a reduction of salary throughout the service would be made by the government.

Ten days later, on 19 June, the only reply from the government was to repeat its request. Curator de Vis was asked to withdraw from the meeting, and on his return was directed to record resolutions dispensing with the services of the assistant curator Tryon, geological collector Stokes, attendant Spiller, messenger Lane, and carpenter Skinner. The zoological and entomological collectors—Broadbent and Wild—were to become attendant and messenger respectively. The board recommended that both Spalding and de Vis retain their positions; de Vis did, but apparently Spalding was retrenched with the others. There was a



Kendall Broadbent, doyen of collectors, in the late 1870s (photograph lent by his grandson S.J. Rossner of Graceville).

suggestion that Spalding be retained for one day per week to keep insects out of the cabinets but there is no evidence that this occurred and five years later, on 5 February 1898, the board was to receive a letter from him seeking a job—there were still none available. It was a desperate time. Preston the young clerk/librarian, who was only paid 6 shillings a week, retained his job. de Vis' salary went from £400 to £300.

Actually, most of the trustees were not unhappy about the loss of Tryon but Bancroft always had dissented from resolutions that Tryon be dismissed. He did again on this occasion and his minority view was recorded:

the inconveniences which he feared would result from the loss of the assistant Curator's services urging that they should be retained in the colony if not in the museum³¹.

For a while Tryon was allowed to use a room in the museum and the library, although his use of the insect collection was to be supervised. Eventually, the board objected to him referring to his 'permanent room in the museum'³² and he went to the Department of Agriculture, later becoming government entomologist and a very influential man in the state³³ (see Chapter 9).

So, de Vis, Broadbent and Wild, with the young clerk Preston's help, were left to run the museum. Preston left in 1896 and was replaced by A.J. Norris on 5 April 1897 and then G.H. Hawkins from 1898. Spiller was reappointed on 5 April 1897 to relieve Broadbent and Wild, so that they could do some work on the collections and occasionally get out into the field, and he stayed until 1902. Only once did the board have occasion to refer to his behaviour. On 27 August 1898 de Vis reported that a Mrs Kennet of Sydney had been offended by Spiller's behaviour in the gallery. The trustees observed that Spiller was of good character, the charge was not proven, and in future attendants should not engage in conversation with visitors except on the subject of the exhibitions. de Vis framed the following regulation:

Grave inconveniences having arisen from attendants while on duty in the public rooms allowing themselves to be drawn into conversation with, or volunteering information to visitors. They are instructed to refrain altogether from addressing visitors except in the maintenance of order. They are required to confine themselves to brief but courteous answers about exhibits and they are warned to be especially careful to avoid making to each other, within the hearing of visitors, remarks which may be misconstrued and complained of as offensive.

During these years of economic stringency, when the staff consisted of five people, everyone did several jobs. The board minutes of 6 April 1899 record that one weekend the attendant, Spiller, and the clerical assistant, Hawkins, were given railway passes to the Darling Downs and Toowoomba to do some collecting but found nothing to collect; while Wild had collected 156 species on the range during his Easter holidays.

At the end of 1899 preparations were made to move into the Exhibition building. From 2 October two packers, three carpenters and four labourers were appointed to help with the move. Soon after, one of the labourers, Baxter, was dismissed—drunk—and the other two left before 3 March 1900. Just after the opening, on 26 January 1901, de Vis took the opportunity provided by the board meeting to express 'pleasure in being able to say that all employed in the reinstatement of the museum have rendered loyal and zealous service'. He certainly made every effort to keep them all in employment.

Dickson, the fourth of the extra hands, had become the night watchman. Unfortunately, on 1 January 1901 de Vis, who then was living in the caretaker's cottage near the railway line, found him asleep at 8 pm and again at 5 am the next morning, so he was dismissed and replaced with F.G. Smedley. The building was then in a rural setting—cows used to stray into the grounds³¹—and it must have been dark and lonely at night. On 30 March 1901 it was suggested that Smedley be supplied with a revolver 'for protection' on the advice of the police, but in April the Police Commissioner advised that it was not necessary. Of the three carpenters hired for the reinstallation, one, A. Norris may have been the A.J. Norris, clerical assistant, who had resigned in 1898. He did not remain on the payroll for very long. A.S. Russell stayed until April 1901 as assistant to J. Berry who became the museum's carpenter. The packers, Ern Lower and Joseph Lamb, became label writer-librarian and assistant messenger respectively; their appointments were approved by the government on 23 February 1901 at the same time as that of J.A. Smith as mineralogist—he had originally been hired on 31 March 1900 as an 'extra hand' temporarily engaged to prepare mineral exhibits. A gardener, W. Hedges was also appointed. It was the only time there was ever a gardener on the museum staff—probably the appointment was made to help J. Jordan, the head gardener, who was employed by the Department of Agriculture³². Broadbent and Wild were still the attendants and Hawkins the clerical assistant. Thus, at the beginning of 1901 the staff had again risen to nine—about the same size but not as well qualified as it had been when de Vis first became curator. It was also in 1901, on 23 February, that the board recommended that de Vis' title change to 'director' from 'curator'. Actually he had been so styling himself for some time.

There was a brief attempt to increase the professional staff by appointing J.D. Ogilby, a well qualified ichthyologist from Sydney who had been recommended by the curator of the Australian Museum, R. Etheridge jnr. It is said of Ogilby, who was a son of a distinguished British zoologist and had studied at Trinity College, Dublin, that he had an 'extreme and indiscriminating affinity for alcohol'³³. It was on this account that he had been dismissed from the Australian Museum in 1890. He had worked on contract to that institution until appointed to the Queensland Museum where 'the fishes were said to have been kept in formalin rather than alcohol'³³. Ogilby took up duty as assistant in zoology on 27 April 1901. On 29 June 1901 it was de Vis'—

painful duty to report repeated grave misconduct on the part of the newly appointed assistant in natural history.....Monday morning he came on duty and remained all day secluded in his room. At 5 pm it was reported to me that he was still there and in so peculiar condition that he could not be induced to leave.

Ogilby resigned a month later and, despite his request, was not even given approval to use the laboratory. The board wanted to fill Ogilby's position, an ichthyologist being considered important to the fishing industry. A Mr R. Hall came from Melbourne and completed a probationary three months as assistant curator. The board recommended his appointment on 24 December 1901 but the minister would not approve it and Hall had to go back to Melbourne. Meanwhile Ogilby sought permission to work in the museum, refer to collections and use the library. Occasionally he was admitted but usually he was not. Then he was appointed as a 'supernumerary' to the museum as a result of an appeal he made to the Department of Agriculture. Payment of 30 shillings a week

was to be from contingency funds. On 14 November 1903 the trustees placed on record 'that this appointment was made without their knowledge' and next month qualified their acceptance of the appointment by making it 'subject to immediate retirement if such should be deemed advisable'. On 30 January 1904 the board decided that 'Ogilby's connection with the museum should altogether end', and subsequently it refused his request for a supply of foolscap paper. Nevertheless, Ogilby's connection with the museum did not end. He was to be appointed part-time ichthyologist in 1913 in the days of Hamlyn-Harris.

Economic recovery was slow and again, on 26 April 1902, there were retrenchments. Everyone lost his job except de Vis, Broadbent, Wild, and the so-called mineralogist J.A. Smith. This time the clerical assistant, Hawkins, also had to go. The staff was back to five. Later Smith resigned and Joseph Lamb—one of those retrenched—was given his job, again demonstrating de Vis' attempts to keep his staff in employment. The board allowed Wild to take the title 'entomologist'—in fact he was looking after the insect collection. By 26 July 1902 carpenter Berry was living in the caretaker's cottage, de Vis having found it too dusty and noisy. His part-time services as carpenter were retained, his accommodation serving in lieu of wages. de Vis made two attempts to return to the cottage—one only 5 months after he had left it and again on 26 September 1903. However, the board did not support him and Berry continued to live there with his family until 1910.

The retrenchments of 1893 and 1902 must have distressed de Vis, nevertheless he carried on, probably doing more himself and suffering a £100 cut in his salary, which increased slightly to £330 from 1902, but which was never restored to the £400 it had been when he was first appointed. It was supplemented with payments from contingencies for Sunday work—amounting to about £50 a year. On 28 May 1904 he certainly complained about the possibility of being deprived of the supplement at a time when his salary was reduced again to £300.

Despite the depression, the new museum accommodation and the small staff, de Vis continued with his research, managing the museum, and detailing every aspect of the institution's operations in his reports to the board. It was a time of remarkable expansion of the collections. There was the material that Broadbent and the other collectors had obtained in the 1880s as well as that from members of the public who had been alerted by de Vis himself to the intrinsic interest of the fauna and the museum's role to investigate and to preserve samples of it. There was material sent by those who had seen the monthly board proceedings published in the press and there was material from people with whom de Vis maintained a prolific correspondence and from whom he solicited donations. Ethnological material from New Guinea and the New Hebrides had begun to arrive in 1888 including the collections authorised by John Douglas—a museum trustee and special commissioner of the British Protectorate of New Guinea—and the large MacGregor collection.

de Vis' tenacity and his efforts on behalf of the institution were sustained over a long tenure with few rewards except those of seeing the institution's collections grow, and knowledge and understanding of the objects in those collections increase—mainly through his own efforts. He was confronted with a large, unknown and unique fauna. He had no literature and few colleagues with whom he could discuss his work, yet he was the museum's first really productive staff member and possibly the most productive up to the present time. He had an analytical and creative

mind. He was scientist, administrator and, if the need arose, a clerk. He was a humane and compassionate man and he kept the museum operating in the face of incredible odds. Mack has suggested that de Vis 'would have been happier in a secluded room describing fossil and recent vertebrate animals, rather than building up the collections of a new museum'¹⁵. There is no evidence of such an inclination either in the collections themselves nor in the energy that de Vis applied to every aspect of the museum's operation. However, Mack was right when he said 'there is no doubting his devotion to the work he had undertaken'¹⁵. de Vis set a standard of personal commitment and achievement for the museum that has been followed, though never surpassed. He was the Queensland Museum's great director.



C.J. Wild, acting director of the museum
1905-1910.

de Vis was retired in 1905 at the age of 76. On 31 December 1904 Norton, then chairman of the board, had reported on 'the exertions which he had for some years made to avert the retirement of the director'. It was not that de Vis wanted to retire — he didn't — but the trustees, who had confidence in him, feared, in the depressed economic climate of the time, that if they lost de Vis he would not be replaced. They had had a warning that this could happen when, on 28 May 1904, the chairman had reported a suggestion of the minister's that 'the Director might be "retired" and the museum put in charge of a person at a lower salary'. Norton, in reply, had told the minister —

from previous experience that no such person could be found who would be competent to manage the Institution with efficiency and with the authority given by scientific standing

and that he, Norton, 'had spoken of the Director in very favourable terms'. Eventually, their fears were justified — de Vis was retired and was not replaced. On 26 November 1904 the Chief Secretary's Office ordered de Vis' retirement, which became effective in March 1905. He continued to attend at the museum and, to oblige the board, continued in charge of the museum — a course that did not please the department. Accordingly, on 24 June 1905, the trustees ascertained that Mr R. Hall from Melbourne — previously recommended to succeed Ogilby in 1901 — would accept the position of director at an annual salary of £200. This would have left £100 for de Vis' salary as consulting scientist. The government did not accept that recommendation and on 26 August 1905 the board had to accept the government's appointment of Wild as acting director. de Vis stayed on as consulting scientist. A doorkeeper, B. McClelland, was appointed in September, presumably to strengthen the attendant staff, depleted by Spiller's retrenchment and Wild's promotion. The only other staff members were Broadbent and Lamb — the latter having become 'assistant in the industrial department' instead of 'mineralogist'.

This year and the next, 1905–6, were probably the nadir in the museum's fortunes. In July 1906 Benjamin Harrison replaced McClelland. In 1907 there was a breakthrough — W.E. Weatherill, described as boy assistant, was appointed in January; H.B. Taylor, office boy in April; and Anthony Alder was appointed taxidermist in September, Weatherill becoming his assistant.

Anthony Alder was an expert at casting. He had learnt his trade from his uncle, who had a taxidermy business, Alder and Co., Islington, London³⁵, and had won a gold medal for his models at the Greater Britain Exhibition, London in 1899. Alder had had a taxidermy and model-making business in Queen Street from 1877 — the same year that he had first offered his services to the museum, only to be told that there was no position available. Instead, he had sold 22 mammals to the museum for £50. Only three years later Spalding had been appointed to the position of taxidermist. Spalding had worked for Ramsay, curator of the Australian Museum, who very likely had recommended him to Haswell. Alder, naturally, was critical of Spalding's work. On 1 July 1892 the museum board noted a —

letter in the *Observer* over the signature of one Alder complaining of the quality of the taxidermist's work. It was considered a sufficient refutation of the charges made that Mr Spalding had been chosen by the New South Wales Commission for the Chicago Exhibition.....and that no notice of Alder's letter should be taken.

On 28 October 1905 the board received a letter from the Department

of Agriculture suggesting that Alder be employed. 'The trustees were opposed to employing him in the museum building, but will give him birds to stuff in his own workshop if he quotes satisfactory prices'. Perhaps Alder had a friend in the department, for, despite his long standing differences with the board, at last he was appointed to the staff of the museum at the age of 58. At the time of this appointment the board was under pressure. In April 1907 there had been strong press criticism of the museum displays and its standards of taxidermy, and then, one week before Alder was appointed, the premier had taken over the control of the museum and the board was about to be disbanded (see Chapter 14). In fact, Alder's appointment was probably that board's last contribution to the museum's operation.

From 1907 to 1910 the museum continued under Wild's directorship, now under the watchful eye of Premier W. Kidston. Apparently what he saw did not please him, because in March 1910 his under secretary, P.J. MacDermott, wrote seeking a reference for a Dr R. Hamlyn-Harris, then a school teacher in Toowoomba³⁶. He received an entirely favourable reference from J.V. McCarthy of the *Toowoomba Chronicle*. No immediate appointment was made, however. Kidston, apparently feeling he needed some advice first, on 2 June 1910 wrote to the premier of New South Wales asking if Robert Etheridge jnr, the curator of the Australian Museum, would be available to investigate the Queensland Museum and report to him. In his report³⁷ Etheridge admired some of the material, especially some of the fossils and the 'fine MacGregor collection', but was critical of the building, the lack of labels, crowding of specimens, inadequate display furniture, arrangement of the material, preparation of the specimens, registration, storage, the level of staffing and the staff themselves:

During my investigation I found one officer performing no less than eight different classes of work, some professional, some mechanical, some pure labour. I venture to say that under circumstances of this nature it is impossible for an officer so situated, no matter how earnest he may be, to carry such multifarious duties to a successful conclusion³⁷.

Mack remarks that the report was fair and informative³⁵. Indeed, Etheridge's descriptions of the collection reflect the remarkable increase in its size and confirm that the dimensions of the task had been quite beyond the capacity of de Vis, his successor Wild and their pathetically small staff.

Etheridge was not impressed with Wild, nor with Broadbent whom he thought to be 'upwards of 77 years of age'—actually he was 73. The other attendant, B. Harrison, a cotton spinner by trade, was then 70. The 18 year-old H.V. Chambers, clerk/librarian, who had replaced Taylor, was described as having only a very elementary knowledge of library work. Etheridge thought the 19 year-old Weatherill to be a bright young man. The only other person to impress Etheridge was J. Lamb, a painter by trade, who, although assistant in the industrial department, had the following duties:

He prepares and articulates skeletons; prepares collections for schools, prints labels, reproduces specimens by casting, curates the collections of minerals, rocks and fossils, assists in skinning large animals and takes his share of the cleansing duties. He is making a special study of Spiders and Frogs³⁷.

Lamb's office in the basement was the only one that Etheridge found reasonably tidy. Despite Etheridge's admiration, Lamb left the museum in 1910. The taxidermist, 61 year-old Anthony Alder, although on the staff at the time is not mentioned in Etheridge's report at all.

A Partial Recovery 1911-45

Ronald Hamlyn-Harris was appointed curator on 1 October 1910. He appears to have had the government's support to put Etheridge's recommendations in train. However, his salary was not exactly princely. Although it was to rise to an equivalent of nearly £500 by 1913, on appointment it was £300. His accommodation—in the cottage by the railway line—was valued at an extra £50 per annum. There was no longer a board of trustees and the director was responsible directly to the premier. Hamlyn-Harris visited other Australian museums before he began his task of reform in Queensland and Etheridge continued to advise. The expansion, begun in 1882 and so sadly interrupted by the depression of 1893, now resumed. The new director began to reorganise every aspect of the museum's operation.

Heber A. Longman, a natural historian known to Hamlyn-Harris, joined the staff as assistant curator and Henry Hacker was appointed entomologist. Later, in 1913, J.D. Ogilby was appointed again, this time as part-time ichthyologist, and he did some good work. He also inspired the new cadet, Tom Marshall, to a life-long interest in ichthyology. Veterinary surgeon D.R. Buckley was part-time osteologist for a short time but it was not a successful appointment—Hamlyn-Harris opposed his reappointment, even as an honorary, believing him to have been using the institution for 'self-advertisement'³⁸.

The first full-time stenographer Eileen G. Murphy was also appointed in 1911, as was a librarian, Clarice Sinnamon. Alder was still employed and helping him were M. Colclough—replacing Weatherill—and the cadet T.C. Marshall. B. Harrison was elevated to chief attendant on £90 per annum³⁹, Broadbent, who had died in office, was replaced and two additional attendants were appointed. One of them, W.E. Greensill, doubled as a carpenter—Berry having left. In the general revitalizing that Hamlyn-Harris initiated Finney Isles and Co. tendered information on new uniforms for the museum's attendants⁴⁰.

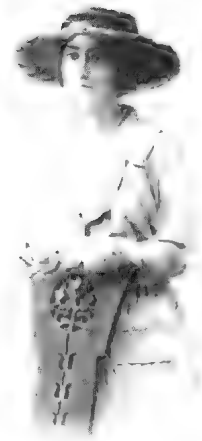
C.J. Wild, no longer acting director, accepted his old position of collector⁴¹. However, he did not impress Hamlyn-Harris, and on 12 June



Ronald Hamlyn-Harris, director of the museum 1910-1917.



The staff of the museum, 1912. *Standing L to R*: 'Chips' Greensill, attendant/carpenter; William Baillie, attendant; Henry Hacker, entomologist; Eileen Murphy, stenographer; Clarice Sinnamon, librarian; Anthony Alder, taxidermist; Benjamin Harrison, chief attendant; E. Varey, attendant. *Seated L to R*: Heber A. Longman, assistant scientist; Ronald Hamlyn-Harris, director; James Douglas Ogilby, ichthyologist. *Reclining*: Tom Marshall, cadet.



1911, four days after a fire had destroyed his camp, he wrote offering to accept a transfer (see Chapter 9). His connection with the museum ended on 31 June 1911⁴². Hamlyn-Harris used the position of collector left vacant to appoint Douglas Rannie as ethnological collector. Rannie, who later became librarian, lived in the caretakers cottage from 1912 after Hamlyn-Harris vacated it. R.J. Cuthbert Butler, who was librarian from 1915 to 1917, took over the house from Rannie when he left.

Thus Hamlyn-Harris had achieved a staff of 15—a new record. He also extended the scientific strength of the museum by appointing honorary scientists—Professors H.C. Richards and T. Harvey Johnston and Dr A.B. Walkom of the University of Queensland, and Dr J. Shirley.

Many of those appointed by Hamlyn-Harris went on to render long service to the museum. They were Eileen Murphy, Tom Marshall, Henry Hacker, Heber Longman—who subsequently became director—and the attendants J. Baillie and E. Varey. Eileen Murphy was only 20 when she was appointed and she was not only the first woman to be appointed to the permanent staff but was also the first stenographer. She was to occupy that position for 42 years, serving three directors—Hamlyn-Harris, Longman and Mack. Her duties were not confined to secretarial ones—she registered specimens, wrote labels and compiled catalogues. Her distinctive and decorative, though not readily legible, hand is still to be found on many museum labels.

During his tenure Hamlyn-Harris instituted educational programmes, revitalised the displays, organised the library and sought ways to redress the lack of scientific staff. However, in the end, his efforts to develop the museum were defeated by World War I. When he retired in 1917 he had lost the position of collector, Alder had died in 1915, Marshall was away with the 13th Australian General Hospital Unit and ichthyologist Ogilby, although he was continuing to do good work, was getting toward the end of his useful days. Staff members who left were never replaced nor had any new positions been created. In addition to the director and the assistant curator, there were the entomologist Hacker, librarian Cuthbert Butler, stenographer Eileen Murphy, preparator Colclough, three attendants and the head attendant and doorkeeper, Harrison. Although Harrison was 'fully capable of the work that was required'—Longman attesting to his vitality on the basis of his recent marriage—he was now almost 78 years old⁴³.

Eileen Murphy who gave 42 years of service to the museum. *Above*: as a young woman; *left*: after her retirement, with T.C. Marshall and M.P. Beirne, head attendant.



Heber Albert Longman, director of the museum 1918–45.

Longman became director in 1918 but he was not replaced as assistant curator. Hacker continued as entomologist until 1929 when he was seconded to the Department of Agriculture, and worked at the museum only one or two days a week⁴⁴. He was succeeded by H.L. Jarvis, seconded from the Department of Agriculture for one day a fortnight. From 1918 A. Fenwick not only took over from Cuthbert-Butler in the library but also moved into the caretaker's cottage near the railway line. J. Shirley became conchologist for one year in 1920–1 and Ogilby worked on as part-time ichthyologist until 1920. The affection generally afforded Ogilby is reflected in a letter from Longman to the under secretary, Chief Secretary's Office, enclosing a medical certificate, seeking approval to pay for medicine and suggesting 'for our veteran ichthyologist Mr J.D. Ogilby three weeks holiday at the seaside, without expense, in charge of a friend'⁴⁵. There was, for a short time before World War II, the promising assistant in ethnology, G. Jackson — who subsequently was killed in action in the war. Filmer observed, in 1946, how Longman grieved for him, and that signs of Jackson's —

good work are in evidence all over the court. Any death in a New Guinea jungle is a sorrowful thing; his, as Mr Longman says, a real tragedy⁴⁶.

Colclough and Longman did not get on well — and this may have been partly political. Mrs Longman was a member of the party in opposition while Colclough supported the Labour government. Between October 1917 and June 1919 Colclough was seconded to the University's zoology department to work on ticks. In 1931 Longman, basing his action on the need to reduce running costs, abolished his position⁴⁷. Colclough was retrenched but subsequently was reinstated in November 1933. Longman wrote that although Colclough was given the —

maximum of consideration..... his lack of interest in his work, his cantankerous attitude generally, and his want of energy prevented him from being the useful officer that a taxidermist should be⁴⁸.



Indeed he was not a useful officer. He had withdrawn to a seat between the bird cabinets in the basement. In April 1945, soon after he was appointed as an assistant, Ivor Filmer recorded an occasion on which Colclough was to make a skin—

but swore volublyat having to get off his seat between the bird cabinets to do it⁴⁶.

Colclough was absolutely unrelenting in his attitude—he just would not work for Longman. He said 'the only good thing Longman did was that he never begat any other Longmans'⁴⁶. In Filmer's understatement 'the two were incompatible'⁴⁶.

Despite Colclough, the museum was a happy place in Longman's time. He was good to his staff and fostered in them an involvement and loyalty to the institution and an interest in natural history. Under Longman's direction, Marshall had developed his skills, and the improvement of the displays, begun in the days of Hamlyn-Harris, had continued. The museum was also a mecca for local and visiting naturalists. Entomologists A.J. Turner, H.G. Barnard, E.H. Rainford and G.H.H. Hardy worked there in an honorary capacity, as did palaeontologist J.E. Young and conchologist H.W. Hermann. In 1942 Marshall was seconded to the Department of Harbours and Marine and subsequently became ichthyologist in that department. Ivor Filmer replaced him in December 1944. His duties were many—Filmer, as a young assistant in the museum at this time, did almost every job there was to be done. He cleaned and fumigated display cases and spirit tanks, ran messages, arranged displays, labelled specimens, filled up jars, made catalogues, registered acquisitions and identified specimens—sometimes with Longman's help, but often he had to do it on his own. When Longman was away he answered most of the public enquiries. When Miss Murphy was away, he was clerk as well.

One of the attendants in Longman's time was R.V. Smith who, like Longman, was a free thinker and a Rationalist, and who was a highly respected member of the Brisbane community. Born in Belfast, he was a

Museum staff, circa 1916. L to R: Cuthbert Butler, librarian; Heber A. Longman, assistant curator; Eileen Murphy, stenographer; James Douglas Ogilby, ichthyologist; Henry Hacker, colonial agent; Tom C. Marshall, assistant preparator; and; William Pattee, after Capt. Benjamin Harris, colonial attendant, gardeners—Jordan, Archibald and Spalding.



museum attendant until his death in 1932 at the age of 43. Both Longman and Tom Marshall were pall-bearers at his funeral and long obituaries in the Brisbane press are glowing in their praise of the man and the work he had done for the Labour party, the State Service Union and the Worker's Education Library⁴⁹.

Michael Beirne, another attendant appointed by Longman had a long distinguished record in office in the museum from 1925 to 1959—his tenure almost spanning that of two directors, Longman and Mack. Beirne's feat in chasing two youths who had stolen gold nuggets from the display is remembered to this day by the attendant staff. It was a long chase, through Victoria Park to Leichhardt Street, where the 'badly winded' miscreants were caught⁵⁰.

Longman achieved international recognition for his scientific work on vertebrate palaeontology. He made another significant contribution to science. In these years of economic stringency many Australian scientists were parochial and jealous of the competitive advantages available to better funded overseas institutions and scientists who came on expeditions to Australia, and visitors' collecting activities often were resented (see Chapter 8). However, Longman believed that science was international, that overseas naturalists should be encouraged to work in Australia, and he provided very real assistance to those who did (see Chapters 7, 8). It is a testimony to his objectivity and scientific integrity that he continued to do this even after the visit of the 1931 Harvard Museum of Comparative Zoology palaeontological expedition. A lesser man would certainly have been jealous of the treasures that the American were removing. They were treasures representative of a fauna that he was investigating and they came from locations that he already had sampled. Longman, far from being jealous shared his knowledge with these colleagues from abroad and guided them to the fossil sites with his never-failing gentle courtesy (see Chapter 7). During his tenure as director, the Queensland Museum was a base for the 1923–5 British Museum Expedition to tropical Australia as well as the Harvard expedition (see Chapters 13, 7 respectively). Longman also supported Archbold's collecting activities on behalf of the American Museum of Natural History and he provided facilities and support for Gabriele Neuhäuser who in 1837–8 was collecting in north Queensland for the Museum für Naturkunde in Berlin (see Chapter 8).

In the local community Longman established the museum's authority in natural science and, largely through his newspaper articles, he did much to encourage and foster scientists and naturalists in Queensland and to promote an interest in the state's fauna and flora. In fact, during his years as director, the museum had better public relations than it has ever had before or since—a fact to which the museum's cuttings books attest.

It is doubtful that all this made up for the inefficiency and even neglect in the actual curation of specimens. Filmer records that he was cleaning out tanks in the spirit room and—

made an interesting experiment by filtering our formalin, as it was very cloudy. The residue was a white powder.... (which) turned blue litmus red, but this did not seem to prove anything other than it was an acid⁴⁶.

Mrs Grichting—the librarian—and Longman, in a tea-room conversation, disagreed about what the white powder could have been. No one seems to have been very concerned that the preservative they were using was acid—perhaps no one knew how damaging it was. A Public

Service Commissioner's enquiry in 1929 recommended that a scientist be appointed to assist the director when 'the opportunity arose'⁵¹. It never arose—it was the beginning of the 1930s depression, and, in any case, Longman himself was not very persuasive (see Appendix 1). For most of his tenure he ran the museum with only four attendants, two preparators, a librarian, a stenographer and a part-time entomologist. In the late 1930s there was a successful education extension programme with funds from a Carnegie grant but it did not continue after the two year period of the grant (see Chapter 5). Filmer suggests that the fact that there had been no funds to improve the museum during Longman's years—

was not so much a reflection on his (Longman's) own efforts, but rather an index of the cultural desert that appears to be characteristic of so much of Australia until comparatively recent times⁵²

Whatever the reason, it was almost at an end and a new era was about to begin. Longman, after 27 years in office, was looking for a successor, and, on 14 August 1945, World War II ended. Filmer recorded the receipt of that news:

A unique day in our history, and in my life. Peace was officially announced at 9.30 this morning, and at the museum we received the news with joy. The attendants rang the bell, shouting "Hooray!" through the galleries, and Mr Longman and I found an old Balinese gong which we banged and made a loud ringing noise outside the back door, but there was no one there to hear us⁵³.

The Beginning of a new Era 1946-64

George Mack became director in February 1946. He came to an institution that was respected in a few specialised areas of science—in vertebrate palaeontology and in some aspects of entomology—and an institution that was regarded, with affection, by the Queensland community as an authority in matters of natural history. However, apart from the entertainment afforded by its displays, the museum's educational role was not generally recognised at all nor was the real significance of its collections, which were neglected—many items irretrievably so. During his tenure Mack improved storage and care of the collections and promoted the educational role of the museum—he instituted school programmes and concerned himself with the educational content and quality of the displays. Primarily to help him achieve these improvements, he gradually increased the staff levels. D.P. Vernon and M.E. McAnna, assisted by K. Keith, succeeded Colclough and Marshall in the preparatorial section. From 1947 one, and later two artists were appointed, and from about 1955 there were two assistants in the library instead of one. A photographer R.V. Oldham, was also appointed in 1955. Assistants were appointed in zoology, entomology, molluscs and ornithology. In 1948 the number of attendants was increased from four to six, and in 1960 to eight. Also in 1948 a clerical assistant for Eileen Murphy, E.J. Bingham, was appointed. However, the scientific strength of the institution was barely an improvement on what it had been in Longman's time. J.T. Woods was appointed as assistant curator in geology in 1948 and much later, in 1963, a second professional position was created when E. Dahms became curator of entomology. Mack also appointed an assistant in anthropology, M. Calley, but it was not a successful appointment and he didn't try again (see Chapter 10).

For the whole of 1946 and most of 1947 there was cleaning, tidying, fumigating, shifting, and everyone was involved, even Colclough, who at

first seems to have cooperated better with Mack than he had with Longman⁴⁶. In the end, there was disagreement about the arrangement of cases in the galleries and Colclough left just before Vernon arrived on 20 September 1946. Two weeks later he was back, helping with the clean up as an honorary worker⁴⁶. However, the next March he fell out with Mack and Vernon about the mounting of birds in the new displays and he appears to have left for ever. Meanwhile, the tidying up went on. Mack and Vernon came into the museum firmly determined to clean it up—and indeed they did. For those staff members who had continued through from Longman's days the new team from Melbourne at first were not appreciated. They were always moving things. When Filmer asked Mr Beirne what he thought of all the removing of exhibits that was going on, Beirne replied 'all changes aren't improvements'; and—



George Mack, director of the museum 1946-64, with Bob Dyer, Australian radio personality and amateur sports fisherman.

Mr Beirne said that Mr Mack was excited about what he saw in Adelaide (where he had attended the 1946 meeting of ANZAAS) — so much activity, even the attendants going round with paint brushes. Mr Beirne did not think that was such a good idea⁴⁰.

Nevertheless, Beirne and the other attendants were all part of the team who helped with the reorganisation of the museum at this time. Conservative about the changes at first, they eventually got used to the new regime; and for some there were definite improvements — Filmer particularly enjoyed the field trips:

10 March 1947: it was a feeling of great pleasure to be off on a collecting trip in official time

25 July 1947: these outings for perches are a real treat⁴⁰.

Many times over the next year Filmer with Vernon or McAnna made expeditions usually to collect perches for bird displays. They would catch the train from Brunswick Street to Mitchelton and then walk to Samford Road or to Ferny Grove, sawing off the logs they needed and carrying them back to the station in sacks. Increasingly Filmer found himself helping Vernon and McAnna with taxidermy:

24 March 1947: an important day in my career — tackled my first skin⁴⁰.

George Mack was an exacting task master. He inspired loyalty in those who stayed long enough to understand him — but many did not stay that long. Miss Murphy was reduced to tears on more than one occasion and Betty Baird, the librarian, left the museum in May 1947 — only six months after she had started — because of Mack⁴¹. His irascibility often made him a difficult man to deal with and may explain some of the departmental neglect that the museum experienced at his time. A characteristic incident occurred when he was conducting a breeding experiment with a colony of marsupial rats, *Dasyuroides byrnei*. Rhodes, the zoology assistant at the time — whose job it was to care for the rats — had left, and Mack ordered the attendants to see to them. Len Taylor volunteered to do the job, but Mack insisted that he had issued an order and had not asked for a volunteer, and promptly served them all with dismissal notices. What really had been troubling Mack was that he needed a roster that would ensure the colony was cared for over the weekend. However tempers had become frayed before that could be explained and the situation was resolved only after the Union was called in. A roster was organised, the rats were fed, Mack said nothing more about it and no one actually left the service of the museum.

Filmer suggests that 'in his "high noon" of reorganisation denigration and re-furbishing Mack was misunderstood by many people'⁴¹. Indeed he was — although most people thought he was merely pig-headed and irascible, he was trying to stop the decay that 50 years of neglect had brought about. Nevertheless it was not only unfortunate that 'good relations with Longman could not be entertained', but also that his relations with so many people were affected because 'bluntly he was not mature enough to assuage his forthright personality and bad temper'⁴¹.

In May 1956, Mack wrote to the Director-General of Education, asking permission to apply for a Carnegie travel grant. He wanted to visit America and Europe —

- 1 to observe and study display, educational and other museum developments...

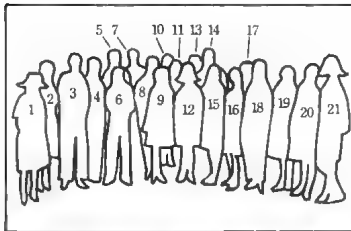
- 2 to prepare a suitable plan for a possible new Queensland Museum building based on my own experience and on observations and discussions abroad.
- 3 to learn at first hand the uses made of radio and especially of television by museums in the field of education⁵².

Cabinet was 'in no way unsympathetic' to the request but 'considered that, in view of retrenchments at the present time, it would be advisable to defer the matter'. He never asked again. He died in office in October 1963 at the age of 64. It was just three months after he had written to the Public Service Board indicating that 'he would appreciate an extension of his term of office' after reaching the age of 65⁵³.

Mack presided over a staff increase from 9 or 10 to 26. However, the increase was due largely to the appointment of assistants and support staff. It is clear from correspondence that he tried very hard to persuade the government that he needed professional and technical staff, but he did not succeed in this.

One of the most astute things that Mack did, was to bring Vernon with him from the National Museum of Victoria. Don Vernon was to stay on the staff of the Queensland Museum for 36 years to become the second longest serving member — Eileen Murphy served longer, retiring after 42 years service. He was to be involved in the design and production of most of the displays developed between 1945 and 1970 and many of those developed in the 1970s and he brought modern techniques of sculpture taxidermy to Queensland. However, he was also an assiduous worker in the field. In the course of his tenure he was to undertake a diversity of projects for the museum including the production of the popular *Birds of Brisbane* in the Queensland Museum Booklet series, the initiation and organisation of a small museums seminar in 1978 (see Chapter 14) and he consistently promoted the role of museums and a respect for their collections. In his retirement he continues his association with the museum.

Museum staff 1965: Eileen Murphy (1), S. Gunn (2), J.T. Woods (3), C. Bowman (4), M.P. Beirne(5), J. Thomson (6), D.P. Vernon (7), E.C. Dahms (8), D.A. Wilson (9), M. Stegeman (10), T. Tebble (11), L. Haren (12), D.D. Chorley (13), B.M. Campbell (14), C. Corrie (15), P. Wipple (16), A. Easton (17), A. Bartholomai (18), E. Crosby (19), L. Elder (20), Mary McKenzie (21).



A New Deal 1964-86

Jack Woods, succeeding George Mack in 1963, was the first Australian-born and educated director of the museum. This was probably an indication of the political and economic maturity of Australia, whose institutions, from the end of World War II, were increasingly staffed by graduates from its own universities rather than from those of Great Britain. Up to this time doctoral degrees were not awarded in Australian universities and it had been customary for Australian graduates to go overseas for their professional training. Some returned, but mainly it was overseas graduates who had staffed Australia's maturing institutions. However, Woods rejected an opportunity to go to the University of California in 1953. Subsequently, as director, he was the first member of the museum staff to be sent overseas by the government to visit the museums of Europe and North America. Study tours and overseas study have long been a privilege of university staff members and the experience is generally regarded as an important factor in overcoming the isolation that is often experienced in Australia. The benefit had not previously been available to museum staff. The occasion signalled the public support and government recognition that at last were being afforded to the museum.

Woods appointment marked the beginning of the modern period in the museum's development. He was responsible for the appointment of curators of anthropology, zoology, ichthyology and reptiles, bringing the number of curators to five; and he appointed H.A. Sweetser to the history and technology section (see Chapter 11).

When Bartholomai became director in 1969 he inherited the strong infrastructure that Mack and Woods had put in place and proceeded to build on it. Perhaps he was fortunate that he came into office while the general affluence and expansion of the 1960s was still occurring,—he certainly took advantage of it. All the Australian museums were expanding at this time¹³, as were universities, and not only were graduates available to fill positions but also positions were being created in the museums. In Queensland, community support through the activities of the Hall of Science, Industry and Health Development Committee resulted in the enactment of the Queensland Museum legislation and the setting up of the board of trustees (see Chapters 11, 14). Thus Bartholomai had a lot of support for the expansion that he engineered. New curatorships were created in arachnology, molluscs, history and technology, higher invertebrates, lower invertebrates and subsequently in industrial archaeology, maritime archaeology, and lower entomology as well as a scientist in charge of materials conservation. Meanwhile, as assistants who had initially been appointed as cadets qualified for promotion, new curatorships were created in Australian ethnography, crustaceans, and amphibians and ornithology. These new positions, together with more assistants and very much enlarged preparatorial, art, education and administration sections comprised a staff of 101—the strength of the museum at the close of 1985.

Now, in 1986, not only is the staff about six times its size when Woods took over in 1964, but also it is highly qualified and experienced. Travel, to visit and consult with colleagues is a normal event, not only for directors, but also for others on the staff. Now the museum is able to keep pace with changing philosophies and advances in science and technology, and it takes its place amongst museums the world over.

There are also members of the community who are contributing to the museum's operation. They are donors, volunteer workers and field



Jack Tunstall Woods, director of the museum 1964-68.



Alan Bartholomai, director of the museum from 1969.

assistants, and consultants. The Hall of Science Industry and Health Development Committee, having initiated the museum's metamorphosis, sought a continuing role. It became the Museum Society of Queensland in 1971, and from 1985, with an increasing emphasis on its association with the Queensland Museum, it changed to the Queensland Museum Association Incorporated. F. Stanley Colliver, honorary museum associate and donor, is the association's foundation chairman. He heads a group of its members who volunteer their services to the museum on a regular weekly basis to help wherever there is a backlog of work to be addressed. It is one of the ways in which the public can interact with the staff in its care of the collections that, in fact, belong to every member of the community.



Museum staff 1984.



Museum staff, 1970. *L to R*: J. Utz, A. Bartholomai, H. King, B. Campbell, S. Hoare, R. Whitby, J. Covacevich, R. Monroe, P. Jell, J. Hodge, E.C. Dahms, J. Wilson, A. Sweetser, W. Balaam, M. McAnna, Mary McKenzie, E. Gehrmann, J. Wertz, T. Hiller, M. Quinnell, R. Hardley, E.P. Wixted, D.P. Vernon, A. Easton (cartoon by S. Hiley—seated).







4

SHOW
AND TELL

Displays



People visit museums to see objects — some familiar, others that few will have seen before. In some museums nowadays it is also possible to touch some of these objects. Always the experience is direct and personal. People love to see fur and fabric, wood and stone, gems and steel. Good museum displays are to be enjoyed; and they are a short-cut to knowledge — gained through the discovery of the significance of objects.

During the 19th and early 20th centuries, museums everywhere displayed row upon row of specimens — possibly to advertise the size of the collection. Certainly, this style of display showed diversity, but it showed little else. However, museums have since had to compete with other entertainments to keep their audiences and gradually, around the world, the style of museum displays has changed. Fortunately, their educational role now recognised, museums are better funded than once they were. Thus, they are able to take advantage of new approaches to design, and new materials and technologies to improve the quality of their displays.

There is no doubt that for much of its history the Queensland Museum's displays were cramped, staff and expertise were lacking, and there were critical shortages of funds. However, from 1910 when Hamlyn-Harris became director, the institution has been served by a succession of able taxidermists and preparators whose standards have been high and who steadily improved the quality of the displays throughout the galleries.

A Collection of Objects

There is no information surviving today on the displays in the old Windmill on Wickham Terrace. It was a collection and assemblage area that was organised by Charles Coxen, with the assistance of other members of the Queensland Philosophical Society, and possibly his wife, Elizabeth. Probably at that early stage everything in the collection was displayed. We know that there were shells and birds that Coxen, ornithologist H.C. Rawnsley and taxidermist and collector E. Waller had contributed; and there was a microscope donated by C. Tiffin¹. In 1863 two cabinets of insects were purchased that were supplemented with some from Silvester Diggles (see Chapter 9). A case of fossils had been donated by J.K. Wilson — that same Wilson whose paper on the geology of western Queensland had been communicated to a meeting of the society by Coxen (see Chapter 7). In 1868 the collections were moved down to Queen Street — to the Parliamentary building. In its annual report for 1899 the museum board of trustees was to comment that there were mainly 'crabs and other marine invertebrates'² that were transferred from the Windmill to the Parliamentary building but there is no other evidence that this was so. After the move a collection of about 70 birds from Cape York was purchased from Messrs Cockerell and Thorpe, and Coxen was to mount them. Another collection of 122 birds was given by Cockerell in 1870 and the society spent £10 on glass doors for the ornithological shelves. Richard Daintree, government geologist for north Queensland, gave four sets of stereoscopic photographs of the Gilbert River¹.

There were also the government's mineralogical collections that Daintree had entrusted to the society until a government museum was founded. However, these mineralogical collections 'being in boxes and not set out on open shelves.....cannot be said to be really open to the public'³. More space was made available in the Parliamentary building in 1871 and C. D'Oyly H. Aplin, the former government geologist for south Queensland, arranged and catalogued Daintree's specimens with his own

Previous page: A school class examines a display of jellyfish (by courtesy the *Courier Mail*).

collection for the geological museum that the government was setting up³⁴. On 24 June 1871 the secretary for Public Works inserted a notice in the *Government Gazette*:

The Government having arranged for the exhibition of Mineral Specimens etc. etc., contributions from persons interested in the formation of the Museum proposed to be initiated will be thankfully received by this Department. Cost of transit of specimens by steamer will be paid⁵.

However, the government's geological museum lasted barely two months. Aplin finished arranging the minerals in the first week of September³; and soon after, the government at last assumed responsibility for the Philosophical Society's collections as well as its own mineral specimens by appointing Coxen the honorary curator of a public museum¹ (see Chapter 3). From the notice that appears in the *Government Gazette* on 7 October 1871, signed by Coxen as acting curator, it is clear that he was the honorary curator of a comprehensive museum and not one confined to mineralogy⁵.

In the notice in the *Government Gazette* in 1873, announcing Karl Staiger's appointment as government analyst and museum custodian, the government solicited—

contributions of animals, birds, minerals, shells etc. to enlarge the present collection at the temporary museum..... (and) when forwarded from distant places.....cost of transit will be defrayed by the government⁶.

There could not have been much room in the two small rooms in the Parliamentary building. Staiger reported that one room contained the minerals that D'Oyly Aplin had arranged and the zoology collection was in the other. Most of the Philosophical Society's collection must have been packed up—pending the availability of a new building—because Staiger describes the zoological collection as comprising:

a skull of a dugong, an imperfect skeleton of a black whale, some snakes, fishes, an octopus and a small collection of insects and shells, none of which I found named⁷

He set up a display of minerals to satisfy enquiries in the new accommodation he had obtained in the Post Office building. Meanwhile Daintree had been writing long letters from London—where he was now Queensland's agent general—advising Staiger how to set up a display of soils from different parts of Queensland:

as.....I take a never ceasing personal interest in this matter I will take the opportunity of sketching the outline of a mode of arrangement of the Museum.....Divide your building into sections, each section to represent a geological epoch.....⁸.

Staiger believed he could do what Daintree suggested if he had the long room in the Post Office building for mineralogical display, leaving the two rooms in the Parliamentary building for the zoology⁹. However, by 9 May 1874, when *The Queenslander* published a glowing account of the displays, they were all in a large, 'nicely painted' room in the Post Office building—

well lighted, and (with) show cases arranged down the centre and along the aisles. In the cases are classified specimens of tin, copper, iron, gold, coal, marble.....as obtained in the colony and.....in many cases.....from other countries—an admirable arrangement when comparison is the object a visitor has in view. Other cases contain insects; there are bottles with fishes.....; reptiles and other things much more agreeable in the preserved than in the living state.....



Anthony Alder, taxidermist at the museum from 1907 to 1915, with his wife.

A tradition of taxidermy came to the new colony, Queensland, from Great Britain. Alder had trained in his uncle's firm in London.



The walls are decorated with views of colonial life and animals that were, by repute, extinct before Australia was discovered. Mr Staiger, who is arranging the collection, is afraid, and with good reason, that the space at his disposal will be occupied before the novelties and valuables sent in.....have all got a place.

The trustees acquired more space in the Post Office building in 1876 and 1877, but it was still very crowded, and the standard of display could not have been high. Nevertheless, Staiger entered displays on behalf of the museum in the Agricultural Society of New South Wales show of 1877 and was awarded bronze medals for Queensland photographs (Daintree's) and for Queensland minerals¹⁰. In the same year taxidermist Anthony Alder offered his services to collect and mount zoological specimens. Although they purchased material from him occasionally, the trustees were not able to engage him at that stage¹¹.

By this time the museum holdings included 'Curios, Machinery, Weapons and Furniture'¹² — it was a museum of general sciences and history as well as anthropology, mineralogy and natural history. Live specimens were also on display. A series of articles in the *Courier* in 1926 elicited reminiscences of the museum in Queen Street from readers¹³. Miss Pauline Seal recalled childrens' hour, 4.00 to 5.00 pm daily, when Mr Dignan fed mice to his carpet snakes. The museum was obviously interested in attracting children, and it created a lasting impression on them, though possibly not the one intended. Apparently the trustees also assumed some responsibility for the living lungfish, probably in the Botanical Gardens. In the board minutes of 20 August 1876 their concern that 'the ducks in the pond.....(were) damaging to the.....propagation of the *Ceratodus* and studying its habits' is recorded.

The displays in the new building in William Street were described in an article in the *Queenslander* published on 13 March 1880 just two days before it opened to the public:

the collections which so crowded the old building in Queen-street are as yet very insufficient to the aim of their present habitation. There are a few new additions to the collections, one the most noticeable of which is the skeleton of a python, beautifully articulated and coiled in spiral curves, the length of the reptile being about 13 ft. The upper floor has been devoted to birds, butterflies, shells, and reptiles, and there are two cases containing beautiful specimens of coral..... The cases of lepidoptera have been supplemented with valuable additions from Singapore, some of the moths and butterflies

being most gorgeous. On this floor a case of echinoderms are chiefly new. On the ground floor are the mammals, minerals, ethnological and technological specimens, and the walls are hung round with the Daintree colored photographs. The collection of mammals is at present very insignificant, though there are a goodly number of skins awaiting the labors of the taxidermist.....Mr Haswell believes in what we might term the pictorial style of arranging zoological specimens, which is certainly more attractive to the ordinary visitor than endless rows of catalogued birds and beasts. A large case is to be devoted to climbing marsupials, in which rock and tree will allow these creatures to be shown in life-like attitudes, while from the still pool in the corner the platypus steals up to sun himself on the rocky margin. We saw one of the platypi pinned out in the shape in which it is intended he shall bask in the future, and another coiled up asleep. The same pictorial design will also be carried out with a large number of the birds that are yet unmounted. The cases brought by Mr Bernays from New Zealand have been opened, and amongst other things contained various bones of the gigantic extinct birds of that country. It is intended that the gallery above the upper floor shall contain a botanical collection of which Mr Bailey is at present engaged in making the commencement. The cases at present set out contain a collection of fungi and of fruits. The walls are to be hung with illustrations of various vegetable diseases. To those who visit a museum more for instruction than amusement the minerals will probably be the chief object of interest. These have been carefully arranged, and are a very valuable collection. The fishes, which were a very attractive feature in the old exhibition, have at present to remain stored away in obscurity, as the vessels in which they were displayed are of a faulty construction and will not hold the glycerine without leaking.....The hammer-headed shark purchased some time ago, and which, though a splendid specimen, appeared to have been irretrievably ruined by weeks of exposure to sun and rain in the exhibition grounds at Bowen Park, has been most skilfully restored by the museum taxidermist, and will now be a most striking object. The largest specimen of this creature possessed by the British Museum is less than 5 ft in length, whereas this one is about 12 ft long.

Edward Spalding, the museum's first staff taxidermist, was appointed in 1880¹⁴. He was to stay at the Queensland Museum for 13 years. The museum board's report of 1885 records that in that year alone he mounted 44 mammals, 81 birds, 9 reptiles and 11 fish as well as preparing skins and skeletons. In 1886 and 1887 he mounted many specimens of marsupials that had been collected by Kendall Broadbent—the museum's zoology collector. These included specimens collected at Cape York, Herbert River, Cardwell and Rockhampton (see Chapter 3).

As well as material collected by the staff, there were purchases, exchanges and public contributions and, in 1884, only four years after the museum had moved to its new building Sir A.H. Palmer, chairman of the board, wrote:

.....Indeed the evils of overcrowding which last year were in a measure prospective are now being realized to the defeat of the prime object of the institution as an educational agent—the conveyance of instruction by means of objects systematically displayed.....On the same floor between the fossils and minerals and therefore quite out of accord with its surroundings is the anthropological collection. This fine series of objects from Australia, New Guinea, the South Sea Islands and New Zealand obviously suffers for want of room for proper display. The minerals have for the present scope enough but it is at the expense of public convenience. The cases occupied by them are.....too closely arranged to allow free circulation of visitors in holiday throngs¹⁵.

The floor above was the zoology gallery but it was also short of space. Palmer says of it:

....To economise room a double line of tall cases has been of necessity placed in the middle of the floor with the unavoidable result of depriving observers of a favourable light for examining a part of their contents — the Australian Birds¹⁵.

The upper mezzanine gallery exhibited molluscs, anatomical specimens and botany:

One end of this gallery being filled by the Herbarium, the cases in which utilitarian botany can find place are but few in number and it is much to be regretted that the department of instruction is thereby seriously retarded¹⁵.

Problems abounded but, as Staiger had done, the museum displayed exhibits at interstate and international exhibitions. The trustees of the Queensland Museum were awarded a gold medal at the Melbourne Centennial International Exhibition in 1888¹⁶.

The museum moved to the National Association building in Gregory Terrace in 1900. It opened to the public on 1 January 1901—Federation Day. Displays apparently left a good deal to be desired. In a report of 26 January 1901, A. Norton, chairman of the board, wrote that—

....failure of the contractor for new cases to finish his work in time compelled me to have numerous cases fastened down with wire in default of locks.... On the ground floor are shown Queensland products exclusively, the galleries are devoted to illustrations of various branches of science and skill. The reservation of a distinct portion of the building for the display of home produce should in my judgement be made a special feature in every provincial museum and I am glad to find that it seems to have met with approval here....Our fish fauna especially demands vastly more than can be afforded to it as yet and our industrial materials are not represented as such in any way.... With regard to the gallery I regret to find my apprehension of its insufficiency more than justified. Though most of its cases have been crowded with exhibits to a degree which precludes anything like proper arrangement and descriptive labelling there remains a large surplusage of material which cannot be utilized. In fact our ethnological collections alone would, if exhibited as they should be, fill the entire gallery and considering our geographical and other relations with New Guinea and the neighbouring oceanic islands we ought not merely to have but to exhibit a far richer series of objects of interest from these sources than most other museums.

Norton went on to say that the display of samples of food and adulterations had excited interest and that the natural history exhibit which featured foreign animals was only partly displayed 'and was cooped up in a few cases in the gallery'¹⁷. The advisability of opening the displays to the public in the evenings was considered but because of the need for 'the installation of electric light' the trustees decided not to ask the Government to incur this expense.

There is no doubt that the Gregory Terrace building gave space for expansion of the exhibits. But Director de Vis and his small staff clearly had neither time nor resources to improve the displays which were still at a comparatively low level in 1910 when Robert Etheridge of the Australian Museum reported that 'the Queensland Museum leaves on my mind a feeling of gloom, absence of taste and disjointed elements'. He also said that 'the present (display) cases are cumbersome and out of date' and that there was a need for 'a more modern form of natural decoration in some of

the mammal and bird groups' because 'much of this is incorrect and not up to present day taxidermal science'¹⁸.

Great progress was made with the exhibition of specimens and objects following the appointment of Hamlyn-Harris to the directorship in 1910. Alder had finally become taxidermist in 1907. In 1912 Thomas C. Marshall began as cadet and in 1913 Michael J. Colclough was appointed as assistant taxidermist. Alder was a considerable asset to Hamlyn-Harris as he had trained in England and was an expert in wax and plaster casting as well as taxidermy and painting. He had supplied museums in England and on the Continent with specimens, had exhibited at international exhibitions and had won two gold medals for his casting work¹⁹.



The Aboriginal Camp-Site diorama. Opened in January 1914, it was on display until the museum closed to the public in November 1985. The display was created by Anthony Alder under Hamlyn-Harris' direction.



The Investigator Tree, incised during the beaching of Matthew Flinders' ship. Later, *Beagle 1841* was added to the inscription. The log came to the museum in 1889 from the Port Office.

Dioramas for Queensland

During the next few years Hamlyn-Harris organised several important displays including the *Australian Aboriginal Life* diorama. This display—to visitors from 1913 to 1985. At the time of its opening *The* except for a few months in 1955 when it was hidden by a temporary display—to visitors from 1914 to 1985. At the time of its opening *The Queenslander* enthusiastically reported it to be—

The largest and in many respects the most interesting of the new displays,.....a comprehensive illustration of a typical aboriginal scene. Three adult figures and a picanniny are shown. A man is squatting in front of a gunyah, husking and preparing Mitchell grass for the milling stone, which may be seen close by. A Dingo is sniffing at a dead wallaby, which has been deposited near the stone²¹.

Another report at that time stated of this display:

The whole is crowned by a talented scenic background of native flora and natural bush features, generally from the brush of Mr A. Alder, taxidermist. Both the idea and the execution merit unstinted recognition. Prominent in the exhibit is to be seen the *Investigator Tree*, round which massive logs cling so much of the history and romance of Australian exploration²¹.

The *Investigator Tree*, donated by the Port Office in 1889, is, in fact, only one log—the 3 metre long portion of the trunk from Sweer's Island, Gulf of Carpentaria. It was incised during the beaching of Captain Matthew Flinders' ship, the *Investigator*, in 1802; and a later incision, *Beagle 1841*, was added by one of the members of Charles Darwin's historic and scientifically important zoological and botanical expedition. As well as those inscriptions there are Chinese characters and other indistinct engravings. This diorama had its name changed to *The Aboriginal Camp Site* when it was refurbished in the mid 1960s. The dingo and pups were replaced with newly-mounted specimens and the *Investigator Tree*, removed to become a key exhibit in an historical display entitled *Discovering the Way*, was replaced with a similar-sized burnt log.

Hamlyn-Harris and his staff produced several room-sized group displays of Australian and particularly Queensland mammals and birds. Adjoining each other on the side of the main hall opposite the Aboriginal diorama there were four semi-diorama animal groups that had large painted backgrounds and side panels made of canvas stretched to wooden

Dioramas created by Marshall in the 1920s. *Below*: the Limestone Cave, constructed in 1925 under Longman's direction; *below right*: The Coral Pool, constructed in 1928, and dismantled in 1955 to make way for another display.



frames. Alder, assisted by Colclough, painted the scenic panels with oil colours thinly applied. These groups featured, separately, kangaroos and wallabies, possums, wombats and carnivorous marsupials including a Tasmanian tiger, and a group of emus with chicks. Irish peat, imported in blocks about the size of bricks, was used in all these early dioramas in the construction of rock and ground forms. The earth surrounds consisted of peat fragments, and peat dust was always a problem as the dust lodged on the painted Aboriginal casts and on the specimens and accessories.

At this time Henry Hacker, the capable entomologist appointed in 1911, began to make an excellent series of insect life-histories. His insect displays included beautiful photomicrographs carefully arranged in table cases.



Possums and tree-climbing marsupials— one of a group of dioramas prepared by Alder under Hamlyn-Harris' direction (photograph from the *Queenslander* 31 January 1914).

It was the developing talent of Thomas C. Marshall, who had trained with Alder and Colclough and later studied art under the gifted artist, potter and woodcarver L.J. Harvey at the Central Technology College, that paved the way for the advances in the displays between 1920 and 1940— during H.A. Longman's tenure as director. Although Marshall was associated with Alder for only a few years he certainly was greatly influenced by him. In 1925, under Longman's direction, Marshall created the *Limestone Cave* diorama based on the Chillagoe Caves in north Queensland. Described by *The Queenslander* at that time as a 'Geological Fairyland', it was built in the top of a disused staircase. Some actual stalactites and stalagmites were used but most were created by modelling them in plaster, cement, expanded metal and powdered glass. Part of the success of this exhibit, has been the result of the element of mystery that its creator achieved. It was an open display and often, when the attendant's back was turned, children entered to discover its secrets. In consequence, the cave became run-down and was closed about 1950. In 1965, refurbished, with two false vampire bats mounted and set-up on the 'limestone walls', concealed fluorescent lighting installed, and glazed with

The ground floor display gallery in the Exhibition building in the 1930s.



sloping glass to avoid reflections it was, again, a success. Recently, two small boys stood in front of the display and one, bending over and peering in, called to the other 'Betcha don't know where this cave ends?'. 'I do—comes out at Jenolan Caves at Sydney' was the reply.

The *Coral Pool* diorama, created in 1928, was Marshall's next success. It was built at the western end of the main hall and featured ridges of 24 species of coral, a giant clam with the shell valves open showing the purple body and colourful painted casts of fish, sea-fans, starfish, sea-urchins and other marine forms. Sadly, it was dismantled in 1955 to make space for another display. Marshall made models of whales, casts of fossil bones and a very fine series of fish casts which he painted himself. Longman, with Marshall's assistance, was the first to exhibit some of the fossil bones of the Durham Downs dinosaur *Rhoetosaurus brownei*, together with a plaster cast skull of the great carnivorous dinosaur *Tyrannosaurus rex* and an oil painting by Douglas Dundas which illustrated the huge extinct reptiles in their environment. Jack Woods, when geologist under Director Mack, reconstructed and improved the display in the 1950s and later the dinosaur footprint from the ceiling of the Rhondda Colliery at Dinmore was added by Bartholomai.

In the late 1930s Marshall made two of the earlier films featuring the marine animals of the Great Barrier Reef, and he was one of the official photographers during the visit to Queensland in 1954 by Queen Elizabeth and the Duke of Edinburgh. There is no question that he was the key man in the better displays of the Longman period. In 1939 he was awarded a Carnegie scholarship to study abroad but was unable to take it up because of the outbreak of World War II²². He was transferred to the Department of Harbours and Marine in 1942 and in 1943 became ichthyologist in that department²³. He maintained his contact with the museum and was a regular visitor.

Ivor Filmer assisted in the maintenance of displays from 1944 to 1952. His keen interest in natural history persisted after he left the museum and he continued to send in road-killed and storm-washed specimens. While in charge of the Australian Inland Mission Hospital at Birdsville during the period 1957–1959 he collected more than 200 vertebrates, including rare and valuable mammal and bird specimens, some of which were mounted for display. He usually air-freighted the specimens from Birdsville to

Brisbane and on one occasion he sent a live python, with two rats in the container to serve as food. However, when museum staff opened the box they found that instead of the python having eaten the rats, the latter had nibbled the python.

Meanwhile, other important items that added to the diversity of the displays and attracted a new audience to the museum had been acquired. In the morning of 22 August 1919 *Mephisto* — today the last surviving World War I German Tank A7V Kampfwagen — was hauled into the museum grounds by two Brisbane City Council steamrollers. It had been recovered, disabled, in France by the largely Queensland 26th Battalion AIF with the assistance of the members of a British tank corps, who towed it out of no-mans-land and protected it from subsequent, largely Australian, souvenir hunters²⁴. The 30 ton tank, consigned to the Australian War Memorial, was diverted to Brisbane as a result of the representations of Queenslanders and state officials, including the governor, whose aide-de-camp was, at the time, Lt. Col. J.A. Robinson,



T.C. Marshall modelling the Pygmy Sperm Whale that came ashore at Sandgate in 1933. Marshall is working in the basement area of the museum that later became the staff tea room.

commanding officer of the 26th Battalion at the time of its recovery. About 1950 *Mephisto* was cleaned and coated with boiled linseed oil to preserve it. In 1971 it was repainted by contract painters Smalley (James) Industrial Coatings and the history and technology section of the museum added further details in 1974.

Another large technological exhibit was put on permanent display in 1929 — the AVRO *Avian Cirrus*, aircraft G-EBOV, flown solo from England to Australia by Squadron Leader H.J.L. (Bert) Hinkler (see Chapter 11). This single-engined aircraft, that made pioneering aeronautical history, has been a magnet for visitors, drawing people from far and wide.

Longman organised the purchase of several large mammals from the London firm of Rowland Ward. The first, a magnificent female gorilla, arrived in 1927, and others followed — tiger, orang-utang, jaguar, cheetah and a male lion. The Queensland public were thus able to see mammals that could not be seen locally, as there was no zoological garden in Brisbane, and the purchase added a new dimension to the mammal displays. These excellent specimens were also examples of first class taxidermy — the first in the museum to have been prepared by the



Donald P. Vernon, in 1946 soon after he came from the National Museum of Victoria. He remained on the staff of the Queensland Museum until his retirement, as ornithologist, in 1981.

manikin method or sculpture-taxidermy. In this process the hollow artificial bodies were made of plaster reinforced with strips of hessian immersed in liquid plaster. The skin was then attached to the hollow cast. This was a tremendous improvement over the old 'stuffing' method that had been practised in museums for a very long time and which involved filling the sewn-up skin with one of the various plant fibres such as straw, hay or sawdust for bodies, and strips of reed or cane for legs. Much of this material was inserted by 'stuffing irons'—lengths of steel rod flattened and bent on one end and with a handle on the other. Several of these, of various lengths up to one metre, used to hang on the wall of the workshop. They were not used after 1946, for museum preparators soon were making excellent manikins under the tutorship of Donald P. Vernon, who had come from the National Museum of Victoria soon after Longman retired.

Displays for Education

Towards the end of 1945 George Mack, formerly ornithologist at the National Museum of Victoria, Melbourne, was appointed scientific assistant to Longman and succeeded him as director early the following year. Vernon, experienced in sculpture-taxidermy, casting and diorama construction was appointed as preparator in 1946. Like Marshall he had formal training in art and also in sculpture at the Melbourne Technical College under George Allen. In 1947 Malcolm E. McAnna was also appointed a preparator. He had been on the staff of the South Australian Museum, Adelaide, for many years and was an expert technician. The standard of displays that this team inherited varied from the excellent work of Marshall to many poorly displayed and out-of-date exhibits. Apart from the special attractions—Hinkler's aeroplane, the World War I tank *Mephisto*, the *Australian Aboriginal Life* diorama, there were also the Torres Strait mummies and the monstrosities case which always excited comment. The latter attracted viewers because of the bizzare mounted head and neck of a two-headed calf, a boar's skull with an overgrown tusk which circled back and pierced its skull, other aberrant skulls, hairballs from ungulates, a pair of scissors embedded in a tree trunk and other miscellaneous objects. Mack said 'The Museum is not a curiosity shop' and they were quickly removed, as were the many odd signs at the front entrance to the museum, one of which read 'Eating Peanuts Not Allowed'. The large eel on display required a new label to replace one that read 'World Record Eel'—Mack was 'against sensational labelling'²⁵. He was keen on educating students in science especially zoology and geology and at that stage very few secondary schools taught those subjects. He did not like dioramas and habitat groups, referring to them as 'just peep shows', and he wanted to present accurate, scientific information in a formal way.

At that time the bird section had a very dated Edwardian appearance with hundreds of rather poorly mounted specimens set on artificial trees. Many, such as the ducks and geese, were badly faded and had to be destroyed. Similarly faded, and in very poor condition were the mounted monotremes and marsupials, which had suffered serious insect damage. It was really only the layer of thick dust on their pelts that kept the specimens' fur intact. In consequence, most of these were destroyed and their entry in the register is all that remains. Sadly, until Mack initiated it, mounted specimens on exhibition were not provided with identification tags tied to the specimens. However even had they been labelled it would have been impossible to rescue the specimens that were lost at this time.

Nor were conditions in the galleries themselves ideal. In the year of

Longman's retirement there was excitement and consternation, when at short notice, on 11 June 1945, the Duke of Gloucester decided to visit the museum, and on that very day the director was away sick. The duke arrived, dressed in military uniform with the duchess by his side. They were accompanied by the governor of Queensland, Sir Leslie Wilson, and his aide. The welcoming party, comprising J. Edgar Young, an honorary, Head Attendant Michael P. Beirne, and Ivor G. Filmer the young assistant on the scientific side, guided the royal couple and the governor around the galleries. The duke then signed an historic bible, donated by J. Wilkinson, the first member for Moreton in the federal parliament. It was the same bible signed by his father King George V when, as Duke of York, he opened the first federal parliament in 1901. According to Filmer, it was a dull overcast day and matches had to be lit occasionally to show the duke a specimen or to light up a label. Looking back one wonders just what the duke thought about a state museum where matches had to be used for illumination of specimens and labelling. The museum galleries were lit with electricity for the first time in their history only in August 1948, after George Mack became director²⁵.

A worse problem was the rain water in the gallery during summer storms. It came through the roof, from perforations in the mortar and from around the windows and of course it ran down the interior walls. It was quite a common sight at such times to see distraught attendants heaving tarpaulins over table cases and placing buckets here and there to catch water from the main leaks or spurts. During one storm in 1947 water poured down the walls, behind the Ellis Rowan watercolour paintings of Australian wildflowers. This fine series on Australian flora, that had been purchased by the Queensland government in 1912, was moved quickly to safe storage. Since that time some of the paintings have been displayed several times but only for short periods. Mack, with the cooperation of the Department of Public Works made a determined effort to make the building as weatherproof as possible and in due course the external mortar was repointed. He was adamant though, that the museum needed a new 'home' and he said so on every possible occasion. His idea was to 'keep the old ship afloat' until a new museum could be built.

Then there were the wooden floors throughout the exhibition galleries. The cleaning of the floors was a ritual that was religiously carried out every Monday morning and it was not without a touch of humour. It was usual then to see a row of at least four women, down on their hands and knees and elbow to elbow, scrubbing away in a kind of leisured unison. There they were—heads down, bottoms up with their dresses tucked into the legs of their bloomers and woe betide any assistant who walked on their wet floor or who was audacious enough to want to open a table case. Of course, the galleries were closed every Monday for cleaning. However, visitors could still gain access by signing the visitors book in the office. This was not something that Mack could change, and it was not until 1970 that the floors and stairways were sanded and floor tiles laid.

From 1948 Jack T. Woods, who had been appointed as a scientific assistant and later geologist, began the improvement of the displays in the eastern end of the gallery. Under Mack's direction he organised new wall cases on *The Pleistocene Period* and *Introducing Earth History*. Woods continued with the redevelopment of the Durham Downs dinosaur display first exhibited by Longman. Also under glass in a new case was the cast of the skeleton of the giant fossil marsupial. The extraordinary fossil skull of

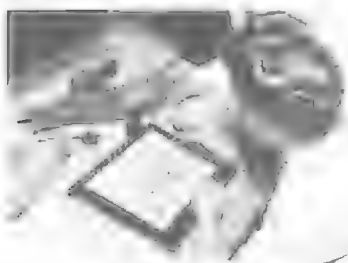


Malcolm McAnna, preparator 1947-71.

The museum's dinosaur display in the 1960s. Longman's original exhibit had been progressively improved by Mack, Woods and Bartholomai. A model of the giant carnivorous *Tyrannosaurus rex* is to the left of a display of the bones of Queensland's *Rhoctosaurus brucei* and the footprints from the ceiling of the Rhondda Colliery.



McAnna (left) and Vernon, colleagues from 1947.



Cecily Sandercocock, first artist in the museum, reconstructs a diprotodon from the cast of the fossil.

the cheek-pouched marsupial *Euryzygoma*, which Longman had described, was the main exhibit in another new case.

Vernon and McAnna mounted mammals and birds and cast many reptiles and amphibians. At first they also refurbished the old display cases and then, gradually, year by year, new cases were made by the Department of Public Works at the Ipswich Road workshops. In the next few years, several new or remodelled wall and island cases were prepared—two showing Aboriginal boomerangs and shields, three on the Great Barrier Reef, two on monotremes and marsupials and one each on human evolution and human physiology. Invertebrates of certain species were displayed in preservative fluid inside smart perspex containers that were made in the museum workshop. The art work in the early 1950's was executed by Cecily Sandercocock who made a solid contribution to the displays. She was the first artist appointed to the staff.

Mack wrote of these displays in the international journal *Museum*: 'The purpose was to produce an attractive, tasteful and dignified display, one that would catch the eye and hold the attention of the visitor'²⁶. He had a text book attitude to display content and was hard to convince on the use of colour and imaginative design, but he certainly was keen to aid students of all ages. In the same article he wrote '... visitors remark upon what they learn from the bright, well lit, methodically arranged exhibits. Classes of school children and other well organised public bodies can readily follow talks given in front of these cases'. For several years Mack and Shirley B. Gunn lectured in the front section of the main hall where the Great Barrier Reef cases, lit with fluorescent lighting, were arranged in an arc.

A valuable contribution to displays in the museum was made by McAnna, especially between 1950 and 1970. He was skilled at moulding and casting, and introduced the use of latex for moulds and casts of reptiles, fish and other animals. When very fine detail was required on small soft bodied specimens, such as frogs and toads, he used a flexible agar mould to ensure sharp and fine details in the cast. He experimented with the use of polyester resins strengthened by fibre glass and with this method he achieved first class results with his casts of sharks, rays and fish. The three metre high Sunfish that he cast in 1970 was his last. His

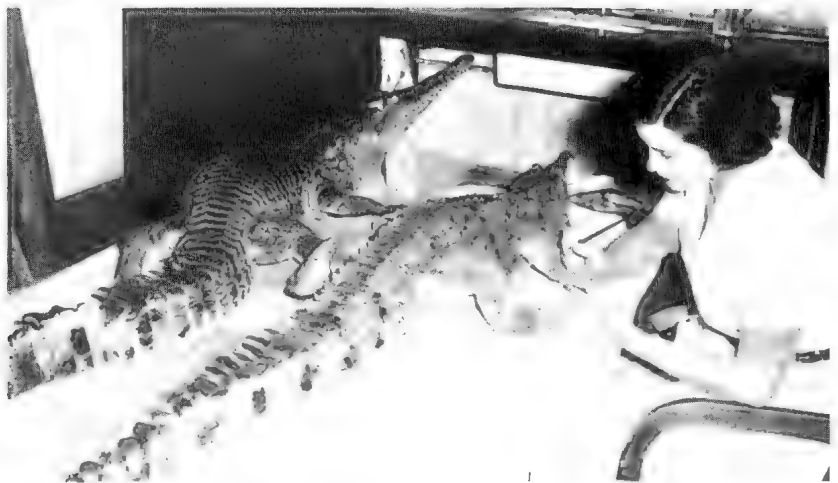
untimely death the next year, while rescuing his three nieces from the surf at Noosa, was a sad loss to the museum.

In an effort to obtain vertebrate specimens both for the study collection and for display, Mack organised field work that was undertaken by several of the staff following a period of inactivity due to decline in staff during World War II. The museum obtained its first vehicle in about 1950 — a 14 h.p. Commer truck. It was used for the collection of specimens. The taxidermy at that stage was done by Vernon and Kent Keith, and in 1960 Terence P. Tebble replaced the latter. An extensive series of reptile casts made by McAnna was painted in oil-colours by several staff artists - especially Valerie Smeed from 1950 to 1956 and Rhyl Jones from 1958 to 1962. They later became well known artists as Valerie Waring, a watercolourist and Rhyl Hinwood, a sculptor celebrated for her grotesque heads in Helidon sandstone in the Great Court of the University of Queensland.

Although he was seven years too early, Mack organised a special exhibition on the Centenary of the Queensland Museum in 1955²⁷. Two



Temporary wildflower display, mid-1960s. *Above*: the display set up at the end of the ground floor gallery; *below*: visitors examine the exhibits.



Reptile models were made by McAnna (*above*) and painted by museum artists, including Lynette Evans (*below*) in the 1950s.

wall cases traced the history of the institution with photographs of directors, curators and collectors, art work and specimens—including anthropological objects from the MacGregor collection and birds collected by Broadbent. One section was used to show the extent of the museum's activities at that time – collecting, mounting, casting, photography and some aspects of the education programme. This exhibition was followed, in 1959, by a much larger display on the *Centenary of Queensland 1859–1959* that consisted of 23 pastel coloured wall panels, two wall cases and other table cases which exhibited historical items and objects, many of which were loaned by the Royal Historical Society of Queensland from their Newstead House collection. The panels featured *Queensland Explorers, First Settlement 1820, Permanent Settlement 1840, Queensland a Colony 1859, Early Housing, and Transport and Mining*. There was also a panel of large framed historical photographs taken by Richard Daintree in the 1860s and coloured in London. The wall cases exhibited historical treasures such as explorer A.C. Gregory's compass; explorer Edmund Kennedy's sextant; the sundial from the homestead of Queensland's first permanent settler,

Patrick Leslie; a box attributed to explorer Ludwig Leichhardt; the model of the Pile Light and many other relics. Mack wrote a well illustrated booklet entitled *Centenary of Queensland Historical Exhibition* which was popular with school children²⁸. One of the central exhibits of the display was the large oil painting of Brisbane by Joseph A. Clarke which was painted in 1880 from the high bank of the Brisbane River at Bowen Park, New Farm. The painting was deposited in the museum by the Queensland government in 1882. It had probably been prominent on the wall of the William Street building and in 1946 it hung on the wall beneath the stained glass window on the western end of the main hall. Later, in 1968, it was displayed in the gallery. Unfortunately, this historically important painting had been prodded by visitors' umbrellas—no doubt while pointing to some familiar feature—and in addition there was some paint flaking. In quite recent times it was restored, a new frame made in the museum workshop, and it now hangs in the cabinet room of the Executive Building in George Street, Brisbane. It cannot be regarded as a masterpiece but it is a fine painting of Brisbane as it was 20 years before the turn of the century. Clarke was a resident of Brisbane in the 1870s and from 1881 he was the first teacher of freehand drawing at the old Brisbane School of the Arts²⁹.

Daintree's coloured photographs have also been displayed on many occasions. In 1877 they were loaned to the Sydney exhibition, along with some mineral specimens (see Chapter 14) and they were proudly displayed by the museum in its William Street building as well as in the Gregory Terrace building early in the 20th century. They were the subject of a special temporary display in 1977 and have been published by the museum as a record of the early pioneers of Queensland³⁰. Daintree had arranged for the over-painting of these photographs—many taken by himself and some later ones of the Gympie and Darling Downs areas by Heinrich Muller—to be done in London when he was agent-general for Queensland. It is not known how many sets there were but there appear to have been at least three and probably more. There was one in the agent-general's office and another, from the 1871 Colonial Exhibition in London, remained in South Kensington for a while. The museum appears to have had one set early in the 1870s. There was a set shown in successive exhibitions in Paris, Vienna and Philadelphia. Apart from their historical value as pictorial records of Queensland in the 1860s the over-painted



Don Vernon preparing a specimen of an Australian Bustard *Enpodotis australis* at his camp near Springsure, September 1965.



Stanley Breeden, museum photographer
1957–65.

Daintree photographs are an interesting and curious example of a technique that flourished briefly at a time when photography was seen as a mere adjunct to painting. They were often embellished with details that were not in the original photograph—for instance an Aborigine or a kangaroo is sometimes added. Indeed, because of the coloured and obviously painted surface of the photographs they were long believed to be paintings.

Many of the enlargements of other photographs exhibited in Mack's *Centenary of Queensland* exhibition were prepared by Stanley Breeden. He was appointed in 1957, succeeding R.V. Oldham. He developed expertise in natural history, ciné and still photography and he took part in field trips photographing wild fauna and collecting specimens. Over a period of eight years he built up the photographic section and this became invaluable both in research and for display in the museum. Breeden's later photographic work achieved an international reputation.

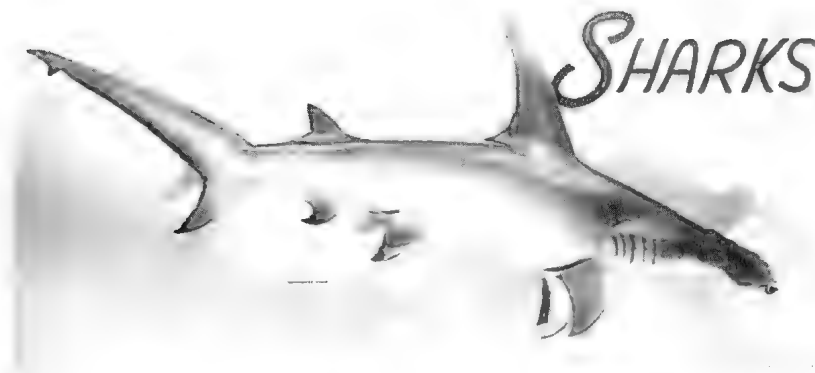
Influences from Abroad

Following Mack's death in 1963 rapid progress was made by Jack T. Woods. Possibly as a result of an overseas study tour of museums soon after his appointment he brought a deal of enthusiasm to his job as director that infected the whole staff. He favoured development of historical and technological displays as well as the geological displays that to some extent had been neglected under Mack. Further, he permitted a certain flair in design and a better use of colour and arrangement than had hitherto been approved; and he sought displays that combined the information and educational emphasis that Mack favoured with the visual impact that could be achieved with modern design, materials and lighting. From 1966, with the appointment of artificer W.J. Balaam, display furniture was made in the museum, its design now part of that of the overall display. It certainly was an improvement on the standard cabinets which, up to that time had been supplied by the Department of Works from the Ipswich Road workshops.

By this time there were additions to the staff and the new appointees became involved with the display design, usually under Wood's direction.

To a greater extent than was evident previously these new displays reflected the new trend to use objects to communicate information on whole subjects rather than information on the object *per se*. John C. Hodge, the first education officer on the staff produced a display on the evolution of man. Bruce M. Campbell, newly appointed curator of zoology, planned the 14 metre long *Sharks and Rays* open display, with a new mollusc display built into the back of it, and an innovative skeleton gallery, that included two fine models by Tebble—one a human knee joint which the viewer could operate. Bartholomai, now curator of geology, organised *Oil and Gas in Queensland*, reorganised the minerals in a series of table and upright cases of new design, and used mineral and gemstone samples to demonstrate igneous, sedimentary and metamorphic rocks. Woods, with Vernon's assistance, also organised displays on a wide range of subjects—*Discovering the Way, Myths and Customs of Torres Strait, From Flame to Fluorescent* and *Focus on Progress*.

H.A. Sweetser, who had been appointed to the technology section of the museum in 1966, began collecting and restoring machines, wagons and a variety of technological items. Some old exhibits such as the model of an early stockyard, a draw-card with children over the years, was refurbished



Innovative new displays were a feature of the mid-1960s. A Hammer-head shark, cast by McAnna—one of the early fibreglass models.

and returned to the main hall. One of the large technological exhibits he restored was the beam engine from Lars Anderson's Sawmill at Esk that had been built in England in 1866, and from 1973 it was displayed in the museum gardens.

Another historic aircraft was acquired that complemented the AVRO *Avian Cirrus* that had come to the museum in 1929. It was the AVRO *Baby*, flown by Bert Hinkler in 1920–1921³¹. As well as this tiny aeroplane, many Hinkler photographs and documents of great value—a dashboard clock, a pair of fur-lined gloves and other memorabilia—have been acquired and displayed through the determined efforts of E. Wixted, the museum's librarian and aviation historian (see Chapter 11). In a visitor survey carried out in 1977 by the museum it was found that Hinkler and his aircraft were among the most memorable of the museum displays³².

Incorporated in the developing historical section of the gallery was Mary Beatrice Watson's water tank—a half-tank used for boiling down the *bêche-de-mer* that her husband fished. It was in this tank that she, a Chinese servant and her infant son, threatened by Aborigines, fled their stone cottage on Lizard Island north-east of Cooktown in 1881, only to die of thirst on one of the Howick group of islands³³. The display with her



The restoration team led by Jack Kunze (standing on truck tray) deliver Bert Hinkler's AVRO *Baby* to the museum in 1972. Restoration was funded by the Royal Queensland Aero Club.



The Samford Bora Ground, a miniature diorama of the mid-1960s, the figures about 14cm high, designed by Eleanor Crosby and modelled and painted by volunteer artist Iris Nunley.



Immortalising Queensland's fauna. Margaret Oakden recording colours while David Joffe (left) assists Tebble in the preparation of the mould.

portrait and other exhibits told the graphic story of her last heroic days.

Another successful display of this period was *The Samford Bora Ground* based on an Aboriginal ceremonial area close to Brisbane. Both the background and the miniature Aboriginal figures 14 centimetres high were executed by volunteer artist Iris Nunley.

When Woods visited London in 1965 he agreed to have prepared a large mounted Red Kangaroo for display at Queensland House in the Strand. Shortly after, a giant old man kangaroo of this species was donated by the Lone Pine Sanctuary, Brisbane, and gave the museum preparators an opportunity to demonstrate their skills. During the 1950s and 1960s it was not possible in Brisbane to have local tanners tan skins to museum standards — especially difficult were the important parts such as the eyelids, nostrils, ears and lips. Instead, the skin was chrome-tanned, as were other large mammal specimens at that time, in a special 44 gallon (200 l) tanning drum. It was electrically driven and rotated slowly to keep the skins rolling, thus shortening the tanning process. This procedure was followed by the addition of sulphonated neatsfoot oil to the solution to soften the skins which were then dried, sandpapered, softened again with oil, and the hairside cleaned and blown dry. The resultant skins were strong and elastic, had perfect facial parts and digits and were suitable for attachment to the manikin or artificial body. The specimen was mounted by the manikin method of sculpture-taxidermy.

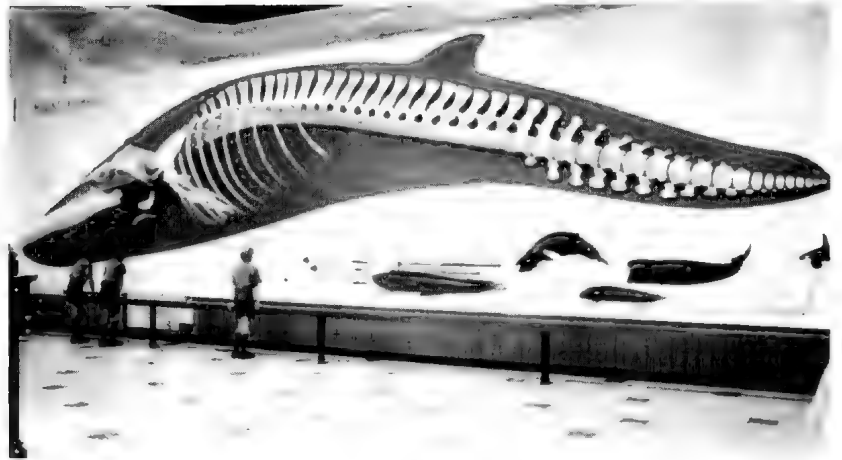
Present day large mammal mounting is sculpture-taxidermy. The cleaned skull, limb bones and pelvis are arranged on a steel armature and an exact clay or plasticene model is prepared with the musculature correct as it would have been in life. As the modelling progresses the skin is tried on and adjustments are made until life-like lines and the pose desired are obtained — a job requiring artistic ability. Plaster moulds are then made and casts of polyester resin reinforced with fibre-glass cloth are produced from the moulds. The casts are strong and durable yet thin and light. They are a considerable improvement over the earlier plaster manikins although they are hard to pin to, and pinning around the eyes and lips is essential in order to achieve good detail. To prevent drumming across concave areas, such as between muscles, pinning must be done when the skin is still moist³⁴.

From before the days of the Egyptian pharaohs, when taxidermy was a funerary art, plaster, clay and wax were the most commonly used materials for making moulds and casts. After World War II museum preparators were quick to take advantage of the new synthetic materials that were becoming available. In very recent years Senior Preparator Tebble and others of the preparatorial staff have been making moulds of the larger animals in polyester resin strengthened with fibre glass. These moulds are carefully prepared and the inside is treated with a release agent. A steel armature is set inside the mould, the mould halves bolted tightly together, and a two-pot mixture of polyurethane is mixed and poured into the mould. The foam expands to fill the mould, turning into a porous but fairly hard manikin that can be cut and worked on, but one that is also light and will take pins readily. Previously, both large and small bird bodies were modelled to the correct shape on a wire armature using sisal binding which was then covered with a layer of liquid celluloid, but now larger birds are also modelled in polyurethane. Many of the smaller birds as well as invertebrates are now freeze-dried without any other operation being done other than setting their positions.

Flexible moulding materials such as resins, silicones, latex rubber and



Vernon prepares a model of a Red Kangaroo, using techniques of sculpture taxidermy. The specimen was prepared for display at Queensland House, London. *Top*: the manikin; *below*: fitting the skin.



The whale wall, set up in 1965.

alginates are also being used. Being flexible, piece-moulding is largely eliminated and intricate shapes can be reproduced in microscopic detail. The moulds are typically thin, light and robust—many can be rolled up—and they are easily transported. In Australia, Tebble was the first museum preparator to use latex reinforced with cotton stockingette to mould large objects—the Winton dinosaur trackways, the Texas caves, termite mounds and the rockface of columnar basalt at Merrivale in south-east Queensland.

In 1964 a plaster model of a pigmy sperm whale that Marshall had made some 30 years before was being recast in fibreglass for conservation. As the original model was broken up for disposal a piece of plywood fell out with a message, in Marshall's writing, carefully written on it. Marshall, now an old man, visited the museum for the annual Christmas party and was told that a message of his had been found. He immediately knew where it had been found and recited the message—'Longman is a B...'. Exasperated because of Longman's refusal to purchase 200 square feet of plywood for a case, he had placed the message in the time capsule. Some days later, he related, he was given the quick nod to purchase the same amount of material by simply and cunningly requesting a mere six sheets.

A Modern Museum

The progress that was achieved under Woods continued with renewed vigour as his successor, Bartholomai, stimulated by an overseas study tour of museums in 1974—some five years after he had taken office—saw the need to improve the design section. From this time there were many new appointments to the staff in all sections of the museum. Between 1969 and 1980 new displays were developed at an unprecedented rate, old displays were restored and modernized and there were temporary displays on a wide range of subjects—some being developed in the museum and some arriving as travelling exhibitions.

In 1965 a 13 metre long skeleton of a sei whale, washed up by the high tide at Tin Can Bay, had been collected and prepared for exhibition in the *Marine Mammals* exhibit. Organised by Campbell, it was completed in 1970, and featured the skeleton mounted against the silhouette of its body shape. Associated with it were various harpoons and other items of the old whaling industry. The four metre long lower mandible of a sperm whale that had been exhibited on the verandah for decades was cleaned and included in the arrangement. This was a 'touch' exhibit and wherever people could reach, the skeleton positively shone from the stroking of

hundreds of hands. The public welcomed this and the exhibit seems to have suffered little effect from years of handling on open display.

The *Bird Hall* was redeveloped over several years in the early 1970s by Vernon, who by now had become ornithologist. A large panel was devoted to *Flightless Birds* with cast portions of New Zealand moa and the cast of the huge egg of *Aepyornis maximus* from Madagascar. In close proximity were Australia's two large flightless birds, the emu and the cassowary. Several dioramas were constructed which featured the Golden, Satin and Tooth-billed Bower birds and the amazing diversity of bower construction. Backgrounds were painted by Susan Hiley, Mary McKenzie and Eloise Gehrman respectively. A diorama featuring the male and female Superb Lyrebird and its repertoire of calls was also a part of this redesigned section of the museum. The background was painted by volunteer artist Mavis Vernon, wife of D.P. Vernon, who previously had painted the background of the *Hairy-nosed Wombat* diorama. The foreground rocks, vegetation, the lyre-bird mound, nest and egg were



One of a series of small habitat dioramas, the Golden Bower Bird, developed in 1970.



The Hairy-nosed Wombat, a display created in 1970 by Vernon, the background painted by his wife, Mavis Vernon.

The Durham Downs dinosaur, *Rhoetosaurus brownei*, spray painted on the wall of the gallery by staff artist, Peter Berryman, 1975.



installed by Anthony Hiller of the preparation staff. The taped calls of the male bird were activated by a remote control switch which operated when the viewer stood in front of the diorama on two large black foot-prints that had been painted on the floor. On one occasion a confused man with shoes and socks in hand was noticed standing bare-footed on the foot-prints. He looked up rather sheepishly, and enquired 'Do I really have to take these off to make the birds call?'. Other dioramas featured the Noisy Pitta, the Crimson Chat and the Black Noddy with background paintings by Margaret McKenzie. In the finch display an innovation was the inclusion in the main label of a quotation from a poem by Thomas W. Shapcott³⁵:

A tiny spill of bird things in a swirl
and crest and tide that splashed the garden's edge,
a chatterful of finches filled the hedge
and came upon us with a rush and curl
and scattering of wings.....

In 1976 Ingram and Campbell with Vernon had completed the innovative bird audiovisual display which featured several song birds including the Bell Miner, Pied Butcher bird, Whipbird and Kookaburra. The sequence was activated by a simple mechanical switch under the floor in front of the first wall case. As each bird species lit up, the appropriate calls were heard. Another section of this unit allowed the visitor to project any one of a series of 80 colour slides of birds. Nearby, the language of birds—in this instance the Noisy Miner—was interpreted in two wall cases showing how birds call and how they convey information to other birds of the same species by their body postures. Dr D.D. Dow of the University of Queensland, who had studied the extensive vocabulary of the Noisy Miner, gave invaluable assistance. From this time bird 'touch' specimens were also put on open display—such as a Barn Owl and certain specially prepared birds' eggs. *Birds* and the bird audiovisual displays were regarded as 'the best', the 'most liked' and the 'displays in which visitors spent most time' according to the visitor survey of 1977³². Perhaps people liked the audio-visual aspects of the display or perhaps they just liked the birds.

Also in 1974, the curator of entomology, Edward C. Dahms introduced

a touch of humour into Henry Hacker's old insect displays by redesigning them with coloured cartoon characters to communicate the story line³⁶.

During the years 1970–1974 Michael Quinnell, curator of anthropology, organised 20 display units featuring various aspects of Melanesian anthropology. Some magnificent specimens, many from the MacGregor collection, were selected for this gallery exhibition. Specially featured was a portion of the gable end of a Sepik mens' cult house. It is a striking design, with symbolic heads painted with earth pigments on palm sheaths joined together. Other items, such as the large wooden food bowl with fretwork handles from the Admiralty Islands, and the carved figures, some inlaid with shells, show beautiful craftsmanship.

In 1975 Mary Wade, curator of geology, organised a complete modernisation of the dinosaur gallery including the Durham Downs dinosaur *Rhoctosaurus brownei*, that had originally been displayed by Longman and successively reorganised and added to by Woods and Bartholomai. A life-size mural painting of *Rhoctosaurus* was spray-painted



on the wall by Peter Berryman, fossil bones collected at Taloona Station in 1924 were displayed in the foreground, and a cast of the Lark Quarry dinosaur trackways was set up (see Chapter 7). The brick-red colour-impregnated polyester cast of the dinosaur trackways was first moulded in latex from the mudstone surface in the field by Tebble and assistants. Associated with the dinosaur exhibit, Wade organised a display on the *Cretaceous Marine Reptiles*—a plesiosaur, a pliosaur, an ichthyosaur and some fossil bones of each from western Queensland, which, one hundred million years ago, when Australia was connected to Antarctica, had been covered by the sea.

There was a new and spectacular development in the display of dinosaurs when, in 1976, with funds earned through a consultancy³⁷, a life-sized fibre-glass model of *Triceratops* was purchased from Jonas Bros., New York, for about \$15,000. In 1978 a second model, of the carnivorous *Tyrannosaurus rex*, was purchased for a similar sum with a grant from the Utah Foundation. Both models, exhibited in a prey-predator confrontation as may have occurred in the late Cretaceous Period, were set up in the museum grounds adjacent to the main entrance and near the tank *Mephisto* and the beam engine.

Models from Jonas Bros. New York, assembled in the museum grounds. *Left: Triceratops*, purchased in 1976 (*L to R*: I. Tebble, A. Bartholomai, B. Campbell, M. Quinnell); *above: Tyrannosaurus rex* purchased in 1978 with funds granted by the Utah Foundation.

The last new display to be mounted in the museum's Gregory Terrace building was of Kingsford Smith's biplane AVRO *Avian* VH UQG — *Southern Cross Minor* — in which he had attempted his 1931 Australia–England flight. Wixted, whose efforts resulted in its acquisition for the museum, says of the aircraft 'that it is the sentinel to Lancaster's final heroic days and a symbol of the successes and failures of the pioneering of aviation'³⁸.

William Newton Lancaster had acquired the plane for his attempt on the England–Capetown record. He left on 11 April 1933, but two days later he disappeared over the Sahara desert. In February 1962 his body, half buried in the sand beneath the wing of his crashed plane, was found by a motorised patrol of the French Foreign Legion.

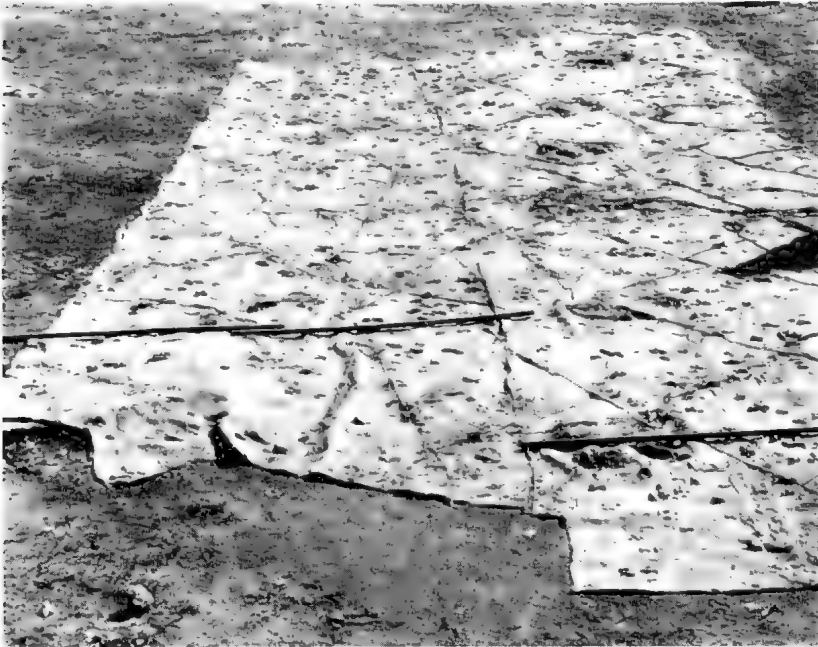
Wixted, already with the two historic Hinkler aircraft in the museum's collection, obtained information on the wrecked aircraft through the French Embassy in Canberra and in 1972 he involved Australian crews in the UDT World Cup Motor Rally, which was crossing the Sahara. In November 1975 a 14-member volunteer expedition — organised by Wylton Dickson, Australian organiser of the UDT Rally — set out from London. The expedition, in its two four-wheel drive vehicles located and recovered the wreck. Three years after — released at last by Algerian customs authorities — the remains of the aircraft reached London and were displayed there, at Australia House, in May–June 1979. QANTAS flew the crated remains to Australia. On 11 February 1980, the anniversary of its discovery in the desert, a display featuring the *Southern Cross Minor* as it was found by the French patrol 18 years before, opened in the museum.

In the Exhibition building, continuing a tradition begun in the museum when it was in the old Post Office building in the 19th century, live animals have been displayed from time to time. There were live pythons and, from 1926, Queensland lungfish, *Neoceratodus*, exhibited on the verandah of the exhibition hall. In 1946 freshwater tortoises were also displayed. One of the large aquaria used for displaying these specimens — the one for the lungfish — was donated by the Bancroft family, the descendants of the museum board member of 1876–94. In a corner of the lower gallery, just inside the building —

Errol Beutel (assistant, history and technology) and Robert Wood (attendant) contemplate part of the remains of Kingsford Smith's *Southern Cross Minor* — the AVRO *Avian* VHUQG, in which Lancaster lost his life in the Sahara desert in 1933. The 'as found' display of the crash site was opened on 11 February 1980, 18 years after it was chanced upon by a patrol of the French Foreign Legion.



Welcome Swallows (*Hirundo neoxena*) have nested every year for the last 15 years. They don't stay here all year, but leave during May and return in August to use a small mud nest in a corner of the lower gallery. The swallows are very noisy when they first return at the end of winter. For a few days they chirp and sing volubly, mostly from perches close to the nest. Then they become relatively quiet as the female begins to repair and refurbish the nest. She gathers feathers and grass, which she stores on a nearby cupboard. Mud, collected from outside, is mixed with the grass and feathers to make a paste with which to repair the nest. Soft downy plants and feathers are used for nest lining³⁹.



Latex mould of the Winton dinosaur trackways laid out in the museum grounds prior to casting in glass fibre resin.

The Future

From 1978 the museum, now armed with the experience that many of its staff had acquired through visits to many institutions in Europe and the American continent, turned its attention with increasing focus and tempo, to the preparation of new displays to open in the new building in the Queensland Cultural Centre. Campbell assumed responsibility for the programme.

The planning of displays for the new building started before the building itself was defined. It was difficult to imagine what the displays should be like. The absolute freedom to select from many philosophies and approaches made decisions difficult. Most museum staff agreed that displays should be attractive and informative, should educate through entertainment, should proceed from the known to the unknown, should, if possible, be of interest to specialist and uninformed audiences alike, should appeal to young and old, should be integrated with academic curricula but not confined to them, should be for the benefit of Queenslanders and interstate and overseas tourists, should project the museum's image into the twenty-first century, and must be based on the objects in the collections — interpreting and placing them in a context that would lead the viewer to a greater understanding of his environment — both natural and man-made. A tall order, indeed.

To plan and build displays, in the shapeless voids of a yet-to-be designed building, building blocks were needed. What, was asked, are the

units of a display—the units of visual excitement and information? Clearly, the object itself is the basis of the display—it has been collected and preserved as the irrefutable evidence of truth. However, to present this truth and to show otherwise unseen aspects of the object—its usage and significance—interpretative information is needed in words or texts, graphics or illustrations or by association of groups of objects to suggest relationships of form, function or design. Definition of the unit of display is also limited by the viewer's experience and subjective perception. From these considerations the unit can be defined as an *Immediately Perceivable and Obviously Cohesive Assemblage of Material items*—an IPOCAM. A catalogue of such natural assemblages of articles held in the collections was compiled. The only limitation was the size of the collections—and the lists kept growing.

The IPOCAMS gradually fell into natural sequences—they could be laid end to end and tell the whole story of change—the earth and the geological history of Queensland with its fossil evidence of past life, the present animal life of Queensland and how its diversity has been achieved and maintained by a variety of solutions to the problems of being alive, the people of Queensland before and after European settlement and how they used the land and technology to improve their standards and way of life.

It was now toward the end of 1978, the building plans had progressed to the stage where approximate floor areas were known and planning to lay out the 'grand story of the meaning of everything' began. There were three display floors. Working in sequence from the beginning, essential geology and palaeontology IPOCAMS could be fitted into the first two floors leaving the third floor for half of the animals. Starting from the other end and working backwards, post-European settlement and technology took up the top floor, pre-European peoples barely fitted the middle floor and again there could be only half of the animals on the first floor. Cutting the story back to fit the physical space left so many holes that the 'grand story' became incoherent. Some drastic rethinking was needed—it was now well into 1979.

Preparation of cast of a meat ants' nest.
Below right: washing out the latex cast;
below: the cast prepared for display.



Visitor behaviour was surveyed and it was found that the average visitor spends less than two hours at the museum, at intervals greater than four years apart—hardly long enough to absorb the ‘grand story’ in its entirety. Few visitors came with specific expectations, and their pattern of movement from display to display was usually unrelated to any continuous theme—indeed they may not even have perceived the themes.

Spectacular, magnificent, splendid displays in museums all around the world survive fifty years and more. If the major items and memorable displays have such a long life expectancy it is not surprising that the impression of museums is that they never change; and that having been taken to a museum as a child there is no need to revisit it until one’s own children are old enough to be taken—as witness the experience of generations of visitors to the Queensland Museum who first had seen the *Aboriginal Campsite* as children. Had the galleries been large enough to show sufficient items from the collections to illustrate ‘the grand story of life and everything’ the new museum would be complete. There would be no need to change anything—and a museum that doesn’t change is not worth a revisit.

So, in order to remove any temptation to attempt the grand theme in the display design, the three display floors in the new building were chopped into fifteen rooms of varying sizes from 250 to 400 square metres and were called ‘pods’. Each pod was assigned a theme on a completely random, arbitrary basis—on the lower gallery there would be photography, fishing and transport; on the middle gallery, engines, giant termite mounds, rat plagues and rainforest Aborigines; and on the upper gallery, Mesozoic fossils, minerals, birds and Melanesian anthropology.

Because there is no logical sequence or association of themes, one pod can be replaced with minimal disruption—and looking to the future the commitment is to do this every few years. Regular visitors will then find two or three new pods every year and the number of regular visitors may increase; and, as they become absorbed in the contents of the small, self-contained pods with their simple, obvious themes perhaps the average visitor will spend more time at the museum than once he would have.

The advantage of having a few well developed display themes is offset by the disadvantage of having to exclude many otherwise interesting themes for which there could be strong public demand. Many favourites from the old museum building, as well as new favourites not included in other themes, have been kept in one large pod. Another pod contains reference material—specimens, books, photographs, leaflets—on all the topics covered by the museum’s collections that might be of interest. Here the public can learn to identify their own specimens by comparing them with the collections and can also consult museum staff.

At the beginning of the new display programme it was realised that to create 5,000 square metres of display in four years was going to take more staff than the number involved in maintaining the 2,000 square metres in the old building. With some augmentation the strong preparation section under Tebble handled display construction and installation, but the small, capable art section had no experience of designing major displays. Architect R. Belcher was appointed to design building and display furniture and in 1979 the art/design section was increased from four to ten, with D. Bligh as senior artist and R.A. Coleman as designer. Coleman subsequently took over the newly formed maritime archaeology section and was replaced as designer by D.L. Gilbert. The south wing of the old building, formerly the home of the Queensland Art Gallery, was converted



Preparing a cast of a termite mound.
Above: applying latex; below: removing the fibreglass jacket.



Mounting the cast of the Queensland dinosaur, *Multaburrasaurus* for the new galleries in South Brisbane—a 'man at work' display in 1985, before the museum closed to the public.



Paul Stumkat, cadet preparator, working on the cast of an Amberjack for the displays in South Brisbane.

into an art studio and set-up area, with darkrooms and photographic studio—although the metal halogen lights installed in the six metre high ceiling, to dispel the gloom of the old building, cast multiple shadows on the drawing boards and were disastrous for accurate colour photography.

As displays went into production M.J. Schofield, in the technology section's metal workshop, fabricated some of the components, as did the artificers, P. Quinn and D. Adsett. Although the old carpenter's shed was cramped, all the woodwork components were prefabricated units, small enough to be transported to the new building. Finally, in 1982, W.A. Brooker was appointed to the new position of electronics technician to develop microprocessor controlled modules for lighting, audio, video and projectors.

In the early stages—between 1980 and 1982—there were many false starts. Displays were planned and shelved, planning processes were tried and rejected, but eventually effective procedures evolved. Concepts were proposed by curators and later approved by a display committee, and each concept was developed, designed and transformed into a display by a working group consisting of a curator to provide information, select specimens and ensure accuracy; a design artist; a communication expert from the education section; a preparator; and a co-ordinator to schedule progress and report back to the display committee. A working manual was produced before each pod was constructed, and full working drawings of all components were prepared so that the architects of the new building could be kept informed of the requirements for room and case sizes.

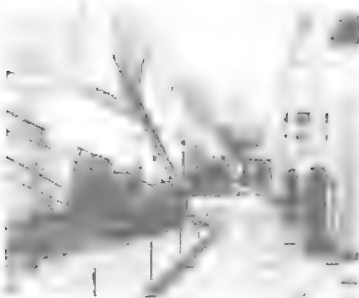
As each component of each pod was produced it was inspected, approved, and stored in a warehouse at West End. To protect this huge investment in time, money, effort and skill, regular inspections of the stored displays were made to ensure that insect pests, fungus, and rats had not been active.

Complete installation manuals were compiled for each pod. These included detailed drawings for assembly; estimates of time and the number of people needed for installation; lists of all materials—paints and tools—required; and they recorded the location of all items—constructed components, finished art work, and those in collection storage or on display in the old building. Installation of the pods in the new building was co-ordinated with the fitout of the galleries by the Department of Works and each took eight weeks to install.

Most of the displays being created for the new building were based on items already in the collection, but many of these were in existing displays. Efforts were made to leave the old displays intact for as long as possible, but by 1985 there were a lot of gaps. As compensation for the public and visitors, the big skeleton of Queensland's most complete dinosaur—*Mullaburrasaurus*—was assembled in the display gallery as a 'men at work' exhibit. This preview of one of the spectacular items being prepared for the foyer of the new building, helped keep the galleries alive for a while. In the end, Bert Hinkler's AVRO *Avian* had to be restored and cleaned ready to be hung in the new building—which meant dismantling the wall holding the whale skeleton. Inevitably, and reluctantly, the display galleries in the old museum building had to close to the public and on 3 November 1985, after nearly 85 years of continuous service, this occurred.

The philosophy, content, production and installation of displays in the new museum galleries were thus resolved. The approach is innovative. For, although some aspects of it have been developed in other parts of the world, there does not appear to be another museum that has combined

changing, semi-permanent displays of selected, non-related themes with a publicly accessible reference collection to provide continuity of coverage in all fields of interest. It will be an exciting time for the museum when it opens its new displays; and it is an exciting future that is planned to keep the people of Queensland entertained and informed.





Views of the display galleries,
Queensland Museum 1984.







5

DIALOGUE

The Community and the Museum



From the time it was founded the members of the Philosophical Society met regularly to discuss the scientific papers one or another of their number presented, and today, to us, the titles of these papers do not sound so very different from those in a modern scientific journal. The subjects demonstrate the interests that were the stimulus for the foundation of the society—the fauna and flora, the geology, exploration, the Aboriginal people, technology—in fact they were the subjects that still endure as the primary responsibilities of a state museum in Australia: Charles Coxen spoke 'On the Marsupialia', 'Habits of the Regent Bower Bird', 'The Geology of Western Queensland', and the 'Komillaroy Tribe'; Silvester Diggles delivered papers 'On the Use of Insects to Man', 'Thoughts suggested by the Theory of Mr Darwin', and 'A Trip to Cape Sidmouth and back'. These papers were published in the *Guardian* so that the whole community had access to the information that was being collected by the members of the society. As well as being able to visit its museum to view displays the community derived this additional benefit from its existence—it was a source of expert information.

As the museum developed, and its staff and skills grew, it replaced the Philosophical Society and continued to serve the community in these two ways: by displaying objects and labelled specimens that its visitors could study and enjoy; and by providing information, not only in response to questions put to it but also through newspaper articles, educational programmes and material that supplemented the school system, and through teacher training and adult education.

The Visitors

There is no record of public use of the museum while it was in the Windmill. However, in 1871 after the collections had been moved into Queen Street, in the centre of the town, and Charles Coxen had officially been appointed the honorary curator, he inserted the following notice in the *Government Gazette*:

Rooms in the parliamentary building set apart for purposes of a museum will be open to visitors from 10 am to 3 pm on Mondays, Wednesdays and Saturdays. Admission can be obtained by application at the Legislative Assembly Messenger's Room.

Contributions of Geological and natural History specimens and also anything else of possible interest will be thankfully acknowledged by the undersigned who will be happy to afford any information as to the scope and object of the Institution².

The displays expanded—some into the Post Office building a little further up Queen Street, others remaining in the Parliamentary building for a short time until more space became available in the Post Office building. The newly appointed custodian was also government analyst and he spent a lot of time doing mineral assays. However, he must have devoted time to the operation of the museum, for regard and affection for it in its new Post Office site was developing and its role in the community was becoming established. On 28 June 1878 the trustees approved the *By-Laws and Rules of the Board of Trustees of the Queensland Museum*. Rule 12, under the heading 'Opening of the museum to the Public' stated that the museum should be open for at least 'five days in each week and for not less than eight hours in each day'. It is probable that from the time it moved to the Post Office building the museum was open for six days a week, until on 19 April 1880 the trustees were of the opinion that the galleries needed to be closed occasionally 'for cleaning and rearranging

Previous page: George Mack with a class of teachers examining mammals (photograph from the *Courier Mail* 18 April 1955).

specimens'. It was suggested that two half days a month would be sufficient. Curator Haswell—who always looked to Sydney for inspiration—said that 'the Sydney museum was closed every Monday during the whole day'. Apparently a compromise was reached and the museum was closed every first and second Monday until 5 September 1884 when the trustees decided to close it every Monday.

In 1881 there was a debate in parliament regarding a request from the museum to open on Sunday afternoons. Petitions opposing this proposal were submitted by church groups. In spite of the opposition the museum did open on Sundays and attendances continued to increase. The Queensland Post Office Directory for 1883-84 carried an advertisement for the museum, stating that it was open to the public on weekdays—including Saturdays—from 10.00 am to 5.00 pm and on Sundays from 2.00 pm to 5.00 pm. These opening times remained until only a few years ago when Len Taylor, senior attendant since 1964, led his colleagues in successful negotiations to establish a special state industrial award for museum attendants. This made provision for weekend work in line with that enjoyed by art gallery attendants and made it possible for the museum to be open for 7 hours on each of the seven days of the week in the years leading up to 3 November 1985.

Since 1881 the galleries of the museum have been closed to visitors on Good Friday, Christmas Day and recently Anzac Day too. Between 1884 and 1970 the galleries were closed every Monday—except when Monday was a public holiday—for cleaning. However, access was still possible by signing the visitors' book in the office. The museum was closed from 7 January to 15 March 1880 for the move to William Street; from 2 November 1899 to 1 January 1901 when it moved to Gregory Terrace; and from 3 November 1985 to 2 October 1986 for the move to South Brisbane. The only other extended period when it was closed to the public was from 20 May to 15 July 1919 during the disastrous Spanish influenza epidemic when the Isolation Hospital in the Exhibition grounds had been extended to the Wool Annex in close proximity to the museum's garden³. The museum closed on 17 January 1911, the day of its noted collector Kendall



Ronald Hamlyn-Harris (*standing left*) with a class of deaf, dumb and blind children on the verandah of the museum (photograph from the *Brisbane Courier* 13 March 1915).

Broadbent's funeral. There also were day or half-day closures when the speaker of the Legislative Assembly died (11 March 1911); for the state funerals of W. Hamilton (30 July 1920), Sir Samuel Griffith (11 August 1920), J. Page (11 June 1921), T.J. Ryan (4 August 1921), and Premier E.M. Hanlon (16 January 1952); and it closed on 22 January 1936 when King George V died. At the end of World War I it closed at noon on 12 November 1918 and all day on 29 November 1918 for an Armistice Celebration. Again, at the end of World War II the museum had special holidays on V-E day (9 May 1945) and on 13 August 1945 with the news of the offer of the Japanese to surrender. When the Japanese did surrender (15 August 1945) the galleries were closed from the time of the announcement and for the public holiday the following day⁴.

The museum has also been closed from time to time because of the age of the building and concerns for the safety of staff and public. It was closed for alterations to the ground floor for the first fortnight of June 1911. After the Queensland Art Gallery had expressed doubts about the soundness of the building, before it moved out in 1974, the museum became cautious about the safety of its own display galleries. When the floor of the upper gallery seemed to be squeaking more than usual the galleries were closed until engineers confirmed that the floor was not moving. The galleries were also closed for fumigation of some display cases infested with the West Indian dry-wood termite introduced to Brisbane during World War II; and when a highly venomous rough-scaled snake escaped from its cage in the basement room of the curator of reptiles. Storm water flooding the galleries has occasionally been the cause of their closure — when the downpipes were blocked by a pigeon's nest; during the first Saturday of the January 1974 floods; and in 1985 when, just before 5 pm on a Friday afternoon, a sudden violent hailstorm broke 360 windows in the building and the museum remained closed the next day while staff mopped up and stuck plastic sheeting over the broken windows to prevent further rain entering the building.

From the time of the appointment of the first board of trustees in February 1876 some reliable indications of public acceptance of the museum are available. August that year was the most popular month with 3714 visitors, probably reflecting the arrival of country visitors for Brisbane's first Agricultural and Industrial Exhibition. This August influx of country visitors is still a major feature of the museum's attendance 110 years later. A display by the museum was also a feature at the National Association's Exhibition that year, pioneering a method of reaching a wider audience that is continued today. On the busiest day of the year in 1876 there were 539 visitors to the museum. The total number of visitors for 1876 was 28,202 — 16% of the population of Queensland at that time⁵. The museum was clearly enjoying considerable public regard and interest. It was attracting visitors, entertaining them, and perhaps even educating them. Certainly it was gaining support — but, of course, in those times there was little by way of regular free entertainment, consequently the museum, in a remote and raw colony starved for information and cultural activity, had virtually no competition.

Prior to the construction of its own building in 1878–79 there was an active debate, through the correspondence section of the *Brisbane Courier*, about whether the proposed site in William Street, within a quick walk of the main business centre, or a site in the Botanical Gardens, where people with leisure time went, would best serve the museum and its public⁶. The shift of the collections to the new, very visible museum building in William

Street led to a predictable leap in attendance. In 1881-82, the first year with full figures for the new building the number of visitors was 46,759.

The highest annual attendance of the century was recorded in 1886 when there were 106,907 visitors. It was disappointing then, after 30 years of growth in activities and in public support, that the financial depression and the devastating Brisbane floods in 1893 resulted in a decline in attendance to 53,342; and, with the staff reduced to three, there was little that could be done to arrest the downturn⁷. There was a brief recovery in numbers when the museum opened in the Gregory Terrace building on New Year's day 1901—Federation Day. Getting ready for the opening, visitors' comforts were considered—the board instructed the director to write to the Works Department 'to provide refreshment rooms and women's closets'⁸. He was also authorised to obtain some benches for the convenience of visitors.

On 26 January 1901 Director de Vis, reported on the opening:

Owing to favourable weather, numerous holidays and the novelty of the attraction the attendance of visitors has exceed(ed) expectation. 8188 have been registered and it is hard to say how many have escaped registration. No means of preventing access to the museum through the bush-house and corridor exist though the Works Department long ago received a memorandum from the Agricultural Department respecting the erection of a fence which would have had the desired effect. In the same memorandum the Works Department had brought under its notice the want of a Refreshment Room..... visitors are complaining greatly that they cannot get refreshments.

On Sundays the attendance has been so large that it has been found necessary to employ a third attendant to perambulate the rooms and keep any unruly element in check.

In the Annual Report for 1902 the board reported that work day visitors were fewer than when the museum was in the city—'more than half of the visitors now being registered on Sundays'. However, one of the problems with the new accommodation was—

the want of means of obtaining refreshment even the slightest, has been repeatedly urged upon our notice, and it has been more than once represented by us to the departments responsible for the neglect. We only regret that we had no power of our own to provide women and children with the means of so much as quenching their thirst.

On 30 August 1902 the board decided that the 'incoming tenant of the cottage'—the carpenter J. Berry and, no doubt, Mrs Berry—would be allowed to serve refreshments 'there being no prospect of a refreshment room being provided'. There is no record of what was served nor for how long this continued.

However, apparently the displays did not manage to hold the public's attention for it was not until 1915, after Hamlyn-Harris had revitalized the museum and had produced new displays, that the annual attendance went up again—to 75,031 visitors, notwithstanding the effects of World War I. Throughout the next few years there was little change in public attendance. In 1917 the figures were 70,154⁹. Through the early 1920s the museum continued to gain popular support. By 1925 annual attendance had arisen to 106,024 almost back to the record level of 1886—but it was now drawing on a much larger and more mobile population. That level of support has not wavered and in 1985, by 3 November when the doors closed to the public and the museum prepared for its move to South

Brisbane, there had been some 250,000 visitors of all ages who had come for entertainment or for educational classes.

The attendants are the staff members that most members of the public see when they visit the museum and they are therefore the people who are primarily responsible for public relations in the galleries. They have been and continue to be, for millions of visitors, the museum's hosts and unobtrusive keepers of orders—for they administer the museum *By-Laws*.

Down through the years most visitors have come to the museum to be entertained and to learn. Just a few, apparently, did not come for that reason. On 2 October 1883 Director de Vis reported, to the board of trustees, the first case of dishonesty on the part of visitors—

the bronze medal commemorating the opening of Epping Forest by Her Majesty and presented by the City of London has been stolen from the case in which it was exhibited.

It was stolen just one month after it had been received. On 6 April 1899 it was reported to the board that a man in possession of curios from one of the cases was arrested in the galleries but was subsequently discharged on a point of law. Most other thefts have happened after the public galleries were closed—the result of illegal entry. Gold specimens were taken in December 1888 and were never recovered. Favourite subjects for burglars have been the weapons collections—Japanese swords were taken and were not recovered. However the museum was more fortunate when an assortment of firearms carefully selected from the collection storage by a discerning burglar were discovered in an auction sale in Sydney. The museum had circulated its precise registration data on the missing items to hobby weapons collectors, one of whom identified them in the sale, called the Sydney CIB, and in due course they were restored to the museum.

In the board minutes for 1 February 1895 it was reported that the museum was frequented by prostitutes for improper purposes. The trustees decided that persons suspected of so being should not be refused admission or expelled unless they were guilty of offensive conduct in the building. After the museum moved to the Exhibition building the board, in its annual report for 1902, observed that—

By our removal from the centre to an outskirt of the city the Museum has become less accessible to street idlers and others, who made use of it as a convenience.

A Source of Information

In September 1871 Aplin entered into correspondence, through the pages of the *Brisbane Courier*, concerning reports on possible methods of formation of gold nuggets, over the address of the museum¹⁰. This subject, fascinating to the public then, as now, may mark the beginning of the history of the museum as a source of expert information in its areas of authority. At about the same time, perhaps impressed by this evidence of the services a museum could provide, a supporter, writing to the *Courier* under the name 'Cosmos' put forward a series of arguments for a proper building for the museum and for professional staffing¹¹. In 1873, Staiger's first report as custodian indicated how much his services as an analytical chemist were in demand, assaying mineral specimens for prospectors who were actively searching Queensland for profitable mineral fields¹².

Back in 1881 the museum's library was advertised as being available to students. This service appears to have arisen because of the lack of a

IF THEY LIVED TO-DAY!



From the beginning the museum has been a source of expert information for the community. The cartoonist appears to have had some conceptual difficulties regarding the vertebrate fauna of the Darling Downs (cartoon from the *Sunday Mail* 28 July 1929).

The artist has a vivid impression of the giant marsupials whose fossil remains were unearthed at Brigalow, Darling Downs, and identified by Mr. Heber A. Longman, Director of the Queensland Museum.

public reference library, so the museum was meeting a wide range of public needs and quite clearly was doing so capably.

When de Vis became director in 1882, the board of trustees indicated in its annual report that the museum was helping schools of arts by undertaking for them the preparation and naming, for exhibition, of their collections of geological, mineralogical and zoological material. While it is not clear how many of the schools of arts throughout Queensland sought the museum's help in this it seems to have been the first attempt by the museum to spread its expertise and knowledge outside Brisbane. By 1888 state schools were being supplied with collections of common minerals. In 1889 a collection of 1000 mineral specimens from mines in Queensland were prepared for display at Dunedin in New Zealand but, for some reason, the collection was never sent.

de Vis, who was an active research worker, maintained contact for his first 10 years in office with his professional colleagues in other museums

The
Queensland Museum,
Bowen Park, Brisbane.

Founded
A.D. 1855.

Telephone
315

SYLLABUS
OF
LECTURES
SESSION 1915.



"A Museum is a Consultative Library
of objects, where people can see for
themselves the things of which they have
read in books"—T. H. Huxley

All Interested Cordially Invited.

Admission Free.

by correspondence. In 1891, the first number of the *Annals of the Queensland Museum* was published. This was the museum's first effort to bring its serious work to a wide international readership. The *Annals* continued to No. 10 published in 1911 when, early in R. Hamlyn-Harris' term, its title was changed to the *Memoirs of the Queensland Museum* with the 1912 issue. It continues today as the museum's scientific journal and in it appear the articles that record the work of its staff and of others working on its collections. The journal is exchanged for other scholarly publications from about 400 museums, universities and scientific institutions around the world.

de Vis also pursued a very active public relations programme, corresponding with many persons and soliciting specimens and support for the museum. He made lengthy reports to the board at each of its monthly meetings and the proceedings at these meetings, together with his reports, were regularly published in the *Brisbane Courier*. It was a means by which the community became aware of the activities and expertise in the museum and it undoubtedly resulted in donations of material that expanded the collections.

When Hamlyn-Harris became director in 1910 he embarked on a similar public relations programme as one of his measures to revitalize the museum. He corresponded with the general public and with professional colleagues throughout the world. He appealed in *The Queenslander* for public support for increasing the museum's collections and soon had interested people actively collecting a range of natural history material in various parts of the state, including Toowoomba, Woodford, Townsville and Maryborough¹³. In an effort to further improve the collections he issued appeals for suitable specimens by circular letter to members of local communities, and through provincial newspapers. Members of the public responded well and their letters—such as that from the manager of Prince Alfred Mine, Sunnymouth, subsequent to an article in the *Chillagoe Standard*, with information on an unusual lizard¹⁴—can be found in the correspondence files. Hamlyn-Harris also appealed for Aboriginal artefacts in a circular letter to the police inspectors in all police districts (see Chapter 10).

In 1912 Hamlyn-Harris started a series of public lectures on natural history. These were advertised through the Field Naturalists' Club, the University of Queensland, schools and the newspapers. They were held once a month, at first in the afternoons but from 1915 at 8.00 pm on a Friday. They appear to have been well attended, for the museum was allowed to use the concert hall—still leased to Brisbane City Council—and other 'engagements of the hall (were) made to accord' with the museum's lecture programme¹⁵. Various museum staff and guest lecturers presented topics, illustrated with specimens, lantern slides and moving films, covering biology, geology and anthropology. Heber Longman was promoted to deputy director in 1912 and those he lectured to included the Toowoomba Scientific and Literary Club, and Kindergarten Teachers' College students.

Until 1911 there were no organised school excursions to the museum but teachers from the East Brisbane State School, Kangaroo Point Girls School, and Leichhardt Street State School arranged visits. Then, in 1912, with agreement of the Department of Public Instruction, Hamlyn-Harris offered a programme of talks for organised school visits. For some schools the cost of travel prevented attendance but at least 13 schools, among which were Ipswich North Girls School, Leichhardt Street Boys School

and Bowen Bridge Road School, indicated that they would be able to attend. In 1918 the lectures to school visitors attracted 26 classes from 18 schools. Longman also gave a series of lectures at night to scouting groups, and extramural lectures were given to interested groups. For example, Henry Tryon, formerly assistant curator under de Vis and now entomologist with the Department of Agriculture, spoke to students from the Teachers' Training College on 'Food of our useful Birds'.

Hamlyn-Harris' other innovation in this period of development of the museum's services were classes for handicapped members of the community. He himself helped when parties of deaf children visited the museum. It was a pattern that was to be repeated by George Mack in 1950 with weekly classes for blind children and ex-servicemen.

H.A. Longman was the first director to contribute a weekly natural history column to the *Brisbane Courier*. It began in 1918 and was a popular feature—and there are museum staff members today who had their inspiration to become naturalists from this column. Much later the distinguished naturalist David Fleay, an honorary associate of the museum, continued these nature notes. Tom Marshall also had a weekly fishing column in the *Telegraph*. Radio and television also became media through which information could be communicated to the community. Museum staff, between the late 1930s and 1950s, gave monthly talks on radio and in more recent times they have been regular guest performers on television especially in children's programmes.

Apart from its scientific journal the museum's more popular publishing programme had a false start when, on 26 January 1901, Director de Vis tried unsuccessfully to persuade the board that, since his own time

THE QUEENSLAND MUSEUM.

POPULAR SCIENCE LECTURES.

SESSION 1915.

The following LECTURES, illustrated by specimens, diagrams, &c., will be given in the Exhibition Hall (next to the Queensland Museum) as follows:—

Friday Afternoon, at 3-30 p.m., APRIL 30th—

"Native Life in the New Hebrides."

Mr. DOUGLAS BARNIB

Friday Evening, at 8 p.m., AUGUST 27th—

"Customs of Various Races"

Part I.—Family Life.

(Illustrated with Lantern Views.)

Dr. R. HAMLYN-HARRIS

Friday Afternoon, at 3-30 p.m., MAY 26th

"Some Remarkable Queensland Fishes"

Mr. H. A. LONGMAN.

(Specimens demonstrated by Mr. J. Douglas Ogilby.)

Friday Evening, at 8 p.m., SEPTEMBER 24th—

"Customs of Various Races."

Part II.—Social Life.

(Illustrated with Lantern Views.)

Dr. R. HAMLYN-HARRIS

Friday Evening, at 8 p.m., JUNE 25th—

"Insects and Flowers."

(Illustrated with Lantern Views.)

Dr. J. SHIRLEY

Friday Evening, at 8 p.m., OCTOBER 29th—

"The Great Barrier Reef."

(Illustrated with Lantern Views.)

Miss F. BAGE, M.Sc.

Friday Evening, at 8 p.m., JULY 30th—

"Minute Life in the Sea."

(Illustrated with Lantern Views.)

Dr. J. HARVEY JOHNSTON.

Friday Evening, at 8 p.m., NOVEMBER 26th—

"Extinct Animals."

(Illustrated with Lantern Views.)

Mr. H. A. LONGMAN.

The 1915 programme of a popular series of lectures that Hamlyn-Harris gave each year from 1912 to 1916. They were held in the concert hall of the Exhibition building.

was best spent writing descriptive labels to 'improve the utility of the displays', it should employ some 'literary man' to write a guide to the museum. Much later, in 1939, a Miss H. Nowland was appointed for three months to write a handbook but this does not seem to have got far. With the exception of George Mack's booklet on the Centenary of Queensland and a small handbook on the Great Barrier Reef¹⁶, publishing of handbooks began in the museum only after 1970 when the series *Queensland Museum Booklets* began. The series now includes works on a diversity of subjects, such as *The Middle Kingdom: Pre-revolutionary China*, *Eucalypts of the Brisbane*, *The Mud Crab* and *Queensland in the 1860s: The Photography of Richard Daintree*.

However, despite the organised programmes of talks, publications, newspaper articles and television and radio appearances, the most appreciated service performed by the museum may be the information that it gives in response to specific questions put to it. The earliest records of this activity are available for 1876 when the first board of trustees began keeping letter files. These reveal that even at that stage the public was referring to the museum a wide range of natural history inquiries, particularly regarding identification of specimens.

This has continued to the present day—every week the museum responds to hundreds of letters, telephone calls and visitors requesting information. The queries come from members of the public and from institutions, including universities and government departments such as Customs and Excise, Primary Industries and National Parks and Wildlife Service. Possibly the greatest range of inquiries come to the history and technology section. In natural history snakes and spiders are most often the subject of inquiries but, as well, information on birds, molluscs, fish, jellyfish, mammals, other reptiles, insects, crustaceans and fossils is sought. For some of the questions most frequently asked free leaflets provide the essential information. As an extension of this service, museum experts provide information and specimen identifications, especially of snakes and spiders, for the Poisons Information Centre at the Royal Brisbane Hospital, other hospitals, medical practitioners and ambulance officers throughout the state and at all hours. Valerie Davies curator of arachnology from 1972, and Jeanette Covacevich, curator of reptiles from



1966 contributed chapters to the standard handbook on Queensland toxic organisms¹⁷.

An Education Extension Service

Apart from Hamlyn-Harris' efforts to develop museum programmes for visiting schools there was not any formal extension service from the museum, although it would have been welcomed by the Education Department, until January 1938. Then an opportunity to develop extension programmes occurred when the museum received a Carnegie Trust grant of £1000 for a two-year programme:

to visit the Primary Schools of the metropolitan area for the purpose of developing the educational services of the Museum, of arousing in the children a desire for more information about the world around them, and of placing before pupils and the public generally the merits of the Museum and the advantages which would accrue from a close study of the exhibits housed therein¹⁸.



W.F. Bevington conducted a museum extension programme funded by the Carnegie Trust. *Opposite page*: Bevington with a class of children from the East Brisbane State School; *this page*: an enthusiastic response from the class (photographs from the *Brisbane Telegraph* 10 February 1938).

The terms of reference were soon expanded beyond state primary schools to secondary and private schools.

W.F. Bevington and A.G. Davies were appointed liaison officers to conduct the programme. Bevington had retired from the position of district inspector of schools the previous year at the age of 65. Presumably Davies did participate in the programme—however his contribution appears to have been eclipsed by Bevington's. The *Telegraph* reported on 1 July 1939 that Bevington had lectured to more than 100,000 students during 1938 and referred to him as 'Brisbane Museum's Father Christmas'. As well as visiting the schools, Bevington devoted Fridays to working with groups which visited the museum. As a follow-up, these children were often required to give short lectures and write essays on subjects studied during their visits. Bevington also promoted the Queensland Nature Lovers' League which operated clubs in many schools to encourage children to care for animals and protect native flora. W.F. Bevington issued many hundreds of membership certificates for the League.

It is clear that Longman cooperated with the programme—he wrote in 1939:

I shall be very pleased to welcome a party of your boys (Young Australia League) at the Queensland Museum on the Sunday of Exhibition week at 3 p.m., as on several previous occasions..... We hope to be able to welcome the party of girls also, on Saturday, August 12 and perhaps Mr Bevington will be available on that occasion¹⁹.

As well as his direct contacts with the children Bevington advised teachers on the teaching of natural history and the preparation and use of charts and specimens. In his annual report for 1939 he mentioned the possibility of establishing a teachers' museum and assembling a teaching collection:

The wide choice (of species) proves rather bewildering to the average teacher..... Could he but have a collection arranged by scientific men.....he would have much more confidence and then be likely to make a success of this branch of his work²⁰.

It is not clear when Bevington finished at the museum. The last record of any activity was on 21 June 1940 and he had certainly left by March 1941²¹. He died, aged 72, in Brisbane in January 1944 after a brief illness. The education programme he had developed did not continue until nearly 30 years later when a permanent education officer was appointed to the museum staff and a teacher, seconded from the Education Department, carried museum programmes into the state primary schools in country areas.

Some school programmes continued in the museum, however. George Mack, who became director in 1945, instituted a series of lectures during the 1950s that were given in front of certain displays for visiting schools. The enthusiastic public response to these talks led to the development of questionnaires for children to answer in the display galleries. Showcases were numbered to link them to specific questions. After 30 minutes a bell was rung and children brought their questionnaires to the foyer for checking by assistants such as Shirley Gunn and Shirley Billing (née Deller). However, by far the most important of his innovations were the holiday programmes. In the school holidays of January 1952 three weeks of talks, films and question time were first presented by Mack to over 3000 adults and children.

One idea of Bevington's that was not so long in being put into practice was that of having collections for schools arranged by museum scientific staff. The museum had always lent material—duplicate or non-type material—to institutions, exhibitions and individuals for teaching or other educational purposes. However, in 1948 a formal loan scheme for schools began when two collections of named natural history specimens were assembled for classroom use; at first for student-teachers, but later for classroom use by teachers. In the early 1950s the Department of Public Works (at Ipswich) manufactured a number of wooden boxes for loan-kits. By 1965 there were almost 1000 requests for loan kits and the scheme continues to this day.

Another programme to help teachers was developed during the 1950s when week-long refresher courses in natural history were presented to groups of up to 30 teachers. The government provided free rail passes to encourage teachers throughout the state to attend.

An Education Section

John C. Hodge was the first museum education officer. He was appointed in 1967 and was the only education officer for five years until F.D. Dale joined him in 1972. Before Hodge left in 1975, to become lecturer



George Mack with children (photograph by courtesy the *Brisbane Telegraph*).



Shirley Gunn demonstrating a specimen of *Chironex fleckeri* — the lethal Box Jellyfish (photograph from the *Courier Mail* 21 December 1954).



Sir Henry Abel Smith (*second from left*), governor of Queensland, was keenly interested in birds, and organised this field trip to Girraween National Park in 1965. With him (*L to R*) are William Goebel naturalist, local property owner, and friend and donor to the museum; ornithologist Hugh Innes; and Don Vernon. In the rock cleft is the nest of the Superb Lyre Bird (photograph by courtesy the *Courier Mail*).



John Hodge, museum education officer, with a school class in the early 1970s.



A touch specimen—the Barn Owl, *Tyto albus*.

in museum studies at Sydney University, he had established the education section and had developed a comprehensive programme of activities based on the museum's expertise in the areas of its responsibilities, and backed up by its collections of objects.

When first appointed Hodge saw the education section as functioning not only to assist visiting groups and lend specimens to schools, but also giving:

advice and assistance on identification, preparation, preservation and display of biological materials for school museums. We are also concerned with evaluating current popular literature and biological supplies²².

He was contemplating the further development of Bevington's ideas for the production of loan kits consisting of:

a box which will contain specimens, black and white pictures, film loops, Kodachromes, work sheets and tape recordings would appear to be ideal. For example we could do one on the Barrier Reef, or Rocky Shore Animals or Aboriginal Culture etc. etc.²².

In 1971 Hodge received a Churchill Fellowship for travel overseas to study museum education. He visited a large number—73 in all—of museums, both large and small, in Canada, the USA, Great Britain and Europe during the period 14 May to 21 October 1971. In his report he recommended, among other things, that short in-service courses for teachers—which had been regularly offered in the 1950s under Director Mack—be re-introduced; that teacher trainees be instructed in the use of museum resources and services; that the museum support research into education by its staff; that a comprehensive school loan service be developed; and that a sales outlet be established in the museum. Only the last recommendation was put into practice soon after and the museum now retails publications that have been assessed by its curatorial staff.

The loan materials at the time Hodge made his report consisted of mounted animal specimens in boxes. Supporting literature or other material was not provided. Schools could borrow two of the thirty kits for one week. The museum paid the freight to the school and the school was expected to pay the return freight. Because funds were not forthcoming to expand the scheme to any great extent Hodge did not advertise the loan kits. Eventually, in 1984 long after Hodge had left, two technicians were appointed under the Commonwealth Employment Programme to develop and produce new kits.

However, Hodge did promote the school programmes that were conducted at the museum. Actually, the scarcity of good natural history films for public programmes had prompted staff as early as 1953 to begin making their own, and an effort was made then to film every live specimen brought to the museum. Hodge developed this idea further and audiovisuals on a range of subjects were produced to form the basis of the school programmes.

From February 1973 it was his policy to offer set programmes each term²³. In 1973 eight were being offered to visiting schools and a ninth, *Australian Transport*, was being prepared. Programmes offered in 1974 included *Human Ecology*, which provided a choice of two activities following the audiovisual—either a board game played by four teams of students, simulating man's various impacts on his environment, or a mock court trial concerned with sandmining at Cooloola.

In June 1974 Hodge obtained, from the Department of Education, a colour video recorder and monitor for in-service training programmes and

for educational purposes associated with school and teacher trainee visits. He also used these for new audiovisual programmes: *Pioneer Life* and the *Coral Reef Ecosystem*. The latter used four slide projectors and a 16 mm movie sequence, and was supported by a display of a variety of reef animals. The *Pioneer Life* programme featured a short drama written by a producer of ABC schools broadcasts, Jill Morris, which the children acted after seeing a 20 minute audio-visual about early white settlement in Australia. In 1975 three more audiovisual programmes were made, forming the basis of structured presentations to school groups visiting the museum. The topics were *What's at the Museum?* — a brief general introduction to the function and history of the museum, designed for grades 3 to 7; *The Aborigines: An Appreciation of the Difference* — on the culture of Australian Aborigines and their relations with more recent immigrants, for grades 6 to 10; and *Australian Animals* — a survey of Australia's fauna for grades 3 to 6. The first programme was screened to the public during the August school vacation of 1975, before being used for school visits. These presentations lasted about one hour and included a 'touch' display of museum specimens and artefacts, and were followed by the students completing worksheets. In 1976 production was underway on a programme about the collection and interpretation of fossils. This featured the work of Michael Archer, then curator of mammals, studying fossil remains of the carnivorous marsupial, *Thylacoleo*, found near Alice Springs.

It has always been the policy of education staff to emphasise the use of the public displays by students who visit the museum: 'The primary interest of any museum is its displays. Our educational activities revolve around the displays, and no group leaves without seeing some of them'²⁴. Education officer Dale stated then that special classes or worksheets could be arranged for groups such as handicapped children and tertiary students²⁴, but the limited staff and facilities often made it difficult to meet such special requirements.



Children examine the fossil skeleton of a diprotodon, 1975.



A school class pays a visit to the museum.



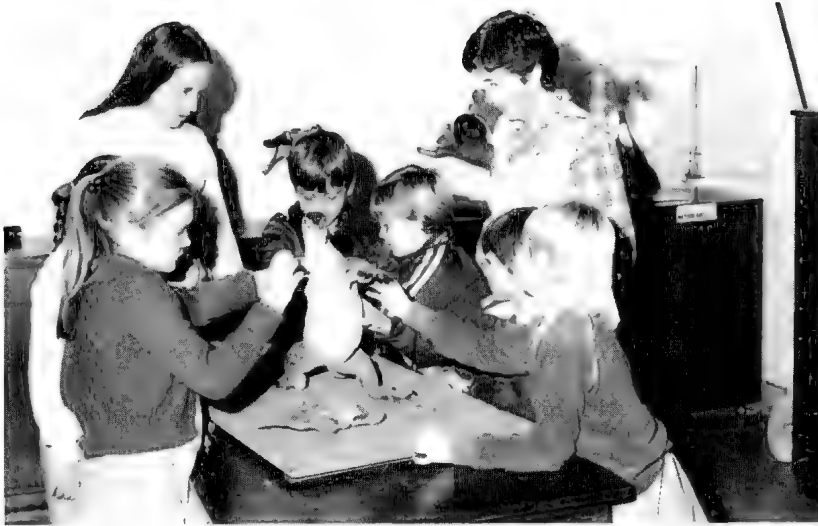
The education extension service brings the museum to schools as far away as western Queensland. Here children help education extension officer Peter Webber repack the museum van after a visit to their school.

Holiday programmes, recalling those first introduced by Mack in the 1960s, were also presented. The first of a new style was offered in January 1972. It was restricted to 12 year old children, who were invited to spend five mornings studying the history of paper manufacture and paper's uses including microscopic examination and specialist demonstrations. Children learnt to make paper by hand and visited the Australian Paper Mills works at Petrie. A holiday programme about fossils and dinosaurs was run in January 1977. As part of the week-long activities children constructed a cardboard dinosaur nearly 3 metres long. During the next few years holiday programmes offered the same activity each day for a week so that more children could take part. Topics included making aboriginal-style wood and shell implements, kite making, fence painting, gum-bichromate printing, and painting and drawing from gallery exhibits. Film programmes and story telling also attracted large audiences though the present education staff have tended to avoid activities, such as film screenings, that, unless closely related to museum displays, can more appropriately be presented by other institutions.

Although many schools in the metropolitan area were using loan kits and bringing their classes to the museum those further afield could not. Therefore, in 1978, the director had discussions with the Education Department—of which the museum was then a part—about the reintroduction of an extension service. It was agreed that the department would provide staff to operate such a service, taking the museum—specimens, audio-visual programmes and activities—to country schools, chiefly those in southeast Queensland which could not visit the museum because of the transport costs and time. The museum provided the vehicle and all the teaching materials. The first extension education officer, Douglas J. Pauli, appointed in September 1978, had wide experience in innovation within the department as a science advisory teacher. In his three year term he devised a range of programmes similar to those offered at the museum itself but specially adapted to suit students in the classroom. Pauli completed his term at the end of 1980 and was succeeded by Greg Storey who, after a two-year term, was replaced by Peter Webber. Apart from its primary role—that is the use of museum resources to supplement school programmes—the extension service has promoted the museum in country areas by providing displays at country shows and provincial shopping centres, and frequently attracting the attention of the local media. 'The man from the museum' has become a recognised celebrity again, harking back to the days of Bevington.

The teaching of Aboriginal culture in schools and the contribution museums can make to this has been a particular interest for Roger Hardley in the Australian ethnography section. To this end he forged links with those colleges of advanced education which train teachers, and he worked in close co-operation with the museum's education section, particularly with the extension education service.

Turning its attention to older students, the museum participated in the work experience programmes that were introduced into some Brisbane high schools in the mid 1970s. Since 1978 the museum has provided opportunities for senior high school students to spend one or two weeks working in various sections as museum assistants. Because of its diversity of activities the museum could offer an extensive choice of work-experience in scientific, educational, art, preparation and clerical sections. In some instances these students have made useful contributions to the museum's operations, and many have subsequently returned as volunteers



School holiday dinosaur project, 1982. Rhonda Scoullar, education officer (*on left*).



Items purchased with funds from the Utah Foundation are featured at an open day in 1981. With the pennyfarthing bicycle is D.J. Robinson, curator of history and technology.

during their vacations. Several members of staff were introduced to museum work initially through the work-experience programme.

Now, in 1986, the new facilities at South Brisbane will make it possible for the education section to further expand its activities and offer programmes that supplement those in the schools and provide teachers and students alike with a range of stimulating material.



Museum publications on sale at its bookshop in 1984.



Margaret Oakden, staff artist 1972-80, who prepared the series of mammal prints marketed by the museum from 1973.

Entrance Foyer-Bookshop, Queensland
Museum 1984.







6

ALL THAT
GLITTERS

Mineralogy



The Reverend George Wight, in an address to the Queensland Philosophical Society on 18 May 1867, suggested that 'the appointment of a practical geologist' would be 'the best, the cheapest, and speediest means of guiding and aiding the development of the vast natural resources of Queensland'¹.

During the decade up to 1867 there had been gold finds in Queensland, drawing new settlers to the colony, increasing its populations and bringing dreams of wealth. Then, in September 1867, alluvial gold was found at Cape River and the rich find at Gympie came soon afterwards.

On 9 January 1869 the Legislative Assembly debated, and carried, the following resolutions:

- 1 That the speedy development of the mineral wealth of the colony is a matter of the greatest importance and ought to engage the serious attention of the government.
- 2 That, in the opinion of this House it would be wise to engage qualified persons who shall devote their services to the above object.
- 3 That an address be transmitted to the Administration of the Government praying that His Excellency will be pleased to cause the necessary steps to be taken to carry out these steps².

So, in 1868 the Queensland government responded to Wight's suggestion and appointed two government geologists, Richard Daintree for northern Queensland and Christopher D'Oyly Hale Aplin for southern Queensland. The appointments were seen officially, and no doubt unofficially too, as being practical in nature—the geologists being expected to find workable mineral deposits that would boost state development and finances, rather than to investigate the regional geology of Queensland. This view of the practical and economic use of mineralogy would continue to dominate the development of the Queensland Museum's collections.

The appointees to the government positions were both experienced geologists, Daintree had left the Victorian Geological Survey in 1864 to pursue mining and pastoral activities in northern Queensland. Aplin had originally emigrated to Australia in 1842 but had returned to England and studied geology there. In 1852 he had come back to Australia and with his brother had gone to the Victorian goldfields. In 1856 he joined the Victorian Geological Survey until he came to Queensland. He was then 49¹.

The work that Daintree and Aplin did was essentially preliminary but the government was disappointed that there were no immediate and dramatic results and the survey was terminated at the end of 1869². Aplin moved to Maryborough and bought a sugar plantation. Daintree continued his field-work until, in 1871, he went to London to arrange Queensland's contribution to the London Exhibition in that year and while there became the Queensland agent-general³.

Minerals for Miners

In the debate in the Legislative Assembly on 17 June 1869 that followed the termination of the geological surveys, the proposition was put that —

it is desirable to establish, in Brisbane, a museum and laboratory.....for the purposes of collecting and exhibiting and analysing, when required, all minerals, forwarded to the institution².

The purpose of the museum would be to —

incubate a love for information upon the subject of our own resources, and interest.....the people.....in these subjects, which were of the greatest advantage to the colony².

Previous page: The main street of Gympie mining town, 1868.

The speaker—the member for Maryborough, W.H. Walsh, who became secretary for Public Works in 1872–3—drew attention to the benefits that New Zealand had derived from its Colonial Museum. Members enthusiastically supported the museum proposal and D'Oyly Aplin's name was mentioned in connection with it. It was not until 1870 that £100 was set aside to establish the museum. In the same session there was a resolution to spend £1000 on 'Specimens of Gold and Auriferous Quartz from the Queensland Gold Fields to be sent to the Exhibition in London'⁴—no doubt to advertise the colony.

On 1 June 1871 D'Oyly Aplin, having heard of the vote of £100 to set up the mineralogical museum, wrote to the minister of Public Works offering to undertake the work and his offer was accepted. He completed the job by 6 September 1871 but had spent most of the £100 on materials⁵. On requesting payment for his work, he was instructed to hand the collections to Charles Coxen, the honorary curator of the museum (see Chapters 3, 4). Aplin was never paid². Although he later received a government appointment, as police magistrate in charge of the settlement at Somerset near Cape York, it was not until September 1874¹.

At the beginning of 1873 K.T. Staiger was appointed as custodian of the museum and government analytical chemist, a combination of duties that may have given rise to the view that the museum 'emanated noxious gases'⁶. Certainly the combination reflected the practical situation seen as existing between mineral collections, the economic value of minerals and assistance to prospectors for much of Staiger's chemical work was mineral assaying. He took over the two small rooms in the old Parliamentary building in which the museum was then housed, but soon obtained the use of rooms in the nearby old Post Office building⁷. A mineral display was set up in one and Staiger used the other room for his assay work. Richard Daintree, then agent general for Queensland in London, corresponded with Staiger concerning the presentation of the mineral collection, recommending the arrangement of specimens and photographs previously used by him in various international exhibitions, and stressing the practical economic significance of the displays⁸. To do as Daintree suggested Staiger needed yet more space, but when he got it it rapidly filled with general museum collections and Daintree's plans for geological displays of Queensland were never realised.

Minerals for a Museum

The mineral collections under Staiger's care were not very large and attempts were made to increase them by donation, by exchange and by purchase. In May 1878 the collections consisted only of 300 specimens, of which 150 represented material apparently obtained through exchange with the Italian government. The Italian collection was claimed by Nehemiah Bartley who was a wealthy land-owner—his property included what is now known as Bartley's Hill, a suburban look-out on the outskirts of Brisbane. Bartley had set up a private mineralogical collection which he had tried to sell to the government in 1874⁹. He had had some correspondence with the museum board regarding sales of specimens— which the board had thought were donations. The board had returned the specimens immediately¹⁰. Apparently Bartley assumed that this collection from the Italian government was in exchange for specimens he had sent. After considerable discussion, settlement was reached by allowing him to take 50 specimens¹¹. Even though the museum collection of minerals was so small the board, on 7 March 1876, agreed to send mineral specimens to Oakey Primary school.



Richard Daintree, government geologist for north Queensland 1868–71



Christopher D'Oyly Aplin, government geologist for south Queensland 1868-69.

With the move to the William Street building there was more space and a better presentation of the minerals and rocks was possible. They were displayed on the ground floor of the building and were classified by chemical composition, locality and economic use. However, the collections were still very small. Accordingly, a more active policy of increasing the mineral collections by exchange with organisations and individuals was instituted in 1880 by the curator, W.A. Haswell. This was not altogether satisfactory, and a geological collector, Alex Macpherson, was appointed in 1881. However, Kendall Broadbent, a zoological collector of outstanding merit was available for appointment and in May 1883 the new curator, de Vis, created a vacancy for Broadbent by making Macpherson an attendant (see Chapter 3). In November 1883 de Vis observed to the board that the mineral collections were being neglected. An approach was made to the Mines Department requesting gold wardens and other officers to be instructed to forward mineral specimens, particularly of ore minerals, to the museum—but there was not a marked response¹². Then, there having been a fire in the Australian Museum, the trustees, on 3 December 1882, offered duplicates from the Queensland Museum to help 'the parent colony in recuperation of its loss'. The offer was accepted.

Early in 1884 a direct method of adding to the mineral collections was instituted by again appointing a geological collector—H.F. Wallmann. His detailed list of duties included geological mapping as well as collecting¹³. Wallmann collected minerals, rocks and fossils in the Sandgate, Stanthorpe and Gympie areas and began a geological investigation of the Gympie Goldfield. However, the board commented on his travelling expenses and expressed dissatisfaction with the paucity of results. Wallmann resigned early in 1885¹⁴. He did not part on good terms with the board. There was a difference regarding maps and reports that the board at first insisted were museum property¹⁵. However, this problem appears to have been resolved and the papers were returned to Wallman. He appears to have maintained a regard for the museum for he continued to donate specimens. Not so the trustees, who would not even consider reappointing him on the two occasions he applied, and also refused to lend him specimens.

During 1885 the museum was represented on, and was involved with assistance to, the Commission in Queensland of the Colonial and Indian Exhibition, to be held in London in 1886. A.W. Clarke, later to be the government mineralogical lecturer, was appointed by the Commission to collect Queensland specimens, for, as Clarke pointed out in his preface to the mineralogical catalogue for the exhibition 'the colony has as yet no mineralogical department or collection to draw on for display on these occasions'. This was both a reflection on the museum's collections and of board policy to allow only duplicate specimens out of the museum¹⁶. Some 1400 specimens, all with a strong economic bias, were collected for display at the exhibition.

Early in 1886 steps were taken to fill the vacant position of museum geological collector and E.B. Lindon, an associate of The Royal School of Mines, London, was appointed in May. Unfortunately, adequate provision was not made in the estimates for a travelling allowance and Lindon was largely restricted to office work and maintenance of collections. Perhaps fortunately, de Vis had made provision for the purchase of a polarising microscope. Lindon made only one trip—to Glenlyon to examine the caves and reported that frequent flooding had prevented deposition of fossil material¹⁷. Lindon's main contribution in the short time he was at the museum was the preparation of a catalogue of Queensland minerals and

localities. He resigned in the middle of 1887 and was shortly after replaced as geological collector by Henry Hurst who had earlier offered to perform, on trial without salary, the duties of clerk and librarian¹⁸. Hurst began collecting, largely fossils, on the Darling Downs. During 1888 he was involved with the preparation of mineral specimens for the Queensland Court at the Centennial Exhibition in Melbourne and he travelled there to arrange the display¹⁹. Afterwards a considerable part of the material donated for this exhibition came to the museum.

The records of museum board meetings during 1888 suggest that views of the practical use of mineral collections were still predominant. The educational use of the collections was recognized in the supply of material for teaching purposes to a number of schools²⁰. The need for a laboratory for analysis of specimens and practical assistance was again noted. At the end of 1888 most of the gold specimens were stolen from the museum's mineralogical displays²¹ and the loss was never overcome. The curator's report to the February 1889 board meeting assigns a higher than usual priority to the mineral collections. Due to lack of space, or the return of the specimens from the Centennial Exhibition in Melbourne, de Vis proposed removal of most of the contents of the zoological cases on the ground floor to make way for minerals²².

In the 1890s drought, depressed economic conditions and industrial troubles had an influence on the museum and its staff and all its activities were reduced. 1891 was a particularly bad year—silverfish were defacing the labels in the mineral cases and Hurst, the collector, was dismissed at the end of the year. He never had inspired the board's confidence, although de Vis usually appears to have supported him. In the end he 'abandoned his position', disappeared from Brisbane 'and was dismissed'²³.

In April 1892 Hurst was replaced by H.G. Stokes with the title of mineralogical assistant. Stokes had been donating and exchanging specimens with the museum over several years. A condition of his employment was that he should perform assays of mineral specimens required by the Mines Department and apparatus and chemicals were to be obtained²⁴. At last a chemical laboratory had been re-established. Stokes' work was largely in the office, testing and reporting on prospectors' samples. He was also involved with a number of exchanges with overseas organizations. However, in June 1893, with the reduction of the staff to three and the office boy, he was retrenched²⁵.

Even under these conditions, there was still some activity with the mineral collections. Collections were prepared for exhibitions and specimens were received by purchase, exchange and donation. As a continuation of its educational service, a mineral collection was provided for the South Brisbane School of Arts in 1894²⁶, while in 1897 the museum loaned mineral specimens to the government geologist for display at Queensland's International Exhibition²⁷. Perhaps the brightest point in this difficult decade was the move in 1899 to the Exhibition building. At the time there was a proposal that the Geological Survey of Queensland should occupy the same building. However, each organisation felt that there was insufficient space even for its own need, and the proposal was not taken any further²⁸.

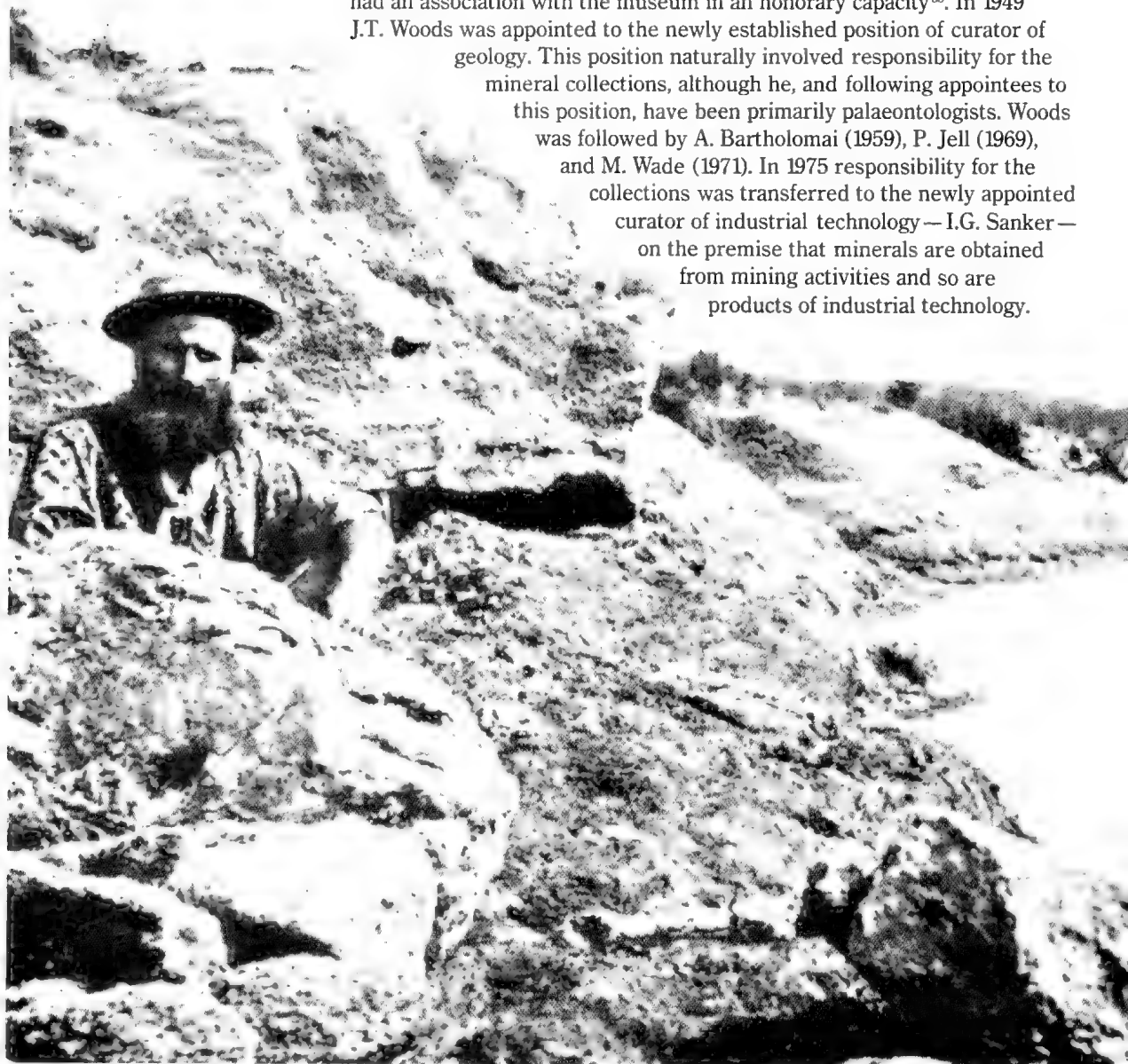
A Museum Mineral Collection

Early in 1900, with the installation of the museum in the Exhibition building under way, J.A. Smith was employed to prepare the mineral exhibits. He is described as mineralogist and later as assistant in the industrial department. He resigned from August 1902, and was followed

by J. Lamb—originally appointed as ‘packer’ for the move to the new location—who was a painter by trade^{29,30}. Discussions were held with B. Dunstan, acting government geologist, about the possible transfer of Geological Survey collections to the museum but no arrangements were made at the time³¹. The Geological Survey collection was to come to the museum in 1979.

With the appointment of R. Hamlyn-Harris as director in 1911, there seems to have been more activity as far as the mineralogical collections were concerned. A new mineral register was begun and older material recatalogued. Hamlyn-Harris actively sought geological material from mines departments in other states. The museum supplied duplicate geological specimens to the University of Queensland then being set up³².

After this there seems to have followed a long period when the mineral collection was more or less neglected. Staff from the geology department of the University of Queensland, particularly H.C. Richards, had an association with the museum in an honorary capacity³³. In 1949 J.T. Woods was appointed to the newly established position of curator of geology. This position naturally involved responsibility for the mineral collections, although he, and following appointees to this position, have been primarily palaeontologists. Woods was followed by A. Bartholomai (1959), P. Jell (1969), and M. Wade (1971). In 1975 responsibility for the collections was transferred to the newly appointed curator of industrial technology—I.G. Sanker—on the premise that minerals are obtained from mining activities and so are products of industrial technology.



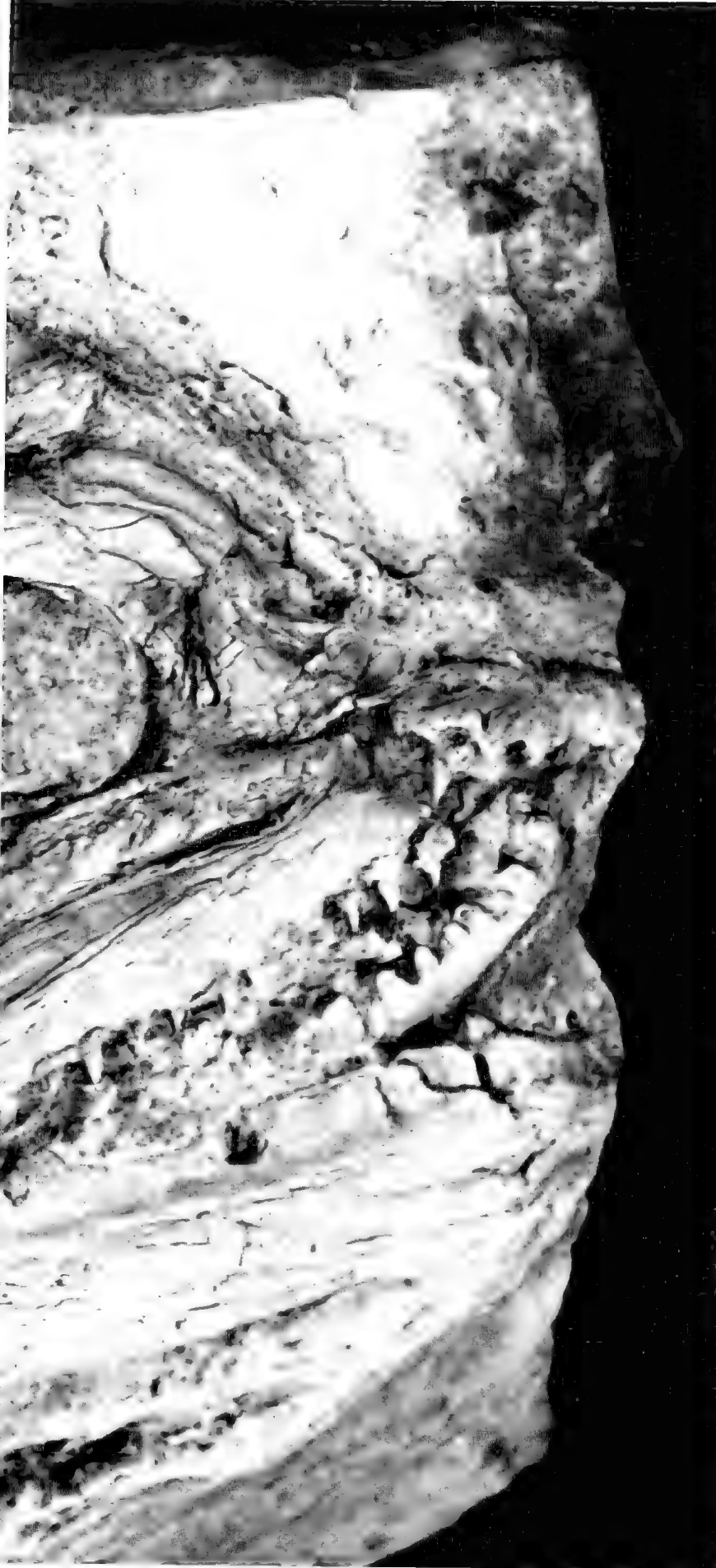
Over the last 30 years the size of the registered collections has increased from 1800 in 1948 to approximately 14,000 in 1986. This has come about by the transfer of some 4000 specimens from the Geological Survey collections, by field collecting, by donations and purchases and by cataloguing of previously unregistered material. The federal government's Taxation Incentives for the Arts Scheme, instituted in 1978 to encourage donations to museums and similar institutions, resulted in the donation to the museum of extensive and valuable opal collections as well as mineral specimens.

The museum's mineralogy collection is reasonably substantial in size and contains specimens of good quality and historical significance—collected by prominent geologists or from long abandoned mines. At this stage it is not an altogether comprehensive collection. It reflects the fact that it has never had the sustained attention of an appropriately qualified curator—a staff mineralogist—whose studies could identify the gaps in the collection and who could make it a complete archive of the mineralogy of the state. Although, in the early days, there was indeed great interest, it was a practical rather than scientific interest and many important minerals were not collected. Since then there have been attempts to increase holdings and to have technically qualified staff appointed and this did happen on several occasions. However, there were reasons—usually economic—why they never stayed long, and over most of its history the mineralogy collection has been treated passively—cared for, but seldom systematically developed and never the subject of scientific investigation. Thus, while some research on the collections has been carried out by outside research workers, there has not been a qualified and interested mineralogist on the museum staff and no research is being done within the museum.



A photograph, possibly of his colleague—explorer William Hann—taken by Richard Daintree at the Clarke River, northern Queensland.





7

THE RECORD IN THE ROCKS

Geology



A number of the early settlers who moved into the Darling Downs in 1841 were interested in their natural surroundings. Unlike many of the later immigrants they did not see the land merely as the source of affluence. Life could not have been easy, nevertheless they found the time to collect and to consider and discuss the significance of the specimens they found.

Amongst the things that excited these settlers were giant marsupial bones, which the Aboriginal people knew to be those of the *Gyedarra* that had grazed around the water holes in the days of their forefathers. These bones were soon recognised as the remains of long extinct diprotodons. They are a link between the scientific culture of the newcomers and the folklore of the Aboriginal inhabitants of the land^{1,2}.

From 1859, with the founding of the Queensland Philosophical Society, we can glimpse through the pages of its *Transactions*, the group of naturalists that had gathered together in these early, formative years of the state. We can see the signs that the society was active and successful and that, from the earliest days, there were men and women to foster the science of geology, especially palaeontology⁴. Later, the search for minerals stimulated the government to an interest in geology and more fossils were found by professional geologists. However, mainly it was the collections made by the early settlers between 1840 and 1900 that engaged the attention of a succession of curators for whom the study of vertebrate palaeontology became a life-work, and that eventually made the Queensland Museum the home of vertebrate palaeontology in the state.

The Philosophical Society

Charles Coxen, an outstanding man in the early history of the state and a key figure in the founding of the Philosophical Society and the museum, was one of those early settlers⁵. Relatives of his, Patrick Leslie and his brothers, first settled the Darling Downs in 1840 and Coxen followed them from New South Wales soon after^{6,7}. He and his wife, Elizabeth (Fanny), were among the 15 or so settlers who discovered unusual bones on their properties. Frederick Isaac at King's Creek, George King of Clifton, and R. Turner and Henry Hughes, were doing the same thing on their new properties⁷. In 1842 colonial surveyor-general Sir Thomas Mitchell and C. Nicholson reported the first fossils to come out of Queensland⁸. Others, including the few official surveyors and professional naturalists, such as Ludwig Leichhardt, the Reverend William Branwhite Clarke, Samuel Stutchbury, and Dr George Bennett all made their way through the Darling Downs in the 1840s and 1850s acquiring fossil marsupial bones and other geological specimens enroute^{1,9}. Most of the bones and other fossils found in this early period were sent either to Sydney to the budding Australian Museum, or to London to Richard Owen, the doyen of British Victorian palaeontology. Many, however, must have been kept at home, proudly displayed, or given to visitors. Some were undoubtedly given to the Philosophical Society — especially after it had founded its museum. In its first report in 1862 to society appealed to colonists for specimens and acknowledged the receipt of fossils from J.K. Wilson of Fitzroy Downs¹⁰.

The Mineral Boom

From the early trips of Commander Logan of the Moreton Bay Penal Colony, coal seams and fossiliferous limestone had turned up at Ipswich, and interest in the geology of the area had been aroused. By 1856 J.S. Wilson, geologist with the Northern Australian Expedition, had presented



The young Patrick Leslie, one of the first settlers on the Darling Downs.

Previous page: Fossil fish *Pachyrhizodus marathomensis* from the Cretaceous Alban, Boree Park Station near Richmond. The type is in the museum.

a note on the geology of Brisbane to the Geological Society of London¹¹. Quite a few of the members of the Philosophical Society, including Gregory and Tiffin, had given papers on geology. Coxen, though not a geologist, presented a paper for J.K. Wilson *On the Geology of Western Queensland*. They all recognised the need for professional geologists to survey the wealth of their colony and to investigate the content and age of the rocks as potential sources of minerals. In 1859 the newly appointed Queensland government employed its first surveyor-general, A.C. Gregory¹². He, joined later by an assistant George Phillips, began the arduous task of understanding the geological structure of the state. Expeditions were moving north all through the next decade, bringing back rocks and fossils.

On 18 May 1867 the Reverend George Wight delivered an influential address to the Philosophical Society which was reprinted in the *Queensland Daily Guardian*¹³. He called attention to the pressing need for the appointment of a full-time government geologist: such a person was needed 'to guide and aid the development of the vast resources of Queensland' by 'the best, cheapest, and speediest means'. Richard Daintree, who had visited Queensland during his leave from the Victorian Geological Survey in 1863, was appointed to the position of government geologist for north Queensland in 1868¹⁴. Daintree was one of the first geologists to make regular use of photography during field work—one of the many images he has left us is that of the giant fossil marsupial bones at Maryvale. In 1869 he sent specimens and photographs, via Minister for Works C.S. Mein, to the Philosophical Society museum. Attempts were also made by society members to influence government to carry out extensive fossil collecting surveys but to no avail¹⁵.

By the mid-1860s a veritable mineral boom was on in Queensland which led to the need for both a better understanding of the geology and a general increase in geological education. The staff of the Geological Survey was increased to two in late 1868 when Christopher D'Oyly Hale Aplin became government geologist for south Queensland. His field notebooks of 1869–1870 are housed in the museum. A pencilled note for January 1870 tells us that he placed his collections 'in the hall of the Philosophical Society in trust for the National Museum collection whenever such a museum is established'—the Queensland Museum is often referred to as the 'National Museum' in its early annual reports¹⁶. Woods used the *Thylacoleo* specimens collected by Aplin in his review of this genus^{17,18}. D'Oyly Aplin collected around the Downs and in the Stanthorpe region and his new assistant, T.R. Hackett, collected around Gympie.

At the end of 1869 there was opposition to the use and costs of the geological survey, and Aplin's job as government geologist for south Queensland came to an abrupt end the following year. However, the Queensland government had finally decided to establish a mineralogical museum in the Parliamentary building, and in 1871 he was given the task of making a first catalogue of and arranging the minerals and fossils belonging to the government, which included his own and his assistant's collections (see Chapters 2, 3, 4). He completed the job in September 1871, but failed even to get adequate remuneration for his curation of the collection. He finally retreated to north Queensland, and to relative obscurity as a police magistrate¹⁹. Daintree also left his post as government geological surveyor for north Queensland in 1871, to become commissioner for Queensland mineral exhibits in London, going on to become the colony's agent general there.



Sir Thomas Mitchell, colonial surveyor-general, who reported the first fossils to come out of Queensland.



Explorer Ludwig Leichhardt, who collected fossils on the Darling Downs in 1844 while preparing for his expeditions.

The Early Museum Collections

Coxen, the first official curator of the Queensland Museum collections from October 1871, had little palaeontological expertise available to him in Brisbane, and sent specimens away to obtain information. Daintree's material went to London in 1873 as did some from the early explorers such as William Hann. Gerard Krefft at the Australian Museum was asked for help with identifications, as was the Reverend W.B. Clarke. Fossil plants were sent to Baron von Mueller in Melbourne. The oldest acquisition book for geology dates back to 1876 with a miscellaneous register back to 1873; in these and subsequent volumes there are listed specimens that were part of the 'old' collection in the Post Office building to which it had been moved from the Parliamentary building.

Nineteenth century donations of geological material, excluding minerals, include quite a representative collection of British material demonstrating that some colonists maintained an interest in 'home' and that collecting was not a new activity for them²⁰⁻¹. Amongst the oldest recognizable donations in the collection today²² are two collected in 1872 by an expedition led by William Hann—one of the many expeditions during the two decades from 1860 that set out for the north²³. Hann was accompanied by the geologist Norman Taylor. When prospecting up the Walsh River they found ichthyosaur remains in sedimentary rocks which they compared with the Cretaceous deposits of the Flinders:



Sheep on the Darling Downs—an early drawing (photographic copy from the museum's negative files).



Bartholomai examining the banks of King's Creek near Clifton Station on the Darling Downs in 1962. Here, in the early 1840s, George King was finding fossil bones of diprotodons.

A more interesting spot for a scientific man can scarcely be conceived; here he is surrounded by the objects of his interest, they are under his feet like pebbles on the seashore, they are hanging over his head ready to crush him if not careful, he cannot move without seeing them around him on all sides; they were of all sizes, and numbers of them beautifully perfect; what, and how many to save was the puzzle, each new find exceeded the last one in beauty, until all the beautiful ones were sufficient to load a dray, could we have saved them, and, as I had not even one packhorse to carry these and the rock specimens, I was put to my wits end how many to transport. However, Mr Taylor and myself collected the best of the various species, which we were content to secure and carry along with us²⁴⁻⁵.

Jack records that a few were carried on 'and the remainder buried beneath the ashes of the camp fire'²³. The specimens donated to the museum were 'two or three bones of the vertebrae of a large animal which were attached to each other by limestone'²⁴⁻⁵ and a fossil turtle²⁶. This material represents the starting point for another of the strengths of the museum geology collection — Queensland Cretaceous fossils.

Following Coxen's death in 1876, Karl Staiger, the government analytical chemist, who had been appointed custodian in 1873, was in sole charge of collections. Records of new geological material are few in his time but one illustrates the opening up of Queensland and its early mineral boom — a Mr G. Smith of Copperfield, an early boom town, wrote to Staiger from the central highlands sending fossil bones from his property, Granville. These were bones of the fossil marsupial *Zygomaturus*.

The flow of specimens from the Darling Downs settlers also slowed. One of Owen's collectors, George Frederick Bennett — son of Dr George Bennett²⁷ — came to live in Toowoomba, presumably to be nearer the Darling Downs where his chief love, the fossil bones, were located. He gave a talk about *Rambles on the Downs* to the Philosophical Society in 1875 and later donated a collection to the society museum²⁸. He bemoaned the lack of interest and knowledge in the current landowners compared with the early days, saying they often mistook fossil bones for those of horse or oxen.

Some new material from southern Queensland came to the museum from A.C. Gregory²⁹ who, in 1875, quit the post of surveyor-general and became geological surveyor for south Queensland under the Department of Works. From the museum's point of view it was no doubt useful to have Gregory appointed as one of the foundation trustees of the new museum in 1876. However, after his retirement in 1879 the posts of geological surveyor for the north and south of the state were abolished and united in the Geological Survey of Queensland in 1880 under the control of Robert Logan Jack who had been Daintree's successor in the north³⁰. Jack initiated a collection within the Geological Survey itself and then less material came to the museum from this source.

In 1877 work began on a new museum building in William Street. The first full-time curator, young William Haswell from Edinburgh, appointed in 1880, was a zoologist. Although he tried hard there is no sign of a sustained attempt to acquire fossil donations. They seem to have arrived rather haphazardly, donated by those who found them on their properties, or on their travels. One specimen that came in during Haswell's time was a bone of *Dinornis*, the giant flightless bird of the Pleistocene of Australia, donated by James Daniells of Headington Hall, Pilton in 1880. Alex Macpherson, later to be employed as a collector, also began donating



William Hann, accompanied by geologist Norman Taylor, led an expedition to northern Queensland. They found ichthyosaur remains in sedimentary rocks along the Walsh River.



Robert Logan Jack set up the Queensland Geological Survey in 1880.

specimens in 1880. Other transactions at this time show that perhaps Haswell did not fully appreciate the significance of the old collection, for, in June 1880, 44 fossil marsupial bones from the Darling Downs were shipped to the Canterbury Museum as part of an exchange deal.

Haswell resigned in late 1880 because of poor treatment and low pay. In January 1882, after a sporadic influx of applications for the post, Charles Walter de Vis was appointed curator at the age of 53; he was put on six months probation and an annual salary of £400. He remained in office until he was 75 and during his tenure he built up the reputation of the museum as a centre for vertebrate palaeontology.

de Vis' Era

After a short time in Brisbane getting acquainted with his new collections de Vis began to get interested in fossil bones. This resulted primarily from the preponderance of collections of vertebrate material already accumulated from sources on the Darling Downs. In 1884 he separated off the fossil and mineral collections from the other collections and by 1885 could write—after another successful field season by his collector, Kendall Broadbent—that 'the number and variety of fossil bones gathered in the last two years has necessitated a thorough examination of the whole collection'³¹. So, despite little formal training, without access to reference material and with next to no library, he began to unravel the myriad bones before him. de Vis went on to work on upper Cainozoic marsupials, birds, turtles, lizards, crocodiles, lungfish, and Cretaceous fish and reptiles.

One of his manuscript books remains which shows his lists of new names for fossil marsupials. It illustrates the quandaries he encountered and the temptations that existed to give every fossil a different name. He resisted those temptations, and most of the manuscript names that he did use have stood the test of time and very few have been submerged in synonymy. He often had large samples—a desideratum for good taxonomy—and he clearly understood the nature of intraspecific variation—his judgements have usually turned out to be correct. He became a respected worker in his day and his opinions on fossil vertebrates, especially birds, were sought. He seems to have been an evolutionary biologist and this is illustrated by his inference in a paper on Darling Downs turtles that 'the chelonian division of the fauna accords with the others in declaring that since its remains were buried a total change has swept over the vertebrate life of Australia'³²—he found no fossil forms coeval with existing species. He also does not seem to have taken kindly a dedication to him in a book by a local teacher of geology, who undoubtedly had some dated ideas³³, for in the museum's copy of the book de Vis has written to deny all association with its preparation.

Of course, much of his time was taken up with running the museum virtually single-handed with little positive support from outside. He did much to foster acquisition and exchange of geological material—in 1882 he wrote numerous letters to initiate deals with museums and universities, both within Australia and overseas, and with the Queensland Schools of Arts—at Bundaberg, Maryborough, Cooktown, Charters Towers, Ravenswood, Gayndah, Mount Perry, Rockhampton, and Batesford Free Library and Museum. Several of these efforts paid off, and one collection of note which came by exchange from the University of Newcastle-upon-Tyne is a representative collection of Carboniferous Coal Measure vertebrate material collected by Thomas Atthey²¹.

For the scientific community of Queensland, 1883 was a high point

with the Royal Society replacing the old Philosophical Society. This year also saw a high 10% of all donations to the museum coming to the geological section. The donors, many of whom recognised the significance of their finds, included residents of Brisbane of varying backgrounds and nationalities, amongst them some of the earliest free settlers in the Brisbane region including David C. McConnel from Manchester²⁹ and a member of the Petrie family. Many of the donors were squatter-politicians such as Thomas McIlwraith, Albert Norton, W.H. Corfield and Edward Palmer, some of whom roamed far in their early days as stockmen, or during election times³⁴. Station owners, such as Ernest Henry of Hughenden, and their managers, land commissioners, surveyors, engineers of railways and roads, well- and bore-sinkers, and general travellers—usually professional civil or hydraulic engineers such as J.E. Falconer, R.E. Graham and Patrick Doyle—all collected material. There were also a few rare men and women who were actually out and about collecting fossils and rocks for their own sake, such as Gregory himself, and John Simmonds, stonemason, who specialised in fossil plants³⁵ and was a staunch member of the Royal Society from its inception³⁵. The Ogg family continued to send material to the museum from the time that the Reverend Ogg took up land on North Pine River and found fossil plants. Later his relative E.J. Ogg moved north to Rockhampton from where he sent a steady trickle of specimens including some interesting Carboniferous blastoids (relatives of sea urchins and sea lilies) that were not to be described until the 1960s³⁶. A. Williams and his son John found lungfish and turtle remains while sinking wells at Eight Mile Plains in 1885.

de Vis found time to write many papers on fossil material and also instituted the *Annals of the Queensland Museum* in an attempt to overcome problems of publication³⁷. Indigenous journals were rare throughout Australia in the 19th century and much local reporting of scientific meetings and new discoveries, including descriptions of new taxa, were given in local newspapers. de Vis, who had a journalistic background, resorted to this on several occasions using both the *Brisbane Courier* and the *Queenslander*. Later workers have sometimes complained of the extraordinary medium chosen for scientific announcement²³. Now, with



Jack Woods with a skull of *Euryzygoma*, the Giant Cheek-pouched marsupial (photograph from the *Brisbane Telegraph* 4 November 1954).

the *Royal Society Proceedings* (which followed on from the *Philosophical Society Transactions*) and the museum's *Annals*, joined briefly in the early 1890s by the short-lived *Natural History Society Transactions*, publication of scientific work was not such a problem.

Robert Etheridge jnr, a palaeontologist from the British Museum, worked on many of the specimens with colleagues in Britain but also with Robert Jack of the Queensland Geological Survey³⁸. Etheridge subsequently became director of the Australian Museum²⁷ and on several occasions acted as honorary palaeontologist to the Queensland Museum. He left a legacy of important described fossils, many acquired during de Vis' time as director. From the museum collection, a Carboniferous palaeoniscoid (ray-finned) fish and 'sharks' of the same age³⁸ were the oldest vertebrates recorded from the state until almost a century later. Some were found in the new rail cutting at Bogantungun by a Mr Sexton of the telegraph station in 1883. A shark tooth from the Rockhampton district, *Deltodus australis*, had been collected by de Vis himself. Etheridge, with Woodward, also described Cretaceous fish and reptiles from the western districts of the state³⁹, and Plio-Pleistocene vertebrates including fossil teeth of the Queensland lungfish from the Darling Downs and elsewhere³⁸.

In the field de Vis was ably served by a few good collectors. Alex Macpherson had been appointed in 1881 as geological collector. In March 1882 a man who certainly was one of the most able of collectors of his time was appointed. This remarkable man, Kendall Broadbent of Yorkshire, was appointed on a temporary basis only for nine months. He stayed on and began a series of field seasons liaising with settlers and collecting fossil vertebrates on the Darling Downs. On one trip he 'bagged' over 100 bones including new diprotodontids and nothotheres—according to de Vis—and a giant extinct bird *Dinornis queenlandicus* which was prepared by a Mr Daniells of Pilton³¹. Broadbent's reports to de Vis give an insight into the problems of field collection in Queensland around the turn of the century. Apart from the vagaries of weather and its effect on transport and the problems with Aborigines, the collectors suffered from the habitual lack of money and were continually having to prise resources from the bureaucrats several hundreds of miles away in Brisbane in order to continue. The last geological collector employed by the museum was Henry Gilbert Stokes, geologist and a prominent member of the Natural History Society of Queensland. He took up the post of collector for a short time in 1892. In 1893 money for paid collectors as such ran out and even field work was often out of the question in the economic depression that led on to the Great Shearers' Strike. The two collectors on the staff at that time were brought back to the museum to act as attendants. To make up the loss, de Vis had to rely on purchases, exchanges and donations. He fostered a group of men to collect for him from whom he would occasionally purchase specimens outright. Most of these people were collecting fossil bones on the Darling Downs. They included Henry

Fossil jaw bones of *Macropus titan* collected by Broadbent from Gowrie, southeast Queensland.



Hurst — who had been a collector on the staff before his dismissal in 1891. Richard Frost and C. Herman Hartmann. de Vis also kept sending out requests for donations and exchanges to all major institutions in the world, and, nearer to home, made acquaintance with as many people as possible. He contributed regularly to the few statewide societies including the Royal Society of Queensland and the Australian Association for the Advancement of Science. The museum archives show that he maintained regular correspondence with several interested landowners. One such was Frederick L. Berney, of Sylvania station near Hughenden, who for a decade or more in the late 19th and early 20th century donated numerous specimens to the museum, including several important vertebrate and plant fossils⁴⁰.

Donations in the first decade of the 20th century still included material from well sinkings. The Hon. J.T. Bell sent fossil kangaroo, diprotodontid, the giant emu *Dromaeius* and giant lizard *Megalania* remains from Warra in 1909. de Vis wrote: 'This well-section illustrates the (disturbed?) character of the bone deposits on the Downs, the bones show by their different colors and different original matrices that they have been swept together from previous burying grounds'⁴¹; Mr Gore of Yandilla — 'one of the few who are alive to the interest felt by many besides themselves in the fossils of the Darling Downs — while engaged in watching the progress of workmen employed in sinking a well' came across bones of an extinct bird which de Vis went on to name *Palaeolestes gorei*⁴⁰. Another interesting donor of this time is Charles Campbell, railway works surveyor, who over the period 1891–1911 was regularly writing and sending fossils to de Vis. These included diprotodontid bones and Silurian fossils found as he worked the new sections of railway. His letters invariably show a picture letterhead from the town where he was billeted. Antarctic rocks from the summit of Mt Erebus reached the museum in 1909, forwarded by Professor T.W. Edgeworth David on behalf of Sir Ernest Shackleton.

de Vis retired from office in 1905 but stayed on, by public petition, as scientific advisor to his successors. He continued to deal with geological matters, including his research, during C.J. Wild's period as acting director and during the first years of Hamlyn-Harris' tenure as director. He died quietly in 1915, age 86 and was hailed as a 'pioneer'³⁷.



The Longman Era

In 1911 Director Hamlyn-Harris had the foresight to appoint, as scientific assistant, a man with no professional museum or biological training as such, but who was a keen and able amateur naturalist⁴². Heber Albert Longman, before he entered the museum (as assistant curator), had specialised in insects and had made an important plant collection. However, with no formal training in geology or anatomy, he set to and became one of the most important practising vertebrate palaeontologists in Australia for the several decades that followed. Longman elevated the reputation of Australian research on vertebrate fossils to the world arena. He became director of the museum in 1917 determined to continue his enthusiastic work on fossil bones—usually by working through his annual three weeks leave and on Christmas Day⁴².

Longman's first palaeontological paper was on a fossil fish, *Porthetus australis*, two specimens of which had been donated around 1912 by S. Dunn of Hughenden in response to a series of letters sent out by Hamlyn-Harris⁴³. Thus began the museum's active research on Cretaceous fishes which is maintained to this day. In 1932 Longman described a new genus of Cretaceous fish, *Flindersichthys denmeadi*⁴⁴, named after the brother of a young man who worked during his university vacation at the museum, Alan Dennead—later to be chief government geologist of Queensland. W.S. Higgins of Richmond, who later came down to Brisbane to meet Longman, had found the fossil on the golf links—'the holy spot', according to W.E. Schevill of the Harvard Exploring Expedition⁴⁵.

In 1915 Longman turned his attention to fossil reptiles with a paper in the *Memoirs* on a giant fossil turtle which had been donated by Frederick Berney from Sylvania station. He described a new genus and species *Cratochelone berneyi* and noted that it was 'a matter of some surprise to those interested in palaeontology that the Queensland Cretaceous formations have as yet yielded comparatively few remains of the giant reptilian forms which characterized Mesozoic faunas'⁴⁶. Longman put this down to lack of systematic research in these areas. Over the next three decades he went on to describe ichthyosaurs: the plesiosaur *Kronosaurus queenslandicus*⁴⁷, identified amazingly from only a scrap of jawbone given to the museum in 1899 by A. Crombie of Hughenden; the giant sauropods *Rhoetosaurus browni*⁴⁸ and *Austrosaurus mackillopi*⁴⁹, the former found by Thomas Jack and a Mr Wood and dedicated to the station manager of Durham Downs, Arthur J. Browne, who sent the first pieces to the museum and helped Longman visit the Eurombah Creek site in 1926; and the crocodiles *Pallimnarchus pollens* de Vis, and *Crocodylus nathani* named after the governor of Queensland at that time, Sir Matthew Nathan⁵⁰.

Fossil marsupials also came under Longman's discerning gaze. In an elegant paper, he described and reconstructed a new genus *Euryzygoma dunense* from material de Vis had referred to as *Notholtherium*⁵². The model, so admired by Sir Arthur Smith Woodward of the British Museum of Natural History⁵³, had been made by Longman and his new assistant, Tom Marshall, with the aid of Portland cement and glue. More marsupials donated by Charles Campbell, by Thomas Jack of Dalby and N. Pearson of Nobby were worked on in the 1920s^{47,54}. Longman also spent some time on the first major cave fauna of vertebrates from Marmor Limestone Quarry near Rockhampton where he arrived in 1924 with the manager Samuel Evans.

Longman did endeavour to bring scientific matters to the public, at



Heber Albert Longman as Hamlet. Longman's lectures and articles on the evolution of man were given great prominence in the press. It was a popular subject at this time and Longman made a special study of it (cartoon from the *Courier Mail* 10 October 1936).

least in Queensland, through newspaper articles⁵⁵⁻⁶ and lectures. He was also probably the first to give courses on vertebrate fossils at the University of Queensland in the geology department⁵⁷, thus inspiring some local people to consider vertebrate fossils in their geological work. Vertebrate palaeontology had never been an integral part of either geological or biological courses at the University of Queensland, which had been founded in 1910—the museum being recognized as the centre in Queensland. Schools, however, had long taught geology and had certainly considered vertebrate fossils^{31,57}.

In the early 1930s Longman invited a young Melbourne geologist, Edwin Sherborn Hills, to take up the study of Queensland's Tertiary fish which had been turning up in geological surveys around the Brisbane region for about 20 years. Hills had recently begun work on fossil fish at Melbourne University and had won a research scholarship to London⁵⁸. He produced two papers on the Tertiary fish from Darra, Bald Hills and Red Bank Plains in 1934 and 1943^{59,60}. This work remains largely unreviewed to this day and only recently Anne Kemp, an associate of the museum, has been studying the Tertiary lungfish.

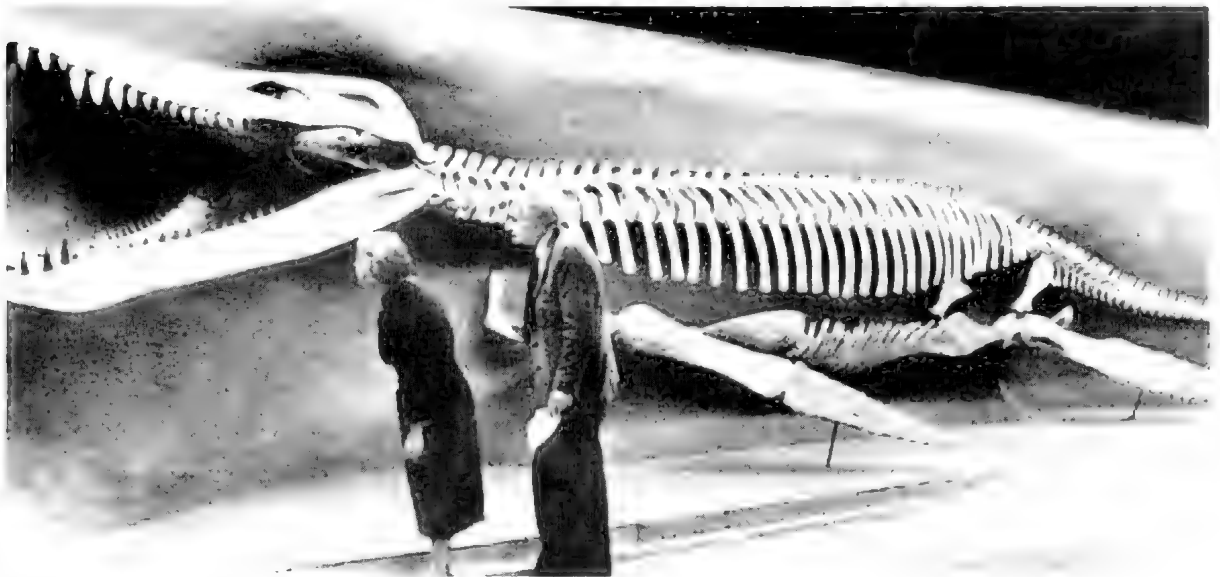
Other palaeontologists were encouraged by Longman, as by his predecessors, to work on museum specimens. These included Henry Casseli Richards, the first professor of geology at the University of Queensland, and A.B. Walkom. In 1915, Walkom reviewed de Vis' work on plants and named *Nilssonia mucronata*, another of Berney's finds, this one from O'Connell Creek on Wyangarie, and described plants apparently collected by one of the few women who accumulated fossil collections, Mrs Lumley Hill of Bellevue, near Esk⁶¹⁻². F.W. Whitehouse, of the geology department at the University of Queensland, did much pioneer work on the important Cretaceous ammonite collections which Robert Etheridge had not found time to tackle at the turn of the century. Among his type specimens are ammonites collected by Henry Hurst from Victoria Downs station, Morven, and Walsh River material from E.W. Smith⁶³.



Longman preparing the skull of *Kronosaurus* collected in 1935 from Telemon Station, Hughenden (photograph from the *Queenslander* 28 May 1936).

During the post-World War I depression years the museum was run on very stringent lines and there was little or no funding available for field work or research. However, Longman gave hospitality and assistance to two major expeditions which came to Queensland. Firstly, Australian-born Sir George Hubert Wilkins led a British Museum expedition in 1923–4 to explore the ‘unknown’ regions of north Queensland. He was pleased to receive museum and state assistance, eventually honouring Longman in the naming of species⁶⁴. Although not the main objective of the expedition, fossil reptiles and ammonites were collected and sent to the British Museum, and some were later donated to the Queensland Museum (see Chapter 8).

A decade later, from 1931 to 1933, the Harvard University Museum of Comparative Zoology Exploring Expedition toured Australia. For much of the second year Harvard geologist W.E. Schevill was expedition leader. He travelled widely, recruiting local help when he could. The Queensland Museum was offered the opportunity to participate but this was not approved—because of lack of funds or lack of interest on the part of the state government. Longman gave the expedition every assistance, storing specimens as they were sent to him, fixing collecting permits, and keeping



The skeleton of *Kronosaurus queenslandicus* Longman, prepared and on display at Harvard University Museum of Comparative Zoology in 1959. Viewing the exhibit are the distinguished vertebrate palaeontologist Alfred S. Romer and Mrs. Romer.

up a correspondence with Schevill. However, the major consequence of Longman’s inability to join Schevill was the loss to Australia of the first articulated skeleton of *Kronosaurus*, the genus which Longman had described in 1924 from a scrap of jawbone. This is one of the most fascinating fossils to come out of Queensland and its loss was a source of some comment at the time⁶⁵. Later, Longman tried to persuade Harvard to return a cast of the restored skeleton but war intervened and this was not to be⁶⁶. The fossil was found when Schevill came to hear of a series of large nodules in a paddock near Hughenden. Schevill’s assistant, a British migrant whom he called ‘The Maniac’, had experience with explosives from his military training and, after initial confirmation that they were dealing with a large reptilian fossil, they decided to dynamite out these heavy blocks—‘The Richmond district took much more time than I had anticipated, largely because of some heavy lumps that were hard to shift—I had to use gelnite for some of them’⁴⁵. They then dug a trench into the

paddock to the lower level of the concretions and loaded them into the back of their Ford truck—which just managed to get them to the nearest railhead. The blocks were shipped off to Harvard wrapped in end-of-sale bloody wool, which so horrified the director of the Museum of Comparative Zoology, Thomas Barbour, that he made Schevill wash every enormous block with disinfectant for fear of anthrax⁶⁷.

In 1934 Schevill asked Longman to send a cast of the original jawbone to compare with the new material, and his assistant, Tom Marshall, made a fine copy. Eventually the almost complete skeleton was prepared by T.E. White, and *Kronosaurus queenslandicus*, the species which Longman had first named in 1924, was revealed. It fulfilled Longman's predictions, based on only the fragment of the lower jaw, about the plesiosaurian relationships. The Harvard *Kronosaurus* was spectacularly mounted and displayed in 1959⁶⁸. When this event was announced in the Australian press without a mention of Longman, Professor W.H. Bryan sent a cable to Harvard reminding them that Longman was the discoverer of *Kronosaurus* and that it was a matter of regret that such an important announcement should lack any reference to the original discovery and to Mr Longman's masterly interpretation of the initially fragmentary material. Longman was certainly consulted throughout the early work on the skeleton but, presumably after Longman's death and with Schevill leaving Harvard to enter the world of oceanography, his contribution was allowed to fade.

Longman in his letters to Schevill dropped several hints that he would like to see the *Kronosaurus* during preparation in the late 1930s but he never was to leave Australia. An attempt was made to send Tom Marshall to the USA on a Carnegie travelling scholarship in 1939⁶⁹. However, with the coming of war Marshall was not able to take up this chance. Longman was naturally disappointed and not a little envious at the loss of the prize specimen, and it seems ironic that *Kronosaurus* remains inadequately known to this day. At least one large block of *Kronosaurus* and other reptile remains collected by Schevill rest, still unprepared, in the stores of Harvard University Museum of Comparative Zoology. New material collected in 1935, and by Bartholomai and Tebble in 1979, is now being prepared in the Queensland Museum. T.E. White did venture that the more common plesiosaur remains from Queensland were similar to the New Zealand *Mauisaurus*, but suggestions that this be written up for the *Memoirs* were not carried through⁷⁰.



W.E. Schevill (left) with colleague R.H. Denison outside Harvard University Museum of Comparative Zoology in 1983 (photograph by courtesy S. Turner).

The Post War Upsurge

There was a break after Longman's retirement in 1945 until 1948 when Jack Tunstall Woods joined the staff, but from thereafter the holders of the curatorships of geology, mammals, and of the post of director have continued to lay emphasis on vertebrate palaeontology.

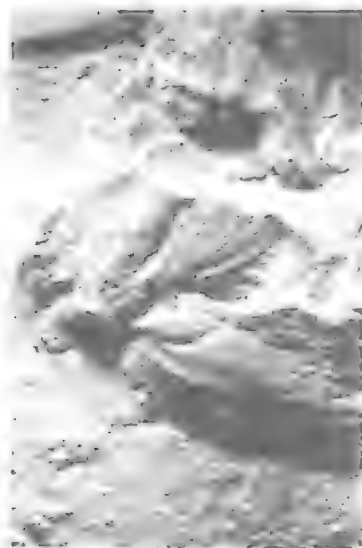
Woods, a 1946 graduate of the geology department, University of Queensland, had been much influenced by Professor H.C. Richards, changing his course from engineering to geology. On joining the museum staff as assistant he was thus the first qualified geologist to handle the collections, and his appointment began a new era for geology in the museum. One of his first jobs was to clean up all the old geological displays and specimens, but after a thorough grounding in the more menial tasks of curation he took up the vertebrate palaeontology banner, working over de Vis' and Longman's material with the aim of a review of fossil marsupial genera⁷¹. During this work he recognized the Pliocene nature of the Chinchilla fauna and made the first thorough restoration of the skull of the marsupial lion *Thylacoleo*. His work on the skull of *Thylacoleo carnifex* was the first truly modern vertebrate palaeontological study from the museum⁷². He prepared the material with modern techniques, and provided not only accurate morphological data on brain case and external structure but also an analysis of the function of marsupial lion teeth with an extrapolation about the diet of the animal. More recent work on tooth wear has sustained his conclusions⁷³.

Woods' first publication in the *Memoirs* was about a small fauna of Cretaceous crabs and lobsters from Currane station—a donation from Miss Sanna Shannon (now Mrs Huessler) in the late 1940s⁷⁴. His work on the marsupials *Palorchestes*, *Propleopus* and the extant *Hypsiprymnodon* again went beyond basic data to functional morphology, and provided thorough taxonomic revision⁷⁵. Admirers of his invertebrate work⁷⁶ implied that he had regressed from invertebrates to Cainozoic vertebrates.

In 1949 Woods collected Tertiary plants and insects from deposits near Brisbane in company with Olof Selling, well known Swedish palaeobotanist. The museum's collection of fossil insects did not increase again until in 1961 it acquired its first specimens from the Triassic Ipswich Coal Measures. These were donated by F.A. Perkins of the entomology department of the University of Queensland. The collection was subsequently added to by Dahms, the museum's entomologist. However, apart from reports on the Hemiptera⁷⁵ little work has yet been done on these Triassic collections.

Woods did much to popularize the dinosaurs and other vertebrates⁴⁶ as well as to enhance the scientific reputation of the museum abroad. One of the important tasks he carried out was the location of most of the type specimens in the museum collections⁷⁶, which has been the basis for more recent compilations⁷⁷⁻⁸. To broaden his experience he moved to the Mines Department in 1959 as senior palaeontologist, but was recalled to the museum to be acting director during the last difficult months of Mack's life; he subsequently became director in 1964.

Woods was succeeded as geological assistant by another Queensland University graduate, Alan Bartholomai. Bartholomai began extensive fieldwork throughout Queensland collecting fossil marsupials from many horizons. His work on Cretaceous fossil fish with a review of the predatory pachyrhiziodids was published in 1966⁷⁹. Later in the same decade the American Museum of Natural History began a series of field expeditions to Australia and Bartholomai was to work with them.



Undescribed Triassic cockroach from the Ipswich Coal Measures, collected in 1984.



Measuring the distance between the dinosaur footprints in the ceiling of Westvale Colliery, Rosewood, southeast Queensland.



J.T. Woods with natural limestone concretions, often containing Cretaceous fossil vertebrates, from the Back Channel of Flinders River near Richmond.

Modern Times

Bartholomai became director in 1969, and continued the museum's tradition of research in vertebrate palaeontology covering a wide range from Cainozoic marsupials to Mesozoic reptiles and fish. More importantly he fostered a whole team of experts in vertebrate and invertebrate palaeontology — adding to the strength of the geology section by the appointment of honorary fellows who have been able to use the museum as an institutional base from which to apply for government grants. Research fellows Anne Kemp — formerly of the University of Queensland — working on lungfish, and Susan Turner — formerly of the Hancock Museum, Newcastle-on-Tyne — studying Palaeozoic to Mesozoic fish, are both adding new and known taxa to the collections and extending the museum's field of expertise. Director Bartholomai's assistant, Tempe Lees, is working on Cretaceous fossil fish — including *Belonostomus*. Further, Bartholomai has encouraged links with palaeontologists in other institutions both in Australia and elsewhere, and close collaboration with invertebrate and vertebrate palaeontologists in the University of Queensland, notably J. Jell and R.A. Thulborn, both being associates of the museum. Another associate, F.S. Colliver, formerly curator of the geology museum in the University of Queensland, has donated his extensive fossil collection of Australian and overseas material to the museum.

Ebenaqua ritchieri, an almost complete fossil fish from the Late Permian, Rangal Coal Measures, Utah coal mine, Blackwater, Queensland. The type is in the museum.



A new genus of bony fish from the Cretaceous, Laura Downs Station, Julia Creek.



Peter Jell, a third University of Queensland graduate appointed by Woods, succeeded Bartholomai as museum geologist in 1969. He was the first full-time invertebrate palaeontologist on the staff and during his short tenure added significantly to the collections of Palaeozoic fossils and Cambrian trilobites from north-western Queensland. Unfortunately Jell left the museum in February 1970. His replacement, the present curator of geology, Mary Wade, was also an invertebrate palaeontologist when she was appointed in 1971. Wade came from the University of South Australia where she had been studying the peculiar Precambrian fauna of Australia. Finding no such deposits in Queensland, she turned her attention to the rich faunas of Cambrian and Ordovician nautiloids from the north-west of the state. She also succumbed to the vertebrate fossils. The world's most complete Cretaceous ichthyosaur, which came from Telemon station in north Queensland, had been languishing on display in a half-prepared state since 1935. Wade arranged for its preparation and eventually described some of the museum's ichthyosaur material⁸⁰. Several more ichthyosaurs await preparation—the rocks laid down in the Cretaceous seas, which covered the Great Artesian Basin 120 millions years ago, seem

to have preserved at that time as many ichthyosaurs as the rest of the world put together.

In 1976 the museum became involved in a project which gained international recognition. A chance discovery in the 1960s by Ron McKenzie while opal fossicking near Winton led to the subsequent exposure of thousands of dinosaur footprints. Bartholomai and R.H. Tedford of the American Museum of Natural History had seen the site in 1971. But it was not until 1976 that Wade and Thulborn, guided there by McKenzie, made a trial excavation. A museum party, assisted by the army and volunteers mainly from the university excavated a much larger area in 1977. This revealed that Queensland had the world's only known stampede of dinosaurs in rocks about 100 million years old. Thulborn was the first to realize that all the dinosaurs but one, the biggest, were going one way and were probably running hell for leather at that. He and Wade took on the huge task of counting, measuring and identifying the footprints—a task which has culminated in a definitive monograph⁸¹.

As a consequence of this work, the museum is now a trustee, with the Winton Shire Council, for Lark Quarry Environmental Park, being responsible for its conservation, and for the interpretive information supplied through Queensland National Parks and Wildlife Service to the public. The park is named in honour of volunteer worker, Malcolm Lark of Miles, who helped with the 1976 excavation. This site, which contains nearly all the known tracks of running dinosaurs in the world, is truly a part of our world's heritage.

Wade and Turner with Jell of the University of Queensland, have made collections of Silurian and Devonian corals, nautiloids, plant and fish remains, as well as early Carboniferous fish including some very unusual sharks⁷⁷ from the Broken River district of north Queensland—a place of great beauty first shown to the geological world by Richard Daintree in 1873⁶.

A large Jurassic labyrinthodont amphibian was also located when Wade was investigating tooth-bearing rock found by Colin Kehl, a farmer at Wandoan⁸³. It is now named *Siderops kehli* by Anne Warren of La Trobe University. Until a slightly younger specimen was found in China in 1985 this was considered to be the last known labyrinthodont in the world. However, *Siderops* is one of the largest and most complete known. The

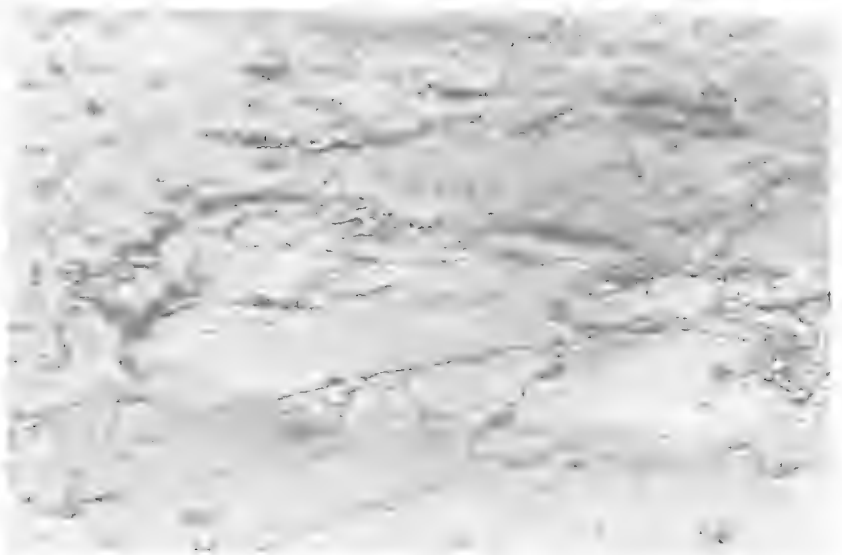


The head of the ichthyosaur *Platypterygius australis* found at Telemon Station between Richmond and Hughenden in 1935. It is one of the most complete Cretaceous ichthyosaurs in the world.

Museum staff working on the dinosaur trackways at Lark Quarry, Winton, 1977.



The dinosaur trackways at Lark Quarry Environmental Park.



Entrance to the covered observation platform at Lark Quarry.



specimen had been buried at right angles to a river cliff and was collected by excavating a cut through the collapsed cliff front, following carefully from the partly-buried head to the shoulders at the top of the cliff. The rest of the body and most of the tail were found later in a buried pile of boulders 50 metres away towards the bottom of the cliff. Despite their enthusiasm no member of the collecting party felt tempted to excavate further for the tip of the tail, which apparently went downhill with an earlier rock fall.

In 1978 Wade, Thulborn and Bartholomai joined a British Museum (Natural History) expedition to Queensland to collect Mesozoic reptiles. Most of the important specimens from this expedition are being prepared in London and then will be returned to the Queensland Museum. An exception was the dragonfly wing from the Cretaceous which was retained in Queensland—a wing of the same age and possibly the same family as that acquired by the museum in the 1920s. In 1980 further Cretaceous insects—a cockroach wing and a beetle elytra—were collected from the Winton area by a museum party.

Another interesting site at Rewan in the Carnarvon district of central Queensland has yielded many vertebrate, and more recently, plant fossils to a succession of museum field parties since it was visited by Bartholomai who investigated its small Triassic reptiles. Warren has also defined an extensive range of labyrinthodont amphibians from this site. Surprisingly, in 1929, Longman had misinterpreted a fossil from Rewan as Cainozoic crocodylian. It was a small mistake but one that held up the search for Triassic vertebrates for a while. When reexamined, his specimens also turned out to be Triassic thecodonts and labyrinthodonts. Thulborn, an expert on dinosaur locomotion, worked on the description and restoration of a Triassic pre-dinosaur *Kalisuchus* from Rewan, and has recognized bones of the first Australian mammal-like reptiles, the forebears of the mammals over 200 million years ago. As well as the 'Rewan beast', a kannemeyeriid similar to forms found throughout the southern continents in the early Triassic, he is studying Longman's *Rhoetosaurus*, a further leg and hind foot bones of the sauropod having been collected by Wade and himself from the original site.

At the end of 1972 a graduate of Yale University, Michael Archer, was appointed to the newly-created position of curator of mammalogy. He had first come to the Museum of Western Australia as a Fulbright scholar in 1970. He was to work on both recent and fossil mammals during his five years at the museum, pushing back through time to older marsupial faunas in the Tertiary deposits found especially in north Queensland in the Carpentaria sub-basin (Pleistocene), at Bluff Downs (Pliocene) and at Miocene sites in the Northern Territory. His identification of a fossil bat enabled dating of this site by comparison with a Middle Eocene bat in France where terrestrial and marine deposits are interlayered. Thus a virtually complete Tertiary record is present in the sediments of Queensland. He also completed an analysis of the basicranium of all extant Australian marsupial genera, necessary to interpret fossil material. He was involved in several major fossil collecting trips, some made jointly by the museum and the American Museum of Natural History and also some financed by American fossil collector, Ray E. Lemley.

Archer left the museum to join the University of New South Wales in 1978, from which institution he continues his exploration of Australian mammalian fossils, his latest excavations being made at a remarkable site at Riversleigh⁴¹. R.E. Molnar, also from the United States, who replaced



The re-discovery of the Rewan site. A. Bartholomai excavating.

Archer on the staff of the museum, has concentrated on fossil crocodiles, dinosaurs and marsupial locomotion. He discovered the first pterosaur remains in Queensland and, with Bartholomai, undertook a study of the large Cretaceous ornithopod dinosaur which they named *Muttaborrasaurus* after the town of Muttaborra in central Queensland. This is one of the most complete skeletons of an Australian dinosaur. It was originally collected in 1963 by Bartholomai and Dahms—the entomologist on the museum staff. Its preparation for display was possible only through the corporate sector support of Kelloggs—through an Australia-wide ‘back of pack’ promotion on their Rice Bubbles product.

Understanding of geology, and particularly the study of fossils and their use to the state of Queensland, has come a long way since the founding fathers began amassing their private collections over 140 years ago. It is a science which underpins many of the endeavours of the state to this day, for accurate knowledge about the rocks of Queensland is still necessary for a proper understanding of its history and its resources. Coxen, Gregory, Daintree, D’Oyly Aplin, de Vis, Longman and many others would wonder at the changes of the last few years and each would have applauded the endeavours of the men and women who built on the foundations that they put in place.



Allingham Creek. Above:: Archer excavating kangaroo skeleton; below: main quarry.



Jurassic Durikai plant beds near Warwick, Queensland. *L to R*: Associate Stan Colliver, Tempe Lees, A.R. Colliver.



Archer, assisted by Errol Beutel, excavating Miocene deposits at Alcoote, northwest of Alice Springs, on an expedition financed by American fossil collector Ray E. Lemley.



8

SCALES, FEATHERS AND FUR

Vertebrate Zoology



In Europe in the 19th century the study of natural history became very popular. Much of the popularity resulted from the persuasiveness of the doctrine of natural theology^{1,2}. By contemplating nature one contemplated God through the tangible products of His Works. Here, it was thought, was a noble amalgamation of science and theology.

One of the important endeavours of the study of natural history was to discover new species. In this search for novelties, collections of preserved animals were in demand. In Victorian society it was also fashionable to have some of God's Works on show in the household. Stuffed animals and ones preserved in spirit were highly prized. In response to the demand for specimens collectors travelled to all parts of the globe—often under the patronage of the wealthy. There were also entrepreneurs who set up shop as natural history dealers in the major cities of the colonial powers. These shops were clearing houses for large numbers of collections³.

In the early part of the century nearly all collections made in Australia were sent, or taken, back to England or mainland Europe. By the 1860s most of the obvious species of vertebrates had been discovered and named by naturalists overseas. Later, with the growing independence of the colonies, the colonists themselves began to study their own animals. Collections were being amassed by people who had little desire to see them leave the colony. However, study of these colonial collections was impeded by the very fact that the named specimens were overseas. Without access to these named specimens, the local naturalists were often not in a position to know if their animals were new or not. In the young Queensland colony, study was also dogged by the lack of relevant literature. Without the published findings of European naturalists, those working in the colonies operated very much in the dark^{4,5}.

These were the circumstances when the Queensland Philosophical Society began gathering specimens together for a museum in 1862. This was the atmosphere in which research on mammals, birds, reptiles, amphibians and fishes began in Queensland.

A Pioneer Museum and its Ornithologists 1862-1882

In most museums of the mid-19th century specimens were either exhibited in jars of spirit-of-wine, or as skins laid more or less flat, or skins were mounted in life-like positions, or they were dried if they kept their body form. Of course, the mounted specimen was favoured for exhibition. Collections were for display. A specimen that could not be seen in a gallery by a visitor was a useless specimen. The concept of separate storage for scientific specimens is very much a modern one¹. This approach did have one advantage—properly built display cabinets were air-tight and excluded dust and insects. Since the only other form of storage was boxes and chests that gave little protection those specimens on display tended to be better preserved than those that were stored.

A consequence of the policy of displaying all specimens was the redundancy of duplicates. Museums had space only for one example of each species, or, at most, one of each sex if the sexes differed. The extras became duplicates and these were mostly used for exchanges. Thus, there was no museum policy to obtain all the material that passed by, nor indeed could the museum have afforded to purchase it all. It was only in the late 19th century when many specimens were needed for the study of geographic variation and the designation of subspecies that the importance of replicates was recognised⁶.

Previous page: Marble Velvet Gecko *Oedura marmorata* Gray, 1842. A widespread species in the open forests of Queensland (drawing from *Forty Queensland Lizards*, a Queensland Museum Booklet, illustrated by staff artists S. Hiley and M. Oakden).

There was another consequence of mid-19th century museum display philosophy that had unfortunate implications for serious studies of the fauna. The labels on the specimens were designed to inform the viewer. They usually gave the name of the species and where it had been found, but there was no information on habitat, season, habits, predators, and colour and other characteristics that were destroyed by preservation.

The following example is typical of the labels of those days:

THE PUNISHMENT OF RAPACITY.

This remarkable example of the omnivorous appetite of the *Varanus varius*, or Lace Monitor, was found in the Kynuna District and donated by Mr W. Higgins. In endeavouring to swallow the well-protected *Tachyglossus aculeatus* — popularly known under the names "Native Porcupine", "Spiny Anteater", and "Echidna" — the Goanna or Monitor attempted too much and both succumbed in the struggle.

The exhibit is shown as found.



A decorative piece from a Victorian drawing room. It was owned by the late J.M. Bauman of Bauman's Gun Shop, Elizabeth St., Brisbane and was donated to the museum by his daughter, Mrs Betty Harris, of Newmarket, Brisbane.



Queensland Museum.

Brisbane June 10th 1880

I hereby engage in consideration of the payment of my passage (money & food) from Dunedin to and of the payment of the sum of £10 per month wages to give up to the trustees of the Queensland Museum all the specimens, whether of botany, natural history or ethnology, that I may collect during the period of my present engagement with the Museum.

Kendall Broadbent.

William A. Haswell, Witness

Kendall Broadbent's first contract with the Queensland Museum.

Perhaps as a result of the emphasis on display the necessity for keeping other data was often overlooked. In the inventory prepared for the museum board in 1876 the only particulars listed were the species' names and how many of each were held. The collections of the infant Queensland Museum being set up by the Philosophical Society suffered from all the consequences of the contemporary museum display philosophy and accordingly their long term scientific value was impaired. In the young Queensland Museum the scientifically inclined had to stand toe-to-toe with members of the public to view the collections. Until the collections started to overrun the display facilities every effort was made to exhibit all the museum's specimens.

However, even in the mid-19th century, the men associated with the foundation of the museum recognized the scientific significance of the specimens they were collecting and much of the material was the basis for contemporary investigations rather than being used merely for displays of curious objects. Outstanding amongst these men were Charles Coxen and Silvester Diggles—both first and foremost ornithologists.

Coxen, to whom we owe the foundation of the museum and the government's eventual commitment to it, had come to Australia in 1833 to collect bird specimens for the London Zoological Society, of which his brother-in-law John Gould was the secretary⁷. Although Coxen later settled in Queensland much of his material was still sent back to Gould or

to the Australian Museum in Sydney. He was also an intermediary for the purchase of collections for John Gould. For example, the collection of birds made by John Jardine at Somerset passed through his hands⁷⁸. Gould had close ties both with Coxen and his brother Stephen (see Appendix 1). Thus, although he made only one visit to Australia and did most of his work in England his publications did find their way to Queensland, and Gould's *Birds of Australia* was one of the first accessions to the museum library. It was purchased from Coxen's widow in 1876. Coxen himself was a skilled taxidermist and helped lay out birds in the display cabinets for the Philosophical Society's museum⁹⁴. It was thus, to some extent at least, through Coxen that a tradition of ornithological studies and some skill in bird taxidermy existed in Queensland from an early date. However, unlike Diggles, his influence was largely indirect and he did not contribute very much to the body of indigenous scientific literature himself.

Silvester Diggles, like Coxen, was a founding member of the Philosophical Society. He was to become an important figure in Australian ornithology and he made a significant contribution to indigenous studies on birds. He was born in Liverpool, England, in 1817, and sailed for Australia with his family in 1853. In 1854 he settled in Brisbane where he taught art and music, repaired musical instruments and hired out pianos⁷. As well as being a member of the Philosophical Society, he helped found the Brisbane Choral Society and the Brisbane Philharmonic Society¹¹. Diggles was interested in insects as well as birds and often gave papers and exhibited specimens at Philosophical Society meetings. He donated many specimens to the Philosophical Society's museum and was one of its two curators from 1869 to 1877⁹. However, by 1873 most of the Society's collections had been handed over to the government and it seems probable that Diggles may have helped Coxen, the honorary curator and the new custodian, Karl Staiger (see Chapter 3).

Diggles' major work was the *Ornithology of Australia*—an encyclopaedia of Australian birds¹². Diggles himself published two-thirds of this work in 21 parts, which were issued to subscribers. Then he ran out of money⁸. His fellow musicians held a benefit raising £116 which enabled him to reissue the first 21 parts in two volumes as a *Companion to Gould's Handbook*. However, he was not able to publish the last third of his book⁷. The *Ornithology* was not successful financially and as a result he ran into difficulties. Thus, although he had intended to donate his private collections to the Queensland Museum he was not able to do so. The museum bought his original lithographs and part of his bird collection from the taxidermist Eli Waller¹³.

The first vertebrate to be described as a new species from the museum's collections had been purchased for the museum by Coxen¹⁴, apparently from Eli Waller, who had a taxidermy shop in Edward Street, Brisbane⁷. It was a parrot—*Aprosmictus insignissimus*. John Gould in 1875 announced the new bird to the world¹⁵. Gould had first seen a painting of it and excitedly asked for the specimen; and '.....through the kindness of the authorities of the new Zoological Museum at Brisbane, I have received the actual specimen.....'¹⁶. The specimen was collected north of Dalby in 1874. Gould was impressed with this 'splendid parrot' and illustrated it in his *Birds of New Guinea*. Unfortunately, in later years it was discovered that the bird was not a species. The specimen was a hybrid of the King Parrot and the Red-winged Parrot. The specimen was returned to the museum and, as late as 1922 it could be seen on display⁸. Later it disappeared—probably destroyed in the clean up of 1946 (see Chapter 4).

Even last night
and this morning
I sit today
in the street

I have 12 miles to go to get
to alluvial from here, on top of the
main range, and usually in
a line on the summit, the pass
in the open places with the
mountain on top of the range
clearly pass into the range,
all the mountain creeks are
made of a series of small
in line the mountains
is a section rocks and
from the main range
in beautiful country
and covered with dense of
great masses of *Caragana*
herb flesh and other all to
be seen

A page from Broadbent's diary:
'travelling is a terror in this
country..... rocks and precipices thrown
together in beautiful confusion'.



The Golden Bowerbird, *Primodura newtoniana*, is regarded as one of the most beautiful of birds.

A year later Diggles discovered two new birds amongst a collection of birds from Normanton. They had been sent to the museum by Tom Gulliver¹⁷. Gulliver worked for the Telegraph Department and was employed on the erection of the telegraph line to Cape York⁷. Gulliver's collection was never displayed. In the 1876 inventory there is a note that the 50 specimens were at Coxen's residence and they were probably amongst the material returned after his death. Diggles' two new birds, however, were not new. They had been discovered and named elsewhere. This was not to be the last time this happened to Diggles. Of the 14 new birds he described in his lifetime none was really new. He realised that this would always be a possibility without comparative material and the relevant literature⁴. However, that was not the reason on one occasion for he was the victim of a fraud. In 1873 and 1874 he presented papers to the Philosophical Society, bringing to its notice six new species of birds^{4,18}—a notable achievement by any standard. They had been collected by one John T. Cockerell, a master mariner, and Diggles believed them to be from Cape York. These birds—a kite, a rail, two bitterns, and two kingfishers—were indeed new to Australia but they were not new to science. They were actually well known species from the Aru Islands in what is now Indonesia. The fraud was not discovered until after Diggles' death³⁷.

Cockerell did not donate his supposedly Cape York specimens to the Philosophical Society. He sent his bird skins to the natural history dealer Dr Edmund Higgins to be sold in London⁷. The 1394 birds were purchased by Frederick Godman who presented them to the British Museum in 1881. Godman had bought the collection because it supposedly contained the six new species that Diggles had described. However, Diggles had not contributed to science. He had contributed to making Cockerell's collection worth money—for Cockerell. In the paper of 1874, Diggles gave some extraordinary information about the habitats of the Albert Lyrebird, but this was also based on erroneous data given to him by Cockerell.

After its formation in 1876 the first museum board of trustees instigated a policy of purchase and exchange of collections. Because the board's policy determined that the representation of species should be complete, most of the collections obtained by exchange were from foreign countries. Donations accounted for the bulk of the early local material, although some was purchased. Eventually the rate of accession of material outstripped facilities for display.

The limited space afforded by the present temporary building being altogether inadequate for the exhibition of the collections already in the hands of the Trustees, they have been compelled to pack up and store a large portion of these specimens which would not suffer material injury thereby; but notwithstanding this, the Museum is inconveniently crowded with exhibits, especially in the department of Natural History, the perishable nature of the specimens necessitating constant care and inspection: while from the same cause, it has been necessary to restrict additions to such of the rarer objects as might not be easily obtainable at a future date, when there may be more available space for exhibition¹⁹.

Even with a new building and a taxidermist the trustees would not be able to display every specimen in the collections. Specimens had to be tucked away in alternative storage. Many would rarely see the light of day until a century later.

In 1880 the local press carried accusations that a considerable number of specimens had gone astray at the museum²⁰. These accusations were accredited to the same J.T. Cockerell who had misrepresented his Aru

Island collection of birds to Diggles⁷. Apparently the trustees had hired Cockerell to arrange birds in the new building—in the minutes of the board meeting of 19 February 1880 it is noted that Cockerell had been paid £10.6.0 for his work. Haswell, the curator, dismissed the charges as untrue⁸. In retrospect we can see that Haswell was wrong—at least in regard to the bird specimens. Between 1876 when the first inventory was completed, and sometime in the 1880s when de Vis compiled the card index of holdings of birds, a considerable number of birds disappeared. One of the specimens that vanished was a Night Parrot. This bird has always been extremely rare—only a handful of specimens were ever collected. Thus they are easy to trace. In the British Museum (Natural History), acquired in the infamous collection purchased by Frederick Godman, there is a specimen collected by J.T. Cockerell supposedly from Western Australia. It has been suggested that the information for the specimen was probably incorrect and that Cockerell possibly purchased or exchanged it from Frederick Andrews in South Australia⁹. There is an alternative explanation—this could be the missing specimen from the Queensland Museum. There are many coincidences between species and numbers of specimens that are missing from the museum and those that were in the collection of Cockerell purchased by Godman. Cockerell appears to have been covering his tracks by spreading rumours of losses from the museum collections during its move.

The Collectors and de Vis 1882-1911

In 1882 Charles de Vis was appointed curator. He was an experienced museum worker having held the position of curator of Queen's Park Museum, Manchester. Since coming to Australia he had contributed natural history notes to the *Queenslander* under the pseudonym of 'Thickethorn'⁸. de Vis' training, however, had been for the Anglican Church. In his early days, he was the typical clergyman-natural historian and very much a part of the natural theological movement:

If the love and discrimination of the beautiful be humanising – if ever wise Government seek to elevate the mental horizon of the governed by bringing the eye into contact with the conceptions of the painter and sculptor—surely the pencil and chisel of nature working in their happiest moods must stir within the most grovelling mind its latent admiration of the ideal, and wean it from those grosser sensualities which are ultimately pernicious, if not fatal, to society¹¹.

Later he was a supporter of the theory of evolution¹⁴.

de Vis was a prodigious worker and was at the museum for about nine hours a day every day of the week⁸. From 1882 to 1911 he wrote 136 scientific papers and contributed about 120 articles to newspapers. He described 371 new species of extant vertebrates. These were 173 species of fish, seven species of frogs, 70 species of reptiles, 107 species of birds, and 14 species of mammals. With his death in 1915 he left behind several unpublished papers and books. Not all de Vis' new species were so, but about two-thirds are presently regarded as valid.

de Vis worked on collections and specimens that came into the museum—he did not collect himself. In this he was a closet naturalist and not a field worker¹. The field work was done by others. Of the many collectors of zoological material Kendall Broadbent and Sir William MacGregor were of particular importance to the museum during de Vis' time.

In 1882 Broadbent was appointed zoological collector for the museum. During his employment he collected vertebrates at Cardwell and Tully



de Vis found this new species, the spectacular Spiny Skink, *Tropidophorus spinulosus*, amongst a collection from Bellenden Ker. It lives in the moist, dark litter of the rainforest.

(1882), Charleville (1883), Cape York, Murray Island, and the Gulf of Carpentaria (1883-4), Rockhampton and Cardwell (1888), and Bellenden Ker Range and Herberton (1889). de Vis described many new species from the specimens Broadbent collected—the most notable was the Golden Bowerbird *Prionodura newtoniana*. The specimen was collected at the Tully River Scrubs in 1882²⁵. In his description de Vis apologised for the

276 Herberton May 23rd
1886.

Mr L W De Vis.

Curator Queensland Museum.

Sir

I have the honour to report.
8 days fine weather since my last
report. But when fine weather
comes, these scrubs will turn
out good. There is a fine scrub
12 miles up of Herberton called
Eaveline, I shall try that next.
The collection this month, is three
yellow *P. Newtoniana*, a new
Leucornis, and a new mountain
thrush, he is spotted like (*Oreocincla
lunulata*) but twice the size
with a large bill, and a different
call altogether. Will send you
another small box next week
weather permitting. Sent Box of
Spec on the 10th through Collier Co
And Collier receipt, and Telegram

Broadbent to de Vis: 'I have the honour to report..... Mr. E.P. Ramsays collectors are in the district so I am informed.....'

plainness of the species but he did not realise that the specimen was a female or an immature. This specimen was stolen from a show case in 1888²⁶. In 1889 he received a beautiful golden male from Bellenden Ker collected by Archibald Meston. de Vis thought it was a new species and did not at first connect the specimen with the bowerbird he had described earlier. It was announced in the newspaper²⁷ that a brilliant golden bowerbird, new to science, was to be described as *Corymbicola mestoni*. Before de Vis could formally publish the description Broadbent informed de Vis that the bird was just a male of *Prionodura newtoniana*.

As a result of the economic depression of the 1890s the museum could not afford the luxury of a zoological collector after 1893 and the supply of



The ageing and much-loved Kendall Broadbent.

with list of specimens, hope you received it in good dry order.

This country is the highest in the Herberton district. must be nearly 5000 feet, we are here 1500 feet, higher than Herberton. The Wild river heads here.

Received the money thanks you

I have the honour to remain Your
Obedient Servant
Kendall Broadbent.

Mr C P Ramsays Collectors are in the district so I am informed. Birds I think are new. I must send you quick to name



Col. A. J. Fisher, High X B. J. Lamb, King, 1896

No 1.

Bower *Ptilonorhina*
 Found 17th April 1884
 In the Herberton Scrubs.
 Shot one old male
 and 6 Brown ones
 at this bower.

Bower decorated with
 white moss and
 bunches of wild
 grapes.

No 2.

Found this Bower
 on the 24th April.
 Shot 2 old males
 at this bower, and
 two young males.
 Bower decorated with
 white moss.

No 3 3 ft high.
 6 feet long
 by 2 ft 6 in
 All bower mad with small
 sticks.

Broadbent discovered the Golden Bower-bird, *Prionodura newtoniana*, in the Tully River rainforest and, at a later date, he collected more near Herberton and at Bellenden Ker. He sent this drawing of two of the bowers to de Vis, who described the species — although the type cannot be traced in the study skin collection.



Broadbent's writing was on this photograph of a display that Spalding probably mounted. It was exhibited until replaced with the new dioramas in the 1970s.

specimens ceased. William MacGregor the administrator, and later lieutenant-governor, of British New Guinea ensured a supply of foreign vertebrate specimens for de Vis to study. de Vis discovered many novelties amongst the more than 3000 specimens—mostly birds—that MacGregor collected during his stay in New Guinea. The collection was technically the property of the British New Guinea government, later the Papuan New Guinea government, and, like the anthropological collection that MacGregor made, the major part of the it was held in trust for the Papua New Guinea Government (see Chapter 10). It received little attention for nearly 80 years after de Vis' work, for after 1893 the museum suffered from shortages of staff and funds that were not redressed until the early 1960s.

One of the effects of the depression on the museum was to inhibit its ability to exhibit every specimen in its collection. There just were not the taxidermists to keep pace with the inflow of specimens; nor was there the floor space to exhibit them. Those that could not be displayed were stored away, often crammed into the little space available for alternative storage. The museum was, in fact, building up a research collection by default. The concept of research collections separate from display material was then coming into vogue in Europe. It was a reversal of the policy of trying to exhibit every object in the collection¹. This change in philosophy may have resulted, at least in part, from the recognition of the importance of intraspecific variations in natural selection, following the publication of Darwin's *Origin of Species* in 1859. This was the subject that now excited naturalists, and instead of a single specimen now representing a species, they needed a whole range of specimens—the more the better—for their investigations. The hypothesis of natural selection had a profound effect not only on the course of natural science but also on the value of museum collections that had been made up to that time. With the recognition of the fact of intraspecific variation there arose the necessity to identify the actual specimens used to describe the species. These specimens became known as the type specimen or specimens—the name bearers of species. They are the standard for the species against which other specimens can be assessed. They remove the uncertainties that arise through ambiguity or inadequacy in descriptions; and they serve as the point of reference from which old descriptions can be updated, by applying new techniques of investigation and new perspectives to the type. Type specimens are now—and had become by the beginning of the 20th century—the most precious part of a museum's holdings—for they are unique and irreplaceable.

Unfortunately in the Queensland Museum, the habit of displaying every specimen and dispensing with duplicates resulted in collections of unique specimens, many of which were, indeed, types specimens of the many species that de Vis described. However, the original label was often lost and the data about each specimen were often lean, and sometimes entirely lacking. It is fortunate from this point of view that MacGregor steadfastly refused permission for the museum to exchange duplicates of his collection. de Vis adhered faithfully to MacGregor's conditions and thus the museum has one of the largest and most comprehensive collections in the world from Papua New Guinea. The board minutes for 4 May 1894 record that the British Museum requested some of the duplicates from New Guinea. It was refused of course, de Vis tartly commenting that for some years the museum had hoped for a share of the British Museum's annual distribution of duplicates too—apparently it had hoped in vain. Subsequently only two specimens from the MacGregor



A Bird of Paradise, *Paradisea raggiana*, collected by Sir William MacGregor in Papua New Guinea in 1894.

collection were presented to the British Museum by the Queensland Museum³.

The Long Middle Years 1911-1946

de Vis, some time in the 1880s, had started a card catalogue for birds. His system, however, was unwieldy. It was open-ended, for each specimen received a unique label under the name of the species with a letter of the alphabet. The difficulties become apparent if the name of the species is changed, or if some specimen is found to be misidentified. In 1911 the new director, Ronald Hamlyn-Harris, instigated a modern system of data storage and retrieval for research collections. Each specimen was, from that time, to receive a unique number as a label. All the information known about the specimen was entered in a register under that number. The task of registering the backlog of unnumbered museum specimens, however, was beyond the means of Hamlyn-Harris' small staff. In the vertebrates, most of this registration was not done until the 1970s and 1980s.

Between 1911 and 1946 not many specimens were added to the museum's collections and there was little research conducted on vertebrates. The exceptions were some papers on reptiles by Heber Longman, and more importantly, the work on fish by James Ogilby. Ogilby was hired for a short period by the museum in 1901, but was dismissed for his 'extreme and indiscriminating affinity for alcohol'²⁸. From 1905 to 1912, he was honorary curator for the Amateur Fishermen's Association of Queensland. In 1912 he was re-employed by the museum, and in 1913 the Amateur Fishermen's Association handed over all their type material of vertebrates to the museum. While in the museum between 1912 and 1920 Ogilby published 22 papers and described several new species of fish. He died in 1925²⁹.

The type specimen of a new genus and species of turtle, *Devisia mythodes*, that Ogilby named in honour of Charles de Vis in 1907³⁰, illustrates the problems with labelling of some of the specimens in the museum. The type specimen appeared to have been collected by Sir William MacGregor in New Guinea. In 1947, the specimen was examined and found to be a specimen of *Chelydra serpentina*, the American Snapping Turtle³¹. This species does not occur in New Guinea. Someone slipped up somewhere.



The Taipán, *Oxyuranus scutellatus* (Peters 1867), is Australia's largest venomous snake and undoubtedly its most dangerous species. It occurs in northern Western Australia and the Northern Territory, on Cape York Peninsula, and in coastal Queensland—east of the main range.

During the 1920s and 1930s scientific work was at a low ebb, not only in Queensland but also in the rest of Australia. In Queensland Director Longman tried to compensate for this by helping individuals and institutions from other countries to pursue investigations in the state (see Chapter 3). However, in other parts of Australia some serious opposition to the continuing depredations being made on the Australian fauna by foreign institutions had developed. It was not only the old anxiety connected with the removal of type specimens that prompted this opposition, it was also a concern that local scientists, without resources to collect widely, could not compete with their overseas counterparts. Ellis Troughton, ebullient curator of mammals in the Australian Museum was in the vanguard of this opposition³². He was especially sensitive about the large collections of mammals being shipped to New York by Richard Archbold, the wealthy benefactor who financed and led a whole series of collecting expeditions to Papua New Guinea and northern Queensland through the 1930s and 1940s for the American Museum of Natural History³³. According to Troughton, the material collected was being used by the American museum's mammalogist, G.H. Tate, to settle 'our mammal question'³⁴. Troughton was opposed to 'any idea that Archbold's and others' olivaginous dollars be given full play in New Guinea or on the mainland'³⁴ and he claimed to have initiated, with his institution's support, the action —

which led to the gazettal of restrictions on all foreign collectors in the (Australian) Territories — and had written to the Minister for Customs asking that the regulation re return of types and examples of rarities to the appropriate State or Commonwealth Museum be included in (collecting) permits³⁴.

At about this time a young German zoologist, Dr Gabriele Neuhäuser, arrived in Australia. Being Jewish, she could not work in Germany and for two years had been in Asia Minor earning her living as a collector of rodents and other small mammals. She brought with her a letter of introduction from Gregory Mathews in England^{7, 6}, and she had made contact with Tate, who wrote to Troughton asking him to help her to obtain permits to collect in Australia for Archbold³⁴. Troughton made his own personal — and chauvinistic — view very clear to Longman:

one naturally found it difficult to be too discouraging to a woman's plans, but I certainly had no intention of furthering Tate's egotistical scheme³⁴.

However, although Troughton believed that the federal government would impose restrictions in permits issued for collecting in the Northern Territory, he could not be so sure about what would happen in Queensland:

as Dr Neuhäuser will be disposing of the collections of mammals to Archbold, it may be necessary for the State authorities to make some provision which will be binding on the institutions eventually receiving the collections, and I do hope you will be able to devise something in Queensland where she first proposes to collect³⁴.

Troughton went on to suggest that she be permitted to take up to 12 pairs of each mammalian species — 10 pairs for Archbold and a pair for the Queensland Museum. He may have been hoping that the twelfth pair would be given to the Australian Museum but appears to have thought it indelicate to actually suggest this.

Longman provided all the assistance to Neuhäuser that Troughton had denied her. The permit that he obtained for her imposed restrictions



Acrobates pygmaeus, from Deception Bay, on a *Grevillia banksii*.



The museum truck aboard MV *Goori* going to Fraser Island in the 1960s.

on numbers of specimens only in respect of protected species—koalas, platypus and tree kangaroos³⁶. It did not include any provision for representative specimens to be retained by the museum, nor indeed had Longman recommended that it should—for he was not expecting Neuhäuser to perform as an honorary collector for the museum. He did arrange to purchase specimens from her, and others were exchanged for various services such as repacking specimens and making crates to despatch her collections overseas³⁷. Longman was concerned about the implications of type material being removed from Australia. To that extent, at least, he agreed with Troughton. However, his recommendation that some provision requiring return of types be included in the permit was ignored³⁸, so he wrote to Tate at the American Museum of Natural History:

You will be interested to hear that Dr Gabriele Neuhäuser has left for western Queensland en route for northern Queensland. I was able to help her with permits etc., on the definite understanding that paratypical specimens of any new species of mammals sent abroad would be returned to the Queensland Museum. Doubtless you will honour this undertaking fully in the circumstances³⁹.

Tate replied that the suggestion was 'eminently reasonable'⁴⁰.

Thus, all was settled amicably—although Troughton probably was not satisfied and may have felt that Longman was being altogether too cooperative. Longman wrote, gently chiding him:

You will be interested to hear that Dr Gabriele Neuhäuser left last Thursday with Mr J. Edgar Young, one of our honorary collectors. As she is unfamiliar with local conditions this arrangement is advisable. We hope to secure a representative series of specimens from her collecting, but I am not sure whether Mr Young will accompany her for more than a few months. In any case, paratypical specimens are to be returned to the Queensland Museum, should she obtain new mammals.

Whilst I am naturally anxious to see all possible work on our fauna carried out by local institutions and specialists, I do not see that we are justified in attempting to make Australia a strictly reserved area in which overseas collectors should be deterred from working.

As a matter of fact we have received many specimens from the British Museum from the series collected by Wilkins and by Sherrin, and we also had some of Raven's specimens.

And when I write to my friend Troughton in the Australian Museum, I cannot get a single specimen of *Rattus culmorum* although I advised, in the first place, that the material should be sent to him, as a specialist!

I hope that you will be able to arrange for a series of exchanges with Tate. Unfortunately we have so little to offer that we cannot expect Papuan and Pacific species, but I do hope that you will obtain a representative series⁴¹.

Despite all the assistance she was getting, Neuhäuser found it difficult. She was pleased and relieved, when Professor Neumann at the Museum für Naturkunde, in Berlin, wanted her to send birds—

because the mammals here could not cover my expenses⁴².

Even so, it was a blow to her when, early in 1938, the government imposed a royalty on restricted species—from five shillings per possum skin up to 10 shillings for a kookaburra⁴³.

Both Neuhäuser and the museums she was supplying benefited from Longman's assistance in the packing and despatching of her specimens, and her correspondence with Longman probably helped to dispel some of



The museum acquired its first vehicle — a 14 h.p. Commer truck — in 1950. It was used principally for field work. It is photographed here in 1954 at a campsite near Chinchilla, on the Condamine River.



By the 1960s the museum's collecting expeditions were ranging widely through the state. *Left*: the museum truck near Johansens Caves, 16 miles N of Rockhampton; *lower left*: at the Annan River, 20 miles south of Cooktown.



the sense of isolation she must have experienced. For the Queensland Museum it was almost as if it had a collector in the field again.

Longman to Neuhäuser:

I think that the *Pseudochirus* obtained by you at Mt. Spurgeon is probably the original *P. peregrinus* Boddaert, collected by Banks. We had another skin received last year. This is a most interesting discovery.I am hoping that you will be able to get two or three specimens of *Dendrolagus bennettianus* for us⁴⁴.

Neuhäuser replied —

I sent you from Spurgeon one specimen of each, *P. peregrinus*, and *P. laniginosus*. *P. laniginosus* is smaller, has much longer ears, and lives in the open forest, together with *Trichosurus*. (*P.*) *peregrinus* lives in the thick scrub.I got one specimen of *P. laniginosus* from here (Coen), much darker and not so much white on the tail, while the Spurgeon specimens did not vary at all. There seems to be some confusion about the two species, as *P. laniginosus* is only mentioned in the books for south Queensland, and the *P. peregrinus* description could as well mean the 1 from here.I do not know, if I ever have a chance, of getting *Dendrolagus bennettianus*. The tree-kangaroos did certainly not fly from New Guinea to the Daintree River, so it is quite likely, that they are in Cape York⁴⁵.

Longman to Neuhäuser:

I hope that you have got additional specimens of the *Ps. laniginosus* and *peregrinus* type. A copy of our Royal Society Abstract for the last meeting is enclosed, and you will see that I exhibited these specimens.We are still hoping for specimens of *Den. bennettianus*, and it would be splendid to get some from further north than the Bloomfield⁴⁶.

Neuhäuser replied —

Did you know, that there are 2 different kinds of Cuscus in Cape York? the one I sent you, with naked inside of ears is not *maculatus*, which is the more common form here. What is the Latin name for both kinds? I think, the *Pseudomys* must be quite interesting too, and I would like to know her name, if you can tell me⁴⁷.



Ivor Filmer (left), general assistant in the museum, helps McAnna unpack a consignment of skins sent by Vernon from Cape York in 1948.

Toward the end of 1938 Gabriele Neuhäuser's brave and lonely travels in northern Queensland came to an end when she married, becoming Gabriele Scott. She now lives in Queensland and is an honorary associate of the museum.

Gabriele Neuhäuser collected hundreds of birds for the Museum für Naturkunde, and mammals for the American Museum of Natural History, and the Queensland Museum got a share of all she collected. Her specimens were the only significant additions to the museum's vertebrate collections between 1893 and 1946. From the specimens of birds she collected, Gregory Mathews and Professor Neumann described new forms and new subspecies^{7,34-35}.

The Modern Era 1946-1985

When George Mack became director in 1946 the institution had been through more than half a century of neglect. There had been one short period of three or four years between 1911 and 1915 when there had been a reasonable staff complement. However, for most of the 53 years from 1893 there had been a director and usually two preparators or collectors but there had never been a professional scientific staff member responsible for vertebrates (see Chapter 3). It was not very surprising, then, that many old mounts from the last century were in bad condition from insect attack, were covered in layers of dust and had to be destroyed (see Chapter 4). Although there was no information attached to them, many were irreplaceable type specimens of birds and mammals. While it may have been possible to identify some of the types by idiosyncratic features and measurements given in the original description, the specimens were damaged beyond any hope of retrieval. Mack instigated the policy of registering all display specimens so the unfortunate circumstance would not happen again.

Mack then set about the collection of material—both for display, and to build up the research collection and restore some of the information that had been lost. This was an unprecedented period of research and collection. In 1948 Mack sent the young taxidermist, Donald Vernon, to join the Archbold Expedition in Cape York³³. During this four months Vernon added many valuable specimens and Mack reported on them⁵⁰. From 1950 the size of the vertebrate collections increased several fold. Not since the time of Broadbent had the museum collected its own specimens on such a scale. The single contributing factor to the change was motor vehicles. In 1950 the museum obtained its first, a truck, and in the 1950s and 1960s the preparators travelled around the state attempting to fill in the gaps in the research collections (see Chapter 4). On one occasion, just before Christmas 1947, the collecting was done closer to home. Vernon, assisted by Filmer, went collecting from the museum roof. They got the museum's first specimens of the Spotted Dove *Streptopelia chinensis*. A couple of days later, Vernon 'potted' a starling and a sparrow through the workshop window⁵¹.

The collections stored in spirit were overhauled from 1964 to 1966 when Woods had become director. These were stored in large ceramic urns and concrete tubs attached to the concrete floor. Many specimens were found to be dehydrated or macerated and were destroyed. Unfortunately, here too many types were lost, some inadvertently owing to loss of labels.

With the appointment in 1967 of the first curator in vertebrates, Jeanette Covacevich, many of the old problems of the unregistered backlog and unidentified types were solved. She began a concerted effort to



A new bird is a very rare event. The Fantail Honeyeater was discovered in the mountain rainforest near Mackay and described by Longmore and Boles in 1983.



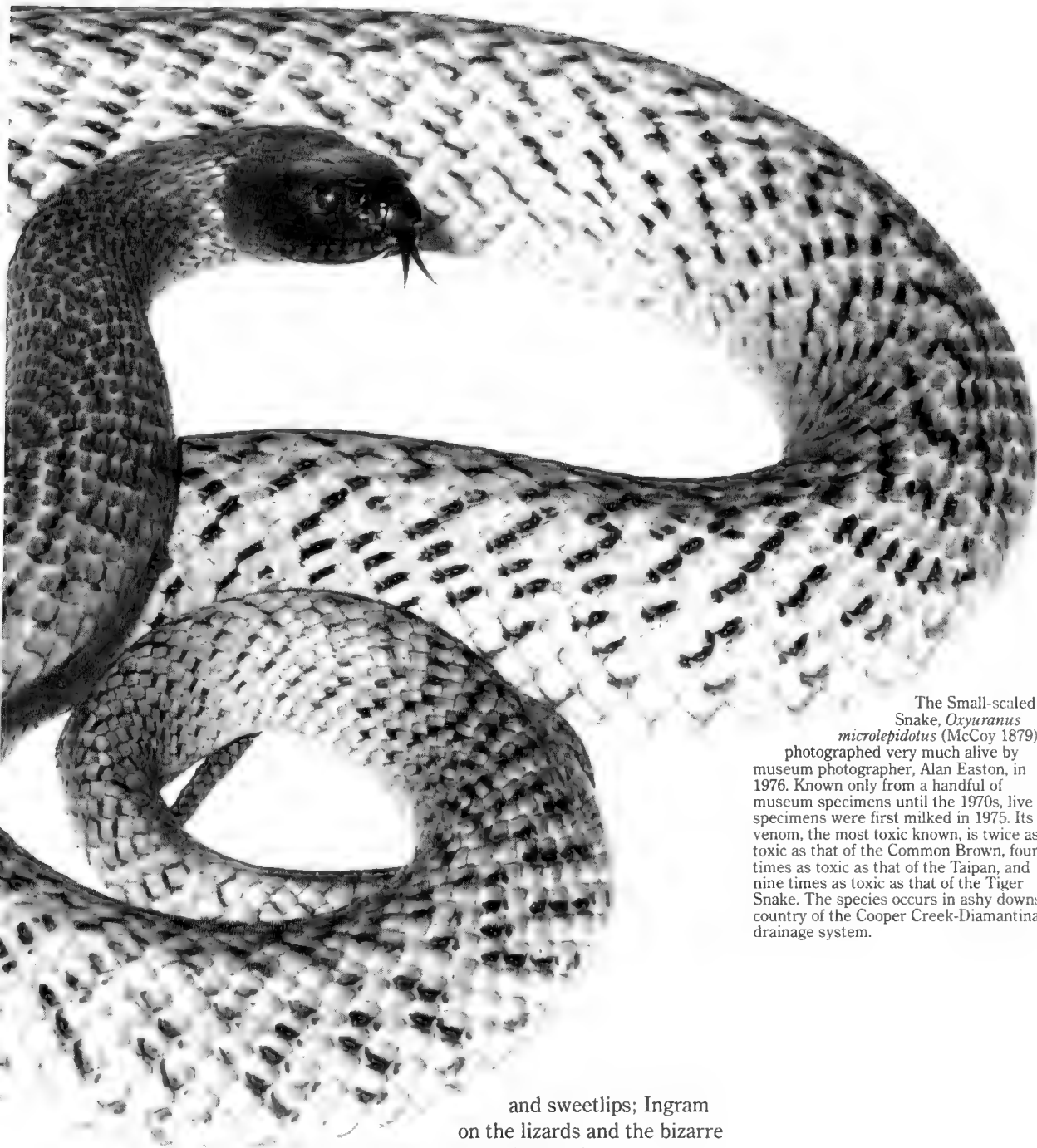
register all the reptiles and amphibia and to research and identify all the types of these groups. The results of her work on the types were published in 1972 and 1981⁵²⁻³. In 1969 Sue Hoare was appointed curator of fishes and she also began to identify the types. After she left the museum in 1970 the work was continued by her successor, Roland McKay. The task was completed in 1973. Vernon became ornithologist in 1970 and he began the registration of the backlog of birds—and in 1984, with the help of volunteers and the new assistant in ornithology, Wayne Longmore, the task was completed by G. Ingram who also completed the work on the types of birds held by the museum.

By 1983 the registers for the vertebrate sections contained over 100,000 records. The size of the data base made it difficult to operate by hand. In that year the decision was made to computerize the records. With the aid of grants from the Australian Biological Resources Survey in Canberra, data entry began in 1984. By mid-1985 all the mammalian records and three-quarters of the reptilian and amphibian records had been entered.

From 1970, museum curators and their assistants systematically surveyed and collected from rivers and from the waters of the continental shelf as well as from desert, heath and montane rainforest habitats throughout the state, and have contributed substantially to knowledge of the biology and distribution of the vertebrates. Among the significant work has been that of McKay on the commercially important whittings, grunters



Alan Easton, museum photographer
1965-84.



The Small-scaled Snake, *Oxyuranus microlepidotus* (McCoy 1879), photographed very much alive by museum photographer, Alan Easton, in 1976. Known only from a handful of museum specimens until the 1970s, live specimens were first milked in 1975. Its venom, the most toxic known, is twice as toxic as that of the Common Brown, four times as toxic as that of the Taipan, and nine times as toxic as that of the Tiger Snake. The species occurs in ashy downs country of the Cooper Creek-Diamantina drainage system.

and sweetlips; Ingram
on the lizards and the bizarre
and possibly extinct

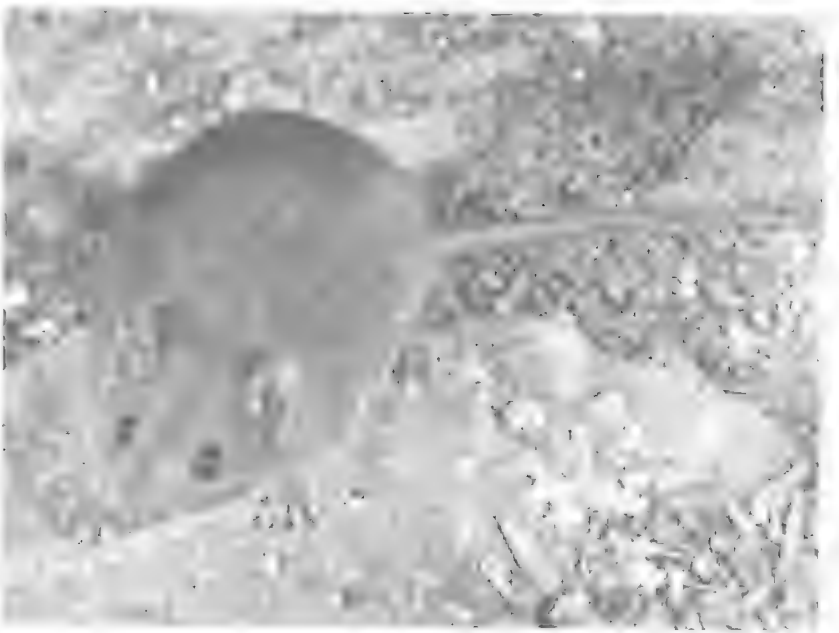
gastric-brooding frog, *Rheobatrachus silus*; Czechura on the unusual skink *Nannoscincus graciloides*; Covacevich on the highly toxic Small-scaled Snake *Oxyuranus microlepidotus*; Ingram on the Plumed Frogmouth, *Podargus ocellatus*; Longmore on the new species, the Eungella Honeyeater; and Van Dyck and Archer on small carnivorous marsupials⁵⁴.

The majority of the larger and more conspicuous of the vertebrates of the state now have been described and their habitats recorded. For this reason, it is probable that, in the future, some of the museum resources and staff previously dedicated to studies of vertebrates will be diverted to

tackle those groups of organisms that are less known and more in need of documentation. Despite this, the vertebrate collections will continue to be an irreplaceable archive. With the application of new techniques for registration and preservation, new approaches to display and vastly improved storage facilities and retrieval systems, the use of the archive will be enhanced. Further, bird and mammal reference collections assume special importance in the 1980s, for it is becoming extremely difficult to augment them. Natural areas are diminishing and there are stringent regulations under fauna protection legislation that, for conservation reasons, preclude collecting. Nevertheless, with the upsurge of interest in the environment, interest in the vertebrates, which flourished in the late 19th century, has never been higher than it is today.



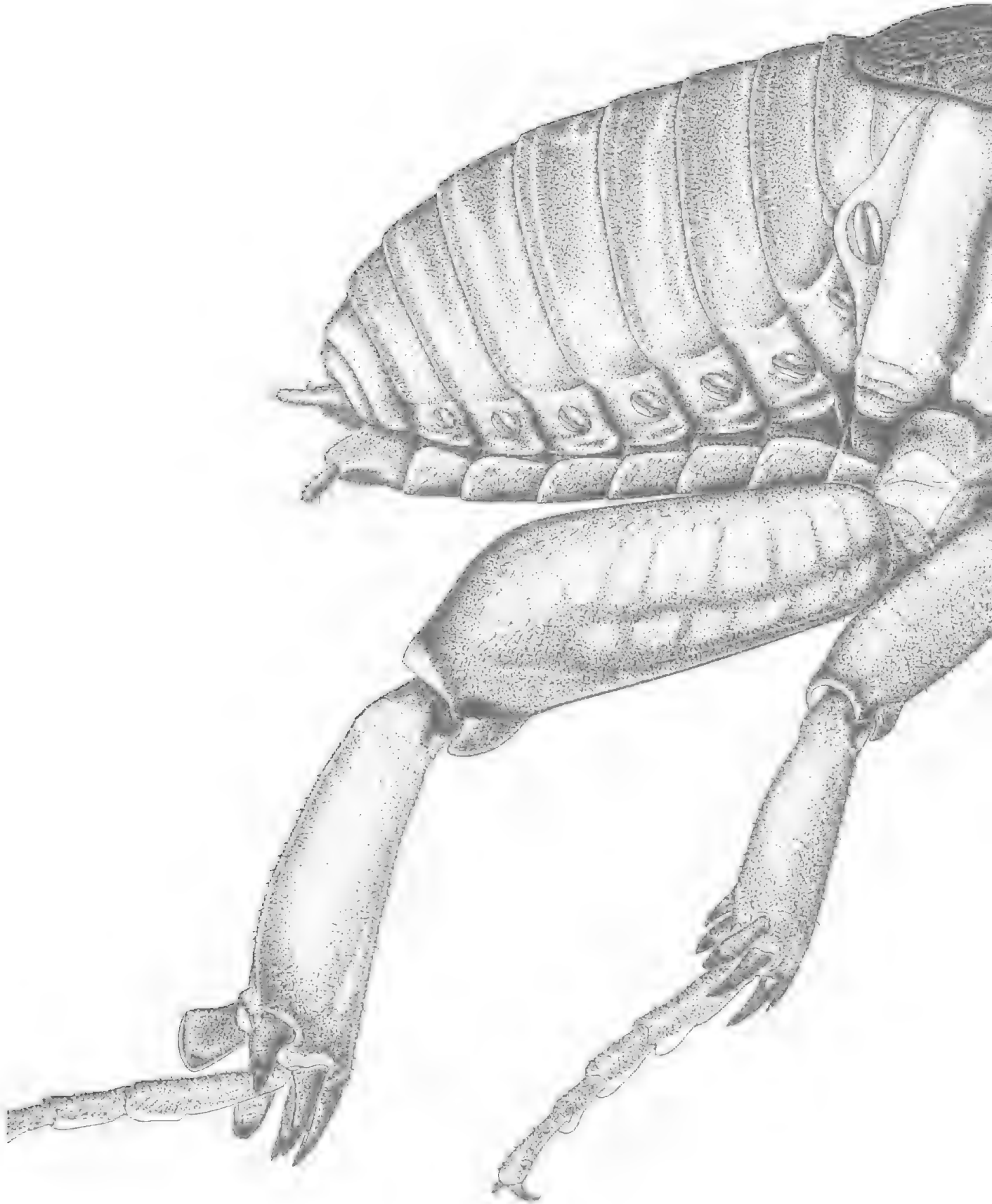
The Black Mountain Skink, *Carlia scirtetis*, is an inhabitant of the bare boulder mountains near Cooktown. It was described and named by Ingram and Covacevich in 1980.



Antechinus leo occurs only in the vineforests of Iron Range-McIlwraith Range on Cape York Peninsula. It was collected during revisionary work on small carnivorous marsupials and was described in 1980.

The Platypus Frog, *Rheobatrachus silus*, created a sensation in the scientific world. The female carries her young in her stomach. The young have a secretion that protects them from their mother's digestive juices.







9

SINGLE
CELLS TO
SPINY
SHELLS

Invertebrate
Zoology



Two environments on earth are noted for the diversity and spectacular form of their invertebrates—coral reefs and rainforests. Queensland has the lion's share of Australia's rainforests and the largest coral reef system in the world, as well as a wealth of other habitats. The museum's role in investigating and documenting these rich invertebrate faunas is well recognised in 1986—but it has not always been so. The development of a tradition of invertebrate studies has been a slow and sometimes painful process—a struggle to build collections of significance when interstate and overseas museums had collected widely in Queensland and its waters before the museum was on its feet; and a struggle to bring invertebrate studies out from the shadow of vertebrate palaeontology with its public appeal and with the institution's reputation for such studies already firmly established.

The utilitarian role that geological collections could fill in allowing prospectors and miners to identify their ore samples was a powerful force in the establishment of the museum (see Chapters 3, 6). In contrast the biological collections began to accumulate through the more idealistic enterprises of the 'gentleman collectors' of the Queensland Philosophical Society. To the Victorian gentleman of that inclination his cabinet of specimens had several social functions—a conversation piece, an aesthetic display, a medium of exchange and communication with his correspondents elsewhere, a hobby that could dispel the boredom of long, slow bush travel, and for some, a means of serious scientific endeavour. Certain groups of animals found favour in the private collections of this era. Criteria for acceptability included intrinsic appeal of colour and form, ease of preservation and small size. Shells and insects fit these criteria admirably so it is no surprise that these are most frequently mentioned in references to the earliest informal collections brought together by the Philosophical Society. It was these collections that were to come under the official control of the honorary curator, Charles Coxen, in 1871 and ultimately the first board of trustees in 1876.



Silvester Diggles, honorary curator of the Queensland Philosophical Society 1869–71.

There is little to indicate the size and nature of the invertebrate holdings when Karl Staiger became custodian in 1873. He reported to the Hon. W.H. Walsh on 2 June 1873 that the collection contained 'a small collection of insects and shells none of which I found named'¹. However, only three years later, at its second meeting, the newly appointed board of trustees, having recognized the urgency of assessing the collections under its charge, set about the preparation of an inventory which duly listed about 4,000 insects, 5,000 molluscs, a modest number of crustaceans, and a few annelids, corals and sponges.

The preponderance of insects and molluscs probably reflects the interests of the two most active contributors to the embryonic museum—Charles Coxen and Silvester Diggles. Although both were primarily ornithologists, Diggles was also interested in entomology, and Coxen, with his wife Elizabeth, had shell collections that later came to the museum.

Because they are conspicuous in Queensland, and because they affected agricultural endeavours of the colonists, insects, as well as forming attractive displays in show cases, continued as the invertebrate group that was given most attention in the museum from the time of its foundation until only relatively recently. Molluscs came a very poor second. Other invertebrate groups were to wait a long time before they were studied and many remain almost unknown to this day.

Previous page: the Cooloola Monster, *Cooloola propator* Rentz, 1980, the type species of the Cooloolidae, a new family of the Orthoptera, found in 1975 by a museum party (drawing by S.P. Kim, from Rentz, 1980⁸⁸).

Insects

In addition to Silvester Diggles, the most conspicuous amongst those who have contributed to and worked on the insect collections in the Queensland Museum up to 1940 were W.H. Miskin, Henry Tryon, C.J. Wild, Henry Hacker, A.A. Girault and A.J. Turner.

Silvester Diggles was a musician and artist who settled in Brisbane in 1854. He is regarded as Queensland's pioneer entomologist², exhibiting often at the Philosophical Society's meetings on insect topics, sending many specimens to taxonomists around the world for description, and maintaining meticulous sketchbooks of the insect life histories he worked out. The butterfly *Hypochrysops digglesii* and the rare chafer beetle *Tapeinoschema digglesii* are among the species that bear his name.

In 1863 the Philosophical Society bought 'one of the largest and best private collections of insects in the colonies' for £18 from a Mr Salting of Sydney³. This comprised two cabinets and they were rearranged by Diggles who, in 1871, claimed that 'the curatorship in great part devolves on me'². He was then one of the two curators of the society's collections, but at this stage these were being handed over to the government museum of which Coxen was honorary curator (see Chapter 3). He regularly supplemented the society's museum collection with specimens from his own. The latter comprised a cabinet of Australian Lepidoptera and Coleoptera and some foreign beetles. His collection was potentially of great long term value because it contained duplicates of many of the species sent to be described elsewhere. In 1877 the board of trustees declined his offer to sell it to the museum for £250 for the Australian cabinet and £1019.4 for the foreign material⁴. After his death in 1880 his widow offered it to the museum for £100, the collection being then in Melbourne after having been recently exhibited in Sydney and Melbourne. Trustee Miskin had misgivings about its condition after such travels and the board delayed a decision on the offer⁵. Meanwhile, it was sold elsewhere—a great loss to Queensland.

Miskin's association with the museum began when he was appointed to the first board of trustees in 1876. Coxen and Miskin, the only biologically inclined trustees, had been appointed to help Chairman A.C. Gregory prepare the inventory of the collection. As Coxen had died soon after, the weight of this task probably fell on Miskin. It was one of his first tasks and he probably relished it, for he was a consistent attender at board meetings and clearly the security and care of the collections were of great concern to him (see Chapter 14).

Trustee Miskin was an amateur lepidopterist, publishing a small series of fine papers between 1874 and 1892⁶. He described butterflies collected by museum collector C.J. Wild in the Cairns area but for some reason always misspelt Wild's name, a fact to which the uncommon oakblue butterfly, *Arhopala wildei*, is permanent testament. He also has the distinction of having described, in 1876, the moth with the largest wing area in the world, the north Queensland *Coscinocera hercules*—its types reside in the museum⁷. Miskin's most important work was his *Synonymical Catalogue of the Australian butterflies* which occupied pride of place as the first paper (93 pp.) in the first volume of the *Annals of the Queensland Museum* in 1891. Its preface made a challenge that sounded as though a particular person was involved:

I declare myself an uncompromising opponent of the species makers.....still worse it is, when persons entirely ignorant of the literature of the subject, from a mere desire to have their names



Rainforest—one of the most diverse ecosystems on earth—in southeast Queensland, Mt. Cordesux (*above*) and Mt. Tamborine (*below*).

appear in type, recklessly publish descriptions of allegedly new species⁸.

That person may have been T.P. Lucas, a Brisbane physician, who was concurrently describing butterflies, and who had applied for a position as entomologist at the museum in 1888⁹. In 1889 Miskin had argued against Lucas' access to the museum collection because of implications that he was a dealer¹⁰. Soon after, in April 1890, a controversy erupted within the board when Lucas made unspecified allegations against Miskin in a letter to the minister, and demanded an enquiry into the museum's management¹¹. The board rejected the idea of holding an enquiry, but Miskin complained that its response to the allegations was 'too apologetic and with too much explanatory detail'¹². Miskin appears to have rejected entomology soon after. Though only 50 when he resigned from the board and left Brisbane in 1892, his wife sold his entire collection and library (3 large cabinets, 4 small cabinets, 22 store boxes, 59 wall cases, 200 books) to the museum for £226, and Miskin never wrote on insects again¹³. With the taxonomic hindsight of almost a century it is worth noting



Coral reefs abound along the Queensland coast. *Above*: Heron Island and its reef, Great Barrier Reef; *below*: corals at Heron Island (photograph by courtesy D R. Robertson)

that more of Miskin's new butterfly species have survived synonymy than have those of T.P. Lucas.

After the short terms of W.A. Haswell and F.M. Bailey as curator and acting curator, respectively, during the period 1879–1882, the eventual appointment, in 1882, of C.W. de Vis—as curator—began a period of development for the museum. Though the collections were already growing through regular donations following public appeals by de Vis, the first staff priority in the zoological area was for a field collector. Kendall Broadbent, a bushman-naturalist of remarkable energy and independence, first came to the board's notice through casual purchase of specimens from him in 1880 (see Chapter 3). After a temporary appointment at £3 per week, from May 1882 to March 1883, he was made full time in May 1883¹⁴. Though Broadbent's talents were principally in the vertebrate field, his collections always included substantial invertebrate components, particularly molluscs. His trip to Cardwell in 1882 yielded 'Lepidoptera, Mollusca and other marine invertebrates'¹⁵; from Cape York in 1884 he collected '951 vertebrates and 1324 invertebrates'¹⁶. He joined the colourful former parliamentarian, Archibald Meston, on his Bellenden Ker expedition in 1889, and gained a small batch of insects reported on by Henry Tryon and a more significant mollusc collection written up by Charles Hedley¹⁷.

Broadbent was a field man and de Vis was a vertebrate specialist— a clear need existed for someone who could take scientific charge of the invertebrate collection. The fulfilment of that need in 1883 saw the appointment of a man whose actions were to occupy more board discussion than any other item for the next ten years, who was to go on to a distinguished career in another government department, and whom a posthumous biographer was to describe as 'an erudite and versatile scientist with a brilliant brain, a sarcastic tongue and a cantankerous nature'¹⁸. That man was Henry Tryon.

Born in England in 1856, Tryon was lured from his studies of medicine by the call of natural history and adventure. After exploits in Sweden retracing the footsteps of Linnaeus, he travelled to New Zealand ostensibly to manage a grazing property for his father, but he explored widely, making plant collections as he travelled. He came to Brisbane in 1882 with dreams of a future in the then embryonic sugar industry in north Queensland¹⁹. He first appears in the records of the museum, in September 1882, as the donor of '15 crabs, 7 fish, 8 shells, 3 starfish and 1 urchin from Stradbroke Island'²⁰. Tryon soon used the museum as headquarters for his natural history pursuits and began proselytizing and collecting for the museum, as the following extracts from a letter from him to de Vis, written from Mackay in December 1882, reveal:

I spent a few days at Inskip Point.....despatched from there a box containing some bird skins, a few shells and plants. I called on the Telegraphist, he had some nice sea snakes in pickle for you, to which I added a few starfishes.....I told him to collect crabs which are very plentiful.....those among the mangrove swamps being particularly interesting. I made one excursion to the back of Tifi Can Bay with a party of blackfellows, but as I was walking from morning to night for 3 days did not find time to collect anything.....in Rockhampton called at the School of Arts.....tried to impress (the librarian) with the immediate necessity of sending you some specimens of snakes which he had in possession in accordance with your admirable proposal re formation of Local Museum.

From Rockhampton I started on foot for Port Mackay which I reached in ten days after very arduous walking. Pedestrians are



Henry Tryon, clerical assistant 1883–4, assistant curator 1885–93, government entomologist Department of Agriculture from 1894.

regarded as vagrants and despicable objects here, hence the cruel inhospitality which I often experienced.....hence my motive for hurrying along.....I walked from Broad Sound in stages of 35, 20, 20 and 50 (43) miles, and so you may conclude that I collected nothing.

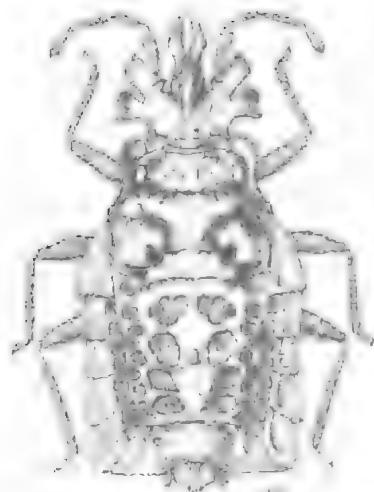
I have been offered the combined duties of "kanaka" driver and accountant.....those occupations appear an end in themselves and one may very well grow old performing them. I feel very much inclined to go to Sydney, where there are plenty of books and society.

I left Mr Brown's spirit drum in Rockhampton to be forwarded to me here, and will fill it as opportunity offers. If you have time and any special desiderata I trust you will write to me quickly. You know I take great interest in any new discoveries²¹.

He was soon back in Brisbane and his volunteer work for the museum attracted special mention in the annual report for 1882. It continued on many fronts in 1883. In January he volunteered to help Broadbent with explorations of the rich fossil marsupial deposits on the Darling Downs. After the museum received an exchange of 300 species of Coleoptera from William Macleay in Sydney in February, the board noted, in May, that 'the collection of Australian beetles has been receiving attention. In the course of its arrangement about 500 species have been incorporated'—undoubtedly Tryon's work²². His enterprise and enthusiasm led to the recommendation, in September 1883, that he be employed for three months as clerical assistant at £3 per week. This was at about the time when Mrs Coxen ceased responsibility for the shell collections and Tryon assumed at least *de facto* charge of all the invertebrate collections. By the beginning of 1884 he was part of the permanent staff; nine months later he requested and gained a substantial salary increase; four months after, he gained approval to change his title to assistant curator.

At this time Tryon was the only entomologist in the Queensland government service. The period also coincided with the introduction and spread of many new agricultural crops—with the inevitable problem of insect pests. Though a museum entomologist, the government turned to Tryon as their only source of expert advice. He was commissioned to investigate fruit pests at Toowoomba, then to serve on the Rabbit Commission, then to work on pineapple pests, then sugar cane. These duties Tryon accepted with gusto from the Agriculture Department and produced, among other things, a landmark 238 page *Report on Insects and Fungal Pests No 1* in 1889²³. But this was attributed to the Agriculture Department, with no mention of his employer, the Queensland Museum. Relations between Tryon and his board quickly soured. The board resented Tryon being absent for long periods without their knowledge and undertaking work for which they received neither funds nor credit.

de Vis was anxious that the insect collections be developed. In 1887 the board endorsed his recommendation that an entomologist be appointed, but funding was not possible. In December 1888 the board resolved that Tryon 'henceforth work solely on the Insecta'. This Tryon agreed to do but threatened to resign if forced to accept the title 'entomologist' preferring to remain 'assistant curator'²⁴. In fact, Tryon had lost a commitment to museum work and, after several years of increasingly strained relations, the board took the opportunity, presented by the forced staff cuts of the 1893 depression, to dismiss him (see Chapter 3). The next year Tryon was made government entomologist in the Agriculture Department, a position he held with distinction



A bizarre new species of flat-bug (Aradidae) from the Eungella National Park. These curious insects are under study at the museum (drawing by Sybil Monteith).

for 31 years, as well as taking a leading role in Brisbane's scientific community.

In July 1899, just before the museum's shift to the Exhibition building several miles away, de Vis suggested to the board that the museum's insect collection be transferred to the Agriculture Department. At that time Henry Tryon would have been well consolidated as government entomologist in the Agriculture Department—just next door in William Street—and making regular use of the museum's insect reference collection. Clearly de Vis saw the proposal as beneficial to both the museum and the Agriculture Department, given the pressures then operating on both. However it 'did not meet with the approval of the board'²⁶ and the Agriculture Department went on to develop a major insect collection of its own.

Charles de Vis offered to allocate his own Sunday allowance to support an insect collector in 1889 and this provoked the board to a decision that sufficient contingency funds were available for this purpose²⁶. Charles James Wild was immediately appointed temporarily at 30 shillings per week (see Chapter 3). This set C.J. Wild, then aged 30, at the start of a 22 year association with the museum during which he held official titles which ran a sequence from insect collector to messenger, to entomologist, to acting director and back finally to insect collector. If a career could be said to have 'ups' and 'downs' then Wild's had a preponderance of them.

Wild appears to have been a man of modest ambition and ability of whom too much was asked. Though appointed as an insect collector his interests clearly lay with shells. He first appears in the records of the museum in March 1888 as a resident of Burpengary donating a collection of 'land and marine shells'²⁷. A month after his first appointment it was reported that 'the newly-appointed insect collector displays most commendable zeal'²⁸, the following month he made 'satisfactory progress'²⁹, but a month later Nerang was 'not rich'³⁰. The sea beckoned—by August the conchological department was able to report 'having received a large and varied collection of shells' from Wild at Burleigh Heads³¹. Wild was active in the short-lived Natural History Society of Queensland, founded by Henry Tryon in 1892, but his exhibits were principally shells and plants³².

In July 1890 Wild was sent to Cairns to collect insects, especially along the railway being then built to Herberton. He was to remain in the area for almost 16 months, but the museum collection today bears little evidence of specimens from that enterprise. After losing his collecting gear he was 'instructed to travel less continuously but as a rule remain in each locality for not less than 3 months'³³. A little later it was thought 'advisable that the insect collector should be transferred to some other fields of labour' and he was recalled to Brisbane³⁴.

In December 1892 Wild was placed on the permanent staff after both de Vis and trustee Joseph Bancroft spoke in his favour. He appears to have had an amiable relationship with both de Vis and Tryon, perhaps a difficult achievement, and was one of the two staff kept when the drastic depression retrenchments of 1893 occurred (see Chapter 3). At this time he was kept on as messenger—however, in 1894 he was 'in charge of the insect department' when a theft was reported of several American butterflies from the Miskin collection³⁵. In 1899 he was sent to Cunnamulla to begin a mosquito collection which was to be sent to the British Museum³⁶.

Wild's position—as messenger—had become temporary in 1895, but



Cooftoola propator (natural size) the type species of the new family found in 1975 — the first new family of its order described since 1914. A museum party found it in deep sand in the Cooftoola region of south-eastern Queensland. Its subterranean habitat in deep sand, probably concealed it from earlier collectors, and resulted in remarkable adaptations that distinguish it from other families of the Orthoptera (drawing by S.P. Kim, from Rentz, 1980³⁸).

when he was returned to the permanent staff, in May 1901, he successfully sought a change in his official title to entomologist. However, in 1903 the board was to note that 'exchanges proposed by insect collectors had been declined, the Entomologist having no leisure for such work'³⁷. Wild never published in entomology, and his elevation to acting director following the retirement of de Vis in 1905 put paid to any possibility that he might. Robert Etheridge's report of 1910 was not complimentary to Wild and it included the scathing comment: 'he says Conchology is his hobby'³⁸.

When Ronald Hamlyn-Harris was appointed director, following the recommendations of the Etheridge report, Wild's days were clearly numbered, but they could hardly

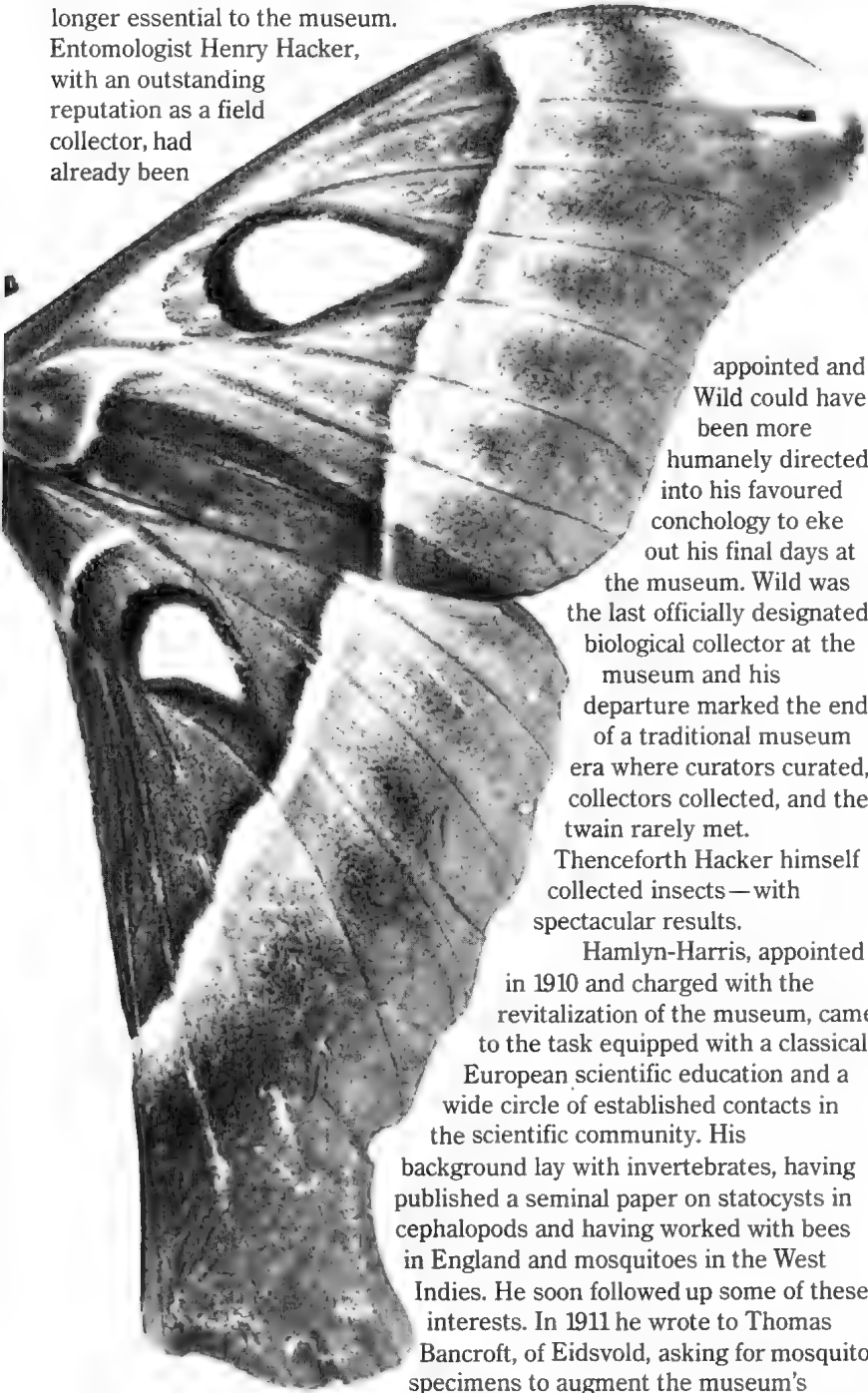
have been more harshly terminated. He was made insect collector again at age 58. Having spent most of the last decade in office work, including four years in charge of the museum, he was despatched alone into the Blackall Range for three months³⁹. His task was to collect large insects. It was April 1911—early winter, when insects, particularly large ones, are rare; and he was provided with written *Instructions for Preserving and forwarding Insects* such as one would give a school boy. His numerous letters to Hamlyn-Harris from the field record his progressive misery: 1 April 'I had a fall on the bank of the creek in my anxiety.....'; 10 April 'I am sorry my efforts have not met with your approval.....'; 15 May 'For more than a week I have been very unwell.....for the last 3 days I have had nothing to eat.....'; 26 May 'There was a bitter frost'; 30 May 'so cold..... I can hardly hold the gun'⁴⁰.



On 5 June, at Woodford, a fire swept through his camp destroying everything including his tent, food and clothing. A police enquiry initiated by Hamlyn-Harris reported: 'Constable Leahy who visited the spot and inspected it is of the opinion that the fire originated from Mr Wild's own camp fire'⁴¹. Despite Wild's offer to accept transfer to another department he was dismissed on 31 July, after Hamlyn-Harris opined to the under secretary that 'Mr Wild is simply wasting his time and ours'⁴².

The way Hamlyn-Harris got rid of Wild seems especially harsh, for his services as an insect collector were no longer essential to the museum.

Entomologist Henry Hacker, with an outstanding reputation as a field collector, had already been



appointed and Wild could have been more humanely directed into his favoured conchology to eke out his final days at the museum. Wild was the last officially designated biological collector at the museum and his departure marked the end of a traditional museum era where curators curated, collectors collected, and the twain rarely met. Thenceforth Hacker himself collected insects — with spectacular results.

Hamlyn-Harris, appointed in 1910 and charged with the revitalization of the museum, came to the task equipped with a classical European scientific education and a wide circle of established contacts in the scientific community. His background lay with invertebrates, having published a seminal paper on statocysts in cephalopods and having worked with bees in England and mosquitoes in the West Indies. He soon followed up some of these interests. In 1911 he wrote to Thomas Bancroft, of Eidsvold, asking for mosquito specimens to augment the museum's

The type specimen of *Coscinocera hercules* Miskin, 1876—the moth with the largest wing span in the world. The female is shown, actual size. ♀



Henry Hacker, entomologist, Queensland Museum 1911–29.

collection which he found to be in a parlous state⁴³. Thomas, son of Joseph Bancroft, a prominent member of the museum's first board of trustees, had published a review of Queensland mosquitoes in the 1908 museum's *Annals*⁴⁴—it generated many reprint requests to the museum. Hamlyn-Harris also began to borrow cephalopods for study and he went to some lengths to gain permission to work up those from the Commonwealth survey vessel, *Endeavour*—named after Captain Cook's ship. Neither of these research aspirations was to bear fruit during his museum years—he wrote largely on ethnological topics. His principal contribution in the invertebrate field was to appoint capable honorary and permanent staff, to build up the collections and, importantly, to open a dialogue with the leading workers of the time.

Within twelve months of his appointment Hamlyn-Harris was in contact with numerous workers offering collections for study and often publication space in the museum's own periodical. Entomologists of note contacted by Hamlyn-Harris included H.J. Carter, G.A. Waterhouse, R.J. Tillyard, E.W. Ferguson, A.M. Lea, and A.A. Girault. H.J. Carter, the prolific amateur coleopterist who was principal of Ascham Girls School in Sydney, wrote enthusing about a collection of Tenebrionidae he had received and offering to name a new pie-dish beetle *Helaeus harrisi*⁴⁵. Hamlyn-Harris asked him to change it to *Helaeus hamlyni* 'because Harris is such a common name'⁴⁶. Carter also diplomatically raised the penurious state of a young teaching colleague of his who was recuperating from ill health at Dorrigo without pay, and suggested that the museum might offer to buy named dragonflies from him⁴⁷. Hamlyn-Harris contacted the young man and a deal was struck, but not without pangs of conscience on the part of the vendor, who wrote, 'I know you will sympathize with me in this. I never sold an insect in my life. I feel it a bit of a degradation (I hate *professionalism* in entomology) to have to do it, but I must do it or "go hang"⁴⁸. The museum thus acquired for £10 a valuable set of named dragonflies from Robin John Tillyard, then on the hesitant brink of a stunning career in entomology.

Another young man with a much greater dislike of 'professionalism' in entomology than Tillyard, and one who was to leave a much more enduring mark on the Queensland Museum, visited Hamlyn-Harris during his second year in office. Alexandre Arsene Girault was an American passing through Brisbane on his way to an entomologist's job in north Queensland. Although his duties were to involve investigation of sugar cane pests, his passion was the taxonomy of the Chalcidoidea, a vast group of tiny parasitic wasps on which he was already an established worker. Soon after he took up duty he wrote to Hamlyn-Harris enquiring about publication possibilities and offering to lodge his types in the museum⁴⁹. Hamlyn-Harris, obviously impressed with Girault's enthusiasm, and anxious to get manuscripts for the first issue of the *Memoirs of the Queensland Museum*—replacing the *Annals*—agreed to publish his work. An awkward problem arose for Hamlyn-Harris when the first manuscript arrived for it contained a lengthy prefatory declaration of a polemical nature quite unrelated to the scientific content of the paper. Hamlyn-Harris was unhappy about this because of the precedent it would set for others wishing to express their personal opinions. But he felt obliged to honour his undertaking to Girault and he printed it unchanged, though with a footnoted disclaimer. Girault's paper occupied 124 pages, more than half the first issue of the new *Memoirs*⁵⁰. Soon after it appeared Hamlyn Harris' worst fears were realized—he received a facetious letter from

lepidopterist A.J. Turner threatening to:

send you an entomological paper in which the new species will be named after the Popes of Rome.....and to dedicate each species with a sentence damning some particular heresy. I propose to precede the whole with a short dedication expressing in obscure and oracular terms a dogmatic view of the Universe from the stand point of Roman Catholicism⁵¹.

After this Hamlyn-Harris reasoned with Girault and received his permission to use discretion regarding any future dedications that he might want published in his *Memoirs* papers. It did not happen again. Girault's next contribution ran to 570 pages and filled 2 volumes of the *Memoirs*. Hamlyn-Harris then received criticism from NSW government entomologist, W.W. Froggatt, for publishing what Froggatt felt were Girault's inadequate taxonomic descriptions⁵²—a complaint with which modern entomologists would agree. Froggatt also thought—mistakenly—that Girault was creating so many new species that surely he must have entered into an arrangement with the museum whereby it would purchase his type specimens.

Girault's subsequent tormented life has been well documented elsewhere⁵³. It was spent in and out of employment due to personal disputes and the constraints of periods of financial depression. In Brisbane he suffered poverty, debilitating manual labour, and the premature loss of his wife leaving five children to support. But he continued a prodigious output of taxonomic work, often resorting to privately printed pamphlets as an outlet. In these he expressed, in unconventional terms, his burning convictions about the low status of 'pure' science and his disdain for those whom he felt had prostituted themselves to ambition and 'professionalism'. Heber Longman was to help Girault over the years with microscope slides, mounting materials and a degree of moral support during his low periods. Girault always spoke kindly of the museum and continued to lodge his types there. These, though initially in a pitiful state of preservation and documentation, total some 3500 specimens and represent one of the important type holdings in the museum. At his death in 1941 Girault left behind an unpublished manuscript of 2483 handwritten pages weighing 37 pounds. The interpretation of his type specimens in the light of this document has presented an almost Giraultian torment to curator E.C. Dahms in recent years.

Henry Hacker, whom Hamlyn-Harris appointed as entomologist in 1911, was outstanding:

not only did Henry Hacker have great observational and practical skills in dealing with insects, enthusiasm for collecting them, and an "eye for a species", but he was also physically tough, resourceful and self-reliant, with a capacity for meeting awkward situations, and mentally tough too, for when he had determined on a course he pursued it despite hazards and discomforts⁵⁴.

Gaining his original expertise with insects at the British Museum, he came to Australia in the late 1890s and led a mobile, adventurous life, following the gold discoveries, and collecting insects wherever he went. Unlike Henry Tryon, whose travels had been pedestrian, Hacker chose a bicycle. In a published letter to coleopterist A.M. Lea he describes part of a 500 mile ride from Charters Towers to Cloncurry in 1907:

It was impossible to ride or even to push my bicycle through the wet black soil, so I shouldered it at sunrise and started to walk to the next stopping place, Fishers Creek, a distance of 40 miles. With the help of a little riding in the harder parts of the country my halting



Rowland Illidge, a pioneer naturalist of the early 20th century, who worked on butterflies and beetles as well as birds. His association with the museum spanned nearly half a century. His interest in natural history is said to have first developed through Elizabeth Coxen in the 1880s.

place was reached at midnight, after having to leave the bicycle on the road.....the hotel was closed, and I was compelled to sleep in wet cloths on the footpath. Next day I walked back to the bicycle.....⁵⁵.

During these travels he built up a large beetle collection of 6000 species which he sold to the Berlin Museum about 1910⁵⁶. More importantly for his later career he built up close personal contacts with working taxonomists around Australia. Hamlyn-Harris' letter to the under secretary recommending Hacker's appointment echoed Etheridge's observations about the existing museum insect collection, and to some extent it explains the new director's criticism of Wild:

It must be known to you, that our insect collections are in such a bad state of preservation, that the specimens are mostly falling to pieces and the cases are full of vermin and unless something is done soon they will be irretrievably lost to science⁵⁷.

Henry Hacker was just the man for the job. Described as 'shy and retiring' and 'silent among a group'⁵⁴ he took no part in the public lecture series which Hamlyn-Harris initiated and is rarely mentioned in the many gushing press accounts of the museum stage-managed by his media-conscious colleague, Heber Longman. Hacker felt his task was to get the Queensland insect fauna collected, properly preserved with good data and, most importantly, studied — and he rarely swerved from that path. He travelled widely, later graduating to a motor cycle on which he earned a reputation equal to his earlier one on the bicycle, and made prodigious collections. He despatched material to specialists around the world, encouraging them by generosity in exchanges and donation of duplicates. A major discovery of his was a member of the primitive 'antarctic' family of moss-feeding bugs, Peloridiidae, living in the high *Nothofagus* forest of the Lamington Plateau — the species he described we now know as *Hackeriella veitchi*⁵⁸.

Henry Hacker went on to publish a series of papers in the *Memoirs* despite Hamlyn-Harris' remark that 'Mr Hacker is a good working entomologist, incapable I take it of doing any scientific work'⁵⁸. His papers reflect the breadth of his interests and his remarkable powers of observation. Many are illustrated by his own photomicrographs using primitive methods, but producing results ahead of their time. He had a special interest in bees, publishing a 6-page catalogue of Australian species in 1921⁵⁹, and for years corresponded with and sent specimens to the eminent American bee specialist Professor T.D.A. Cockerell. Cockerell described scores of species sent by Hacker and co-authored a paper with him. Typically, when Cockerell personally visited the museum in 1924, the press fêted his meetings with Longman, barely mentioning Hacker.

Recognizing Hacker's abilities the government transferred him to the Agriculture Department in 1929 where he did an equally efficient job in building up that department's insect collection. However he remained in charge of the museum's insect collection, working one or two days a week there until his retirement in 1943. This marked the beginning of a close association between the entomologists of the museum and the Department of Agriculture, and from that time holotypes from the department have regularly been lodged in the museum. Hacker gave up entomology and all connection with it after his retirement in 1943, although he lived for 30 more years, dying in 1973 at the age of 97.

When G.B. Monteith took charge of the museum's Hemiptera collection, in 1978, he was surprised at its small size in view of its having been one of Hacker's favoured groups. Recent chance information from

America reveals that just before Hacker retired he sold a large collection of Queensland Hemiptera to a wealthy private American hemipterist, Carl J. Drake. Drake's collection is now housed separately in the U.S. National Museum of Natural History under the terms of a generous bequest from Drake. Australia's largest species of fungus bug (Aradidae) has its holotype there, a specimen collected by Hacker at Buderim in 1912. It's name is *Drakiessa hackeri* (Drake), a permanent reminder of the partners in a museum impropriety 45 years ago.

Soon after the secondment of Henry Hacker to the Agriculture Department in 1929 A.J. Turner began informal periods as honorary entomologist at the museum. Turner's first association with the museum had been a brief term on its board just before its disbandment in 1907. He was an eminent paediatrician and prolific amateur lepidopterist, having collected extensively and published 121 papers describing about 3,500 species⁶⁰. A collector colleague of his was Wilfrid Bourne Barnard, one of the noted Barnard family of naturalists. Barnard himself was not inclined to describe species but Turner had described numerous species from his collection over the years. When Barnard died in 1940 his collection was bequeathed to CSIRO in Canberra but, by arrangement with his family, it came to the Queensland Museum. We can assume that the 'arrangement' was influenced by Turner who, then retired, spent several years working on the Barnard collection at the museum, contributing three papers on it to the *Memoirs*. The Barnard collection contains about 750 of Turner's types making it a vital regional adjunct to Turner's own collection—which did go to CSIRO.

Little work was done on the entomological collections from 1940 to 1962 though Hubert Jarvis of the Agriculture Department spent one day per fortnight at the museum during 1944–48. It was in 1962 that Director George Mack's long efforts to increase the curatorial staff of the museum resulted in the appointment of an entomologist, E.C. Dahms. His responsibility, as Tryon's had been, was the whole of the insect, arachnid and other invertebrate collections. Mack himself acted as vertebrate curator. Dahms set himself the task of organising and cataloguing the collection, especially the 4,000 slides and 18 drawers of pinned specimens that comprised the Girault collection. Subsequently the check list of 3,000 Girault species in the Chalcidoidea was published with funds provided by the Australian Biological Resources Survey⁶¹.

In 1978 the responsibilities for entomology in the museum were shared out between Dahms and the newly appointed curator, G.B. Monteith, who had formerly been curator of the entomology museum in the University of Queensland. Monteith has pursued investigations on the biogeography of flightless Hemiptera—their limited capacity for dispersal making them excellent subjects for the investigation of isolating mechanisms between communities. The acquisition of honorary associate T.E. Woodward's collections of Hemiptera was an important one for the museum and, with those made by Monteith, the museum's collections of the families Aradidae and Lygaeidae in this order are strong.

In the course of his surveys Monteith has collected extensively, especially from rainforest and high altitude areas throughout the state, and has expanded greatly the museum's holdings. He has solicited the co-operation of many colleagues, who are studying much of the material he has collected in connection with his own research. The museum and science will benefit accordingly—through the establishment of identified reference collections of a variety of insect groups; and through an increase



Naturalist W.B. Barnard, whose entomological collection, containing 750 of Turner's types, came to the Queensland Museum.

in the understanding of dispersal and speciation in rainforest refuge areas.

The museum also holds the Eland Shaw collection of Australian cockroaches that formed the basis of his investigations of 1914 to 1925⁶². These were catalogued by E.C. Dahms⁶³ and the Blattidae were later reviewed by Josephine Mackerras between 1965 and 1968.


The insects of Queensland are diverse. However, despite their economic importance that has resulted in rather more investigation on the group than for most others, the insects of Australia are still imperfectly known and will continue to be collected and studied in the museum for a very long time.

Molluscs

After the Philosophical Society's museum was moved to new quarters in the Queen Street Parliamentary building in 1869, Charles Coxen lent his shell collection for display. As Coxen's main interest was ornithology, it may be more correct to say that the loaned shell collection was that of his wife, Elizabeth Coxen (née Isaac). She was a serious conchologist in her own right. Years later, one of her contemporaries, Henry Tryon, was to imply that it was her influence, and not that of her husband, which led the youthful Rowland Illidge to an interest in shells⁶⁴. After Coxen's sudden death in 1876, following only three meetings of the board of trustees he had worked so hard to establish, she offered 'his' shell collection for sale to the museum with the request that she gain some remuneration for maintaining the museum's shells. After some clarification of the demarcation between the Coxen collection and the museum collection at the request of ever vigilant trustee W.H. Miskin, the board agreed, on 19 January 1877, to buy the collection (including birds and books) for £239.2.0, and to make £50 available for Mrs Coxen's curatorial services for the year at the rate of 10 shillings per day attended⁶⁵. She continued this casual arrangement up to about 1882. Thus, Elizabeth Coxen was the first person paid to look after invertebrates in the Queensland Museum.

Between 1882 and 1893 Tryon, Broadbent and Wild added molluscs to the museum's collection. When Tryon was directed to devote his time to insects, in late 1888, the board solved the concomitant problem of lack of curatorship for the Mollusca by appointing Charles Hedley to a temporary position of conchological assistant. English born, Hedley had worked on an oyster lease on Stradbroke Island and at fruit growing near Gladstone. After a serious injury to his arm, the museum job gave him welcome relief from heavy work⁶⁶. During 1889 he completely rearranged the shells and donated a collection of his own⁶⁷. A collection from Sydney conchologist T. Brazier was also received⁶⁸.

In early 1890, Sir William MacGregor, having met Hedley when he passed through Brisbane, wrote and asked for him to be allowed to join his New Guinea expedition, then in progress. The board was enthusiastic about this proposal and 'on the understanding that Mr Hedley would collect solely for the Museum he had been furnished with collecting materials and his passage paid to Cooktown'⁶⁹. The board also resolved that if an assistant zoologist's salary should become available then it should be offered to Hedley. His report from New Guinea in July of the same year revealed the experience of many eager naturalists on their first visit to the tropics for his 'expectations of a rich harvest of objects of interest were somewhat disappointed'⁷⁰. Malaria overcame him and on return to Brisbane he had to sever his connections with the museum. In 1891 he joined the Australian Museum where his 30-year career made him a key figure in Australian malacology⁶⁶.



Charles Hedley FLS, on Northwest I., Capricorn Group 1926. He was at this time scientific director of the Great Barrier Reef Committee and had accompanied a party of students from the University of Queensland to the island (photograph by courtesy A. Denmead).

Years later, from the Australian Museum, Hedley was able to perform a service for the museum that resulted in its acquisition of an important collection. Hamlyn-Harris had met E.J. Banfield—the celebrated ‘Beachcomber’ of Dunk Island—in Brisbane in 1911 and must have appealed to him for specimens from the Great Barrier Reef, for on his return to Dunk Island Banfield was to write:

As I explained to you I am somewhat embarrassed. Your predecessor seemed not to encourage me and I made other alliances, which it would be vain of me to disregard⁷¹.

One of the ‘other alliances’ Banfield was referring to was with the Australian Museum. It had arisen through his long friendship with Charles Hedley. After the ‘Beachcomber’s’ death in 1923 his widow, Bertha, offered his collection to the Australian Museum as a token of his long association with Hedley. However, Sir Matthew Nathan, Queensland’s governor, and a great proselytizer for Great Barrier Reef studies, personally intervened with Mrs Banfield appealing for the retention of Banfield’s collection in the state. Conscience wracked, Bertha wrote to Hedley explaining her dilemma:

I regret my want of thought exceedingly, but will you after this explanation allow me to offer to the Queensland museum the first refusal of the shells.....I have tried to act as I have thought would be pleasing to my dear one, and he was so intensely patriotic as regards Queensland I think he would have liked his treasures to remain with her⁷².

To her relief Hedley fully agreed that Banfield’s memory ‘should be especially cherished in Queensland’⁷³ and so the museum gained an important and historic collection which was placed on public display for many years.

After Hedley left the museum there was no one to look after the shells—for it was soon after that the retrenchments of 1893 reduced the staff so drastically (see Chapter 3). Undoubtedly Wild would have liked to, but it is not likely that he had the time and he was not given the opportunity.

When Hamlyn-Harris increased the scientific strength of the institution by appointing honoraries in 1912, John Shirley DSc was appointed honorary conchologist. He was an inspector of schools, a prominent figure in Brisbane’s scientific circles, and later to become first principal of the Teachers’ Training College³. He spent Saturday afternoons and all holidays reducing the collection from ‘chaotic’ to orderly. But in 1914 he wrote to Hamlyn-Harris:

The want of literature in your institution, especially of the works named in my former letter, and also of such French conchologists as Montrouzier, Crosse, Fischer, Quoy and Gaimard are also great hindrance to the determination of shells.....Under these conditions I find that I cannot spare sufficient time for accurate determination. I must therefore ask you to accept my resignation⁷⁴.

After Shirley retired from the teachers’ college in 1919 Longman arranged his appointment as conchologist at the beginning of 1920 (at age 71) at a salary of £200 p.a. He ‘revised and rearranged with the skill of an expert who had made a hobby of the shells of our foreshore’⁷⁵ but he ceased work in 1921 and died the next year. His collection was donated to the museum in 1973.

H.W. Hermann was another honorary conchologist to the museum. He worked there during the 1940s and he appears to have attracted other conchologists to the museum—



Eland Shaw, the donor of an important collection of cockroaches.



In camp, Finch Hatton, northern Queensland, 1975. Valerie Davies, curator of arachnology, sorting specimens.

Mr Hawkey.....a fireman in the railways.....often comes in for a chat. His speciality is conchology—he has a big collection of shells. He also knows Mr H.W. Herman well, the honorary conchologist, who spends many hours in the Shell Room where there is no ventilation and the smell is different to that pervading the rest of the basement⁷⁶.

Hermann did not even have a table to work at until Mack arrived and had cupboards shifted to make room for one⁷⁶. His large identified collection was, like Shirley's, donated to the museum after about 30 years. Hermann's came via Tom Marshall in 1974. R.V. Oldham, the museum photographer, also donated his small collection of shells⁷⁶.

Thus, the museum had benefited from the work of many honouaries and, in due course, was to acquire their collections. However, up to 1970, the only significant work to have been published on the collection had been that of Hedley and Shirley. Generally the labelling was inadequate, registration and cataloguing incomplete and little scientific work had been based on the material—which largely consisted of marine shells. There was little alcohol preserved material in which the animal was retained with its shell. In fact, although the collection had some value as a reference collection, it had little as a scientific resource. Further, there was only a very limited representation of the important non-marine molluscs that were likely to be unique to Queensland and were not represented in other collections in Australia. The first appointment to the position of curator of molluscs, Helen King, began to remedy this situation and worked on terrestrial species. However, the mechanical cleaning and sorting of the large collection of marine shells was a distraction. In 1976 Martin J. Bishop—the first museum appointee to come directly from an overseas institution—began his investigations on terrestrial snails. Before he returned to Cambridge in 1978 he had added significantly to the collection of land molluscs and had contributed to the taxonomy and biogeography of Queensland terrestrial molluscs, especially those in rainforest areas. In 1980 J. Stanisic was appointed curator, and he continued the emphasis on non-marine molluscs, initiating investigations on the relatively unknown smaller species of terrestrial snails, especially those living in rainforest litter that are important in the energy-flow relationships of rainforests. As a result of King's, Bishop's and Stanisic's efforts, the terrestrial component of the museum's mollusc collection, encompassing a comprehensive coverage of taxa from most habitats throughout the state, constitutes an important research tool.

The most recent addition to the mollusc collection is the large donation of about 400,000 specimens of marine and non-marine shells from honorary associate F.S. Colliver. Apart from its size, the geographic and habitat range that is represented makes the collection a valuable acquisition, compensating for the poor label data on some of the older components of the museum's holdings. Thus the museum now has a comprehensive reference collection of tropical Indo-West Pacific marine molluscs as well as its growing collection of non-marine species.

Arachnids

de Vis was the first person in the museum to work on spiders—he had a minor long-term interest in them. He used to come into the library on Sundays to work on them, and in 1911 he described a spider whose silk was used by the aborigines for fishing. He also translated keys and prepared catalogues of Australian spiders. It was probably de Vis who interested Joseph Lamb in the group. Etheridge in his 1910 report heaped

praise on Lamb — ‘in my opinion the one capable man of the staff who, among many other duties, was ‘making a special study of spiders and frogs’³⁸. Lamb, though classified as assistant in the industrial department and a painter by trade, published a short paper on new spiders in the 1911 *Annals of the Queensland Museum*. But this promising future for arachnology came to an abrupt halt with Lamb’s resignation, in March 1911, because he ‘wanted to settle on the land’. A brief flirtation with arachnology in the museum about this period manifested itself also in the loan of the New Guinea, Northern Territory and Blackall Range spiders to W.J. Rainbow at the Australian Museum for description; the donation of mygalomorphs by Thomas Bancroft of Eidsvold; the visit of R.H. Pulleine, an amateur arachnologist from South Australia, in 1912; and the loan of jumping spiders to G.W. Peckham in New York.

From 1943 to 1946 Mrs Grichting, the librarian, was looking after the spiders, and bottles and specimens were brought into the library so that she could work on them without leaving the library unattended⁷⁶. She does not appear to have published on the group and it was not until 1971 that a curator was appointed.

In 1962, when E.C. Dahms was appointed to the position of curator of entomology, his responsibilities included the arachnids, which were delegated to an assistant. In 1971 it was an assistant in entomology who had been looking after the arachnids, R.W. Monroe, who became the first curator of arachnology. He added more than 2,000 specimens from the Darling Downs and mid-eastern Queensland to the collections. Valerie Davies succeeded Monroe in 1972. Davies specialised in the family Amaurobiidae (Araneomorphae) in which she described numbers of new species and genera. However, she also developed a comprehensive collection of all taxa, exploring every major habitat in most parts of the state. Features of the collecting programme conducted by Davies were the rainforest surveys — from the sub-tropical forests of the sand masses of south-eastern Queensland to the montane forests of Cape York Peninsula. These surveys, which involved continuous periods of up to two months in the field, echoed the achievements of the museum collectors of the late 19th century. They added many thousands of specimens to the collections, and included a vast number of as yet undescribed species. From the



Museum expedition to Iron Range, northern Queensland, 1977. *L to R*: Paul Filewood, assistant; Valerie Davies; Martin Bishop, curator of malacology.

northern Queensland material, families with Papua New Guinea affinities were recorded in Australia for the first time.

Robert Raven became assistant in the arachnid section in 1975 and succeeded Davies as curator of arachnology in 1985. Raven specialised in Mygalomorphae—trapdoor spiders—applying his data to the elucidation of biogeographic relationships between the fauna of Australia and the western Pacific and the other continents of Gondwanaland. The Lycosidae—wolf spiders—have been studied by R. McKay—who works on the family in addition to his responsibilities as curator of fishes.

Protozoan and Helminth Parasites and Symbionts

Until the appointment, in 1976, of Lester Cannon—a turbellarian specialist—as the curator of lower invertebrates, the museum has not had the benefit of an authority on helminth or protozoan parasites. Nevertheless it has acquired, through the work of associates and others working in Queensland, one of the important Australian collections of these groups reflecting the importance of veterinary and medical pathology in this tropical state. The first donor was T. Harvey Johnston, who arrived in Brisbane in 1911 to become the inaugural lecturer-in-charge (and later professor) of the biology department at the newly founded University of Queensland. Like Hamlyn-Harris, who had taken up the museum directorship the previous year, he was interested in invertebrates. Harvey Johnston served as honorary zoologist at the museum from 1912. The museum was to become repository for many of the helminth and protozoan parasites of vertebrates emanating from his work until he moved to the University of Adelaide in 1922. Johnston's appointment as an honorary of the museum marked the beginning of a long and fruitful relationship with the University of Queensland zoology department which still endures. Agreements for deposition of primary types in the museum by members of the zoology and entomology departments have benefited the museum's invertebrate holdings over the years.

An outstanding student of Harvey Johnston's was Josephine Bancroft. She was the grand-daughter of museum trustee Joseph—the celebrated naturalist and medical practitioner who had contributed to the identification of the filarial worm causing elephantiasis; and she was the daughter of Thomas—who had determined details of the transmission of filarial disease by mosquitoes. She collaborated with Harvey Johnston in much of his work during his University of Queensland days. As the wife of Ian Mackerras the famed medical entomologist who later became the director of the Queensland Institution of Medical Research (QIMR), Josephine went on to a distinguished career as a parasitologist in that institution.

Josephine and Ian Mackerras began to work together while at Heron Island on their honeymoon. They combined her interest in blood protozoans with his interest in vectors of pathological organisms that had been particularly important in combatting malaria and other disease in the Australian and American armies during World War II. In due course Josephine Mackerras made a major contribution to the understanding of haematozoan Protozoa and filarial parasites of the Australian native fauna, much of veterinary significance⁷⁷. The museum holds her unique and comprehensive collection made between 1947 and 1961.

At about the same time D.F. Sanders, a colleague of Josephine Mackerras and also a former student of Harvey Johnston's was studying helminth parasites at the QIMR. Professor John Sprent of the University



Professor T. Harvey Johnston, came to the University of Queensland in 1911 and began a tradition of co-operation between that institution and the museum.



The museum acquires a boat for estuarine surveys, 1972.

of Queensland was beginning to work in the same area. Sandar's specimens came to the museum; and, in 1986, Sprents collection will be accessioned. Thus the museum's helminth reference collection is second only to the Australian National Collection, which was first brought together by Harvey Johnston and his students at Adelaide University and since has attracted other donations.

Corals

Though molluscs received attention at the museum in the earliest days there were equally conspicuous and aesthetically pleasing marine invertebrates that were neglected. This was despite the proximity of the Great Barrier Reef. Their neglect was partly the result of the sheer expense and logistical difficulty of working in those dangerous and remote waters; and partly because there was no practical need for knowledge of these groups. de Vis had been member of a committee for scientific enquiry into the Barrier Reef but it was disbanded for lack of funds. Hamlyn-Harris recommended the advisability of the establishment of biological stations on the Reef during a lecture tour in Adelaide in January 1914. Later that year he visited the Reef personally, spending two weeks on Dunk Island with the 'Beachcomber', E.J. Banfield. His views on the need for a Reef research station received extensive press coverage and were supported by Banfield's own regular columns in the *Townsville Daily Bulletin*:

In the absence of a biological station the Queensland museum is performing some of its functions and strenuously fostering the idea which Dr Hamlyn-Harris devoutly believes to be in the interests of science generally^{7d}.

Hamlyn-Harris' dreams of a reef station were not realized in his time. In 1922 the Great Barrier Reef Committee (GBRC) was formed as an association of invited delegates under the auspices of the Royal Geographical Society of Australasia of which the Queensland governor, Sir Matthew Nathan, was then president. The committee's chairman was H.C. Richards, professor of geology at the University of Queensland. Heber Longman, the museum's director, was a member and he suggested, at its first meeting, that the committee set up a permanent research station^{7e}. This suggestion, emanating originally from Hamlyn-Harris, was not to be adopted until, in 1951, the GBRC, founded the Heron Island Research Station^{8f}. Instead, the committee's approaches to the British Association for the Advancement of Science resulted in the 1928-29 Yonge expedition to Low Isles. Longman, Richards and E.O. Marks visited the expedition as committee representatives in October 1928. At the same time, Longman encouraged public awareness of the Reef by opening the famous coral diorama in the museum. This was developed from material collected by preparator Tom Marshall assisted by local Bowen resident E.H. Rainford who sent reef invertebrates to the museum for many years until his death in 1938. Longman's association with the GBRC produced no great material benefits in the way of systematic collections. The committee did not see that its responsibilities included the collection of invertebrates for Australian museums, which Richards thought were 'already stuffed with collections that remained unworked'⁸ⁱ.

Nevertheless, the museum did receive a collection of corals from the GBRC. It was made by Charles Hedley who, in 1924, having retired from the Australian Museum, came back to Queensland as scientific officer for the committee at a salary of £700 per year^{8j}. Hedley made this collection when he joined the HMAS *Geranium* surveying in the waters of the Reef.



Carden C. Wallace, curator of lower invertebrates 1970-7, with the coral collection.

These corals were identified by J.W. Wells of Cornell University who used them as the basis for one of the earlier works on taxonomy of Great Barrier Reef corals⁸¹.

The GBRC coral collection, together with that from Low Isles from the University of Queensland, formed the basis of the identified coral collection that came under the care of Carden Wallace when she became curator of lower invertebrates in 1970. She set herself the task of unravelling the taxonomy of the family Acroporidae—the stag-horn corals. This group—the dominant one in the reef community—had confounded previous efforts to understand it owing to the variability of its growth forms, which are readily modified by the environment. She applied an innovative numerical approach to the problem with great success, bringing credit to the museum⁸². Later, she was coauthor—with J.E.N. Veron of the Australian Institute of Marine Science—of the definitive monograph on the Acroporidae⁸³.

The coral collection that Wallace built up in the museum before she left in 1976 will be vastly expanded in 1986 by the large and important collections of James Cook University and the Australian Institute of Marine Science—both in Townsville. These collections formed the basis for the whole series of monographic works on coral taxonomy that were published by the latter institution. Initially, much of this coral material will very likely remain in the Townsville branch of the museum to open in 1986 (see Chapter 14). There is current interest in coral taxonomy in the Townsville institutions and it is the museum's policy to take cognisance of the needs and interests of the local community in deploying its collections, expertise and other services through its branch establishments.

Crustaceans

Bruce M. Campbell, formerly curator of the museum in the zoology department of the University of Queensland, became curator of zoology in 1964. He brought with him, from the zoology department museum, the corals from Low Isles reported on by Stephenson and Wells⁸¹ and the rocky shore molluscs and other organisms that had been surveyed by Edean, Stephenson and Kenny⁸⁴, as well as a variety of other invertebrates. Campbell's appointment was at the end of the era of the general curator, whose responsibilities ranged through so many diverse animal groups that constructive research or even collecting was almost



Monteith (*left*) and Dahms, curators of entomology, collecting in the rainforest, Mt. Glorious (outside Brisbane).



Queensland Museum-Earthwatch expedition to Bellenden Ker, northern Queensland, in 1981. Assistant Doug Cook descends the cable tower to the expedition bivouac at 1000m altitude.

impossible. In the Queensland Museum his responsibilities excluded only insects, arachnids, reptiles, birds and terrestrial mammals. He curated the rest of the invertebrates and fishes and aquatic mammals. It was the first time since 1888, when Hedley had been on the staff, that an entomologist had not had the responsibility for the entire invertebrate collection. Nevertheless, it was a formidable portfolio and it was not until 1968 that there was some relief—a curator of fishes was appointed. Campbell kept the whales. Not until 1970, with the appointment of other invertebrate curators, was he gradually able to assume full time responsibility for Crustacea—the subject of his own research. He began to systematically develop these collections. Unfortunately Campbell's research on shore and mangrove crabs, as well as his participation in surveys of wetland and estuarine habitats, came gradually to a halt as he assumed the duties of deputy director from 1976. His successor as curator of crustaceans, R. Monroe, did some useful work on barnacles before his resignation. P. Davie the present curator is continuing the work on crabs.

Ascidians

The three new curators, appointed in 1970 to alleviate Campbell's awesome responsibilities for all of the invertebrates excluding insects and arachnids, were in the fields of molluscs, and lower and higher invertebrates. The division between the last two was entirely arbitrary, depending on the interests and expertise of the incumbents. At first, Wallace, as curator of lower invertebrates, had the lion's share—just about everything except bryozoans, echinoderms and prochordates, none of which were particularly well represented in the collections. In 1974, after a year as a caretaker curator of molluscs, Patricia Mather—publishing under her maiden name of Kott—became curator of higher invertebrates with responsibilities for annelids, bryozoans and prochordates. Echinoderms went to Wallace's successor as curator of lower invertebrates—Lester Cannon—for no other reason than that he had some expertise with them, while Mather had some research experience in the Annelida. Mather came to the museum with a sound international reputation as an authority on ascidians—commonly known as sea squirts—the only authority in the southern hemisphere and one of the few in the world. Although an important group of filter feeding organisms in temperate as well as tropical seas, the only ascidians that were in the collection at the time were some from Moreton Bay that she had lodged while a research fellow in the University of Queensland. So she set about building up a collection—now a comprehensive representation of species from other parts of the tropical West Pacific as well as from both tropical and temperate locations around the Australia coast—collected from intertidal habitats and complemented by donations of survey material from other benthic habitats. The collection, containing in the vicinity of 25% of the holotypes of the species known from Australia, was the basis for taxonomic and biogeographic work on the Australian and Indo-West Pacific fauna published from 1974⁵⁵, and culminating in monographs on the Australian ascidian fauna being published as volumes in the *Memoirs*⁵⁶.

The Balance Sheet

Inevitably, museum collections reflect the interests of the successive curators, of the honorary associates of the institution, and of other donors who have worked in the area. There are other groups of organisms not well represented in the collections and some of these have not yet been investigated—for the invertebrate fauna is vast and the number of workers relatively few.



Bellenden Ker base camp in lowland rainforest at the foot of the mountain near the tower of the Telecom cable-car used for access to stations along the altitude transect up the mountain.

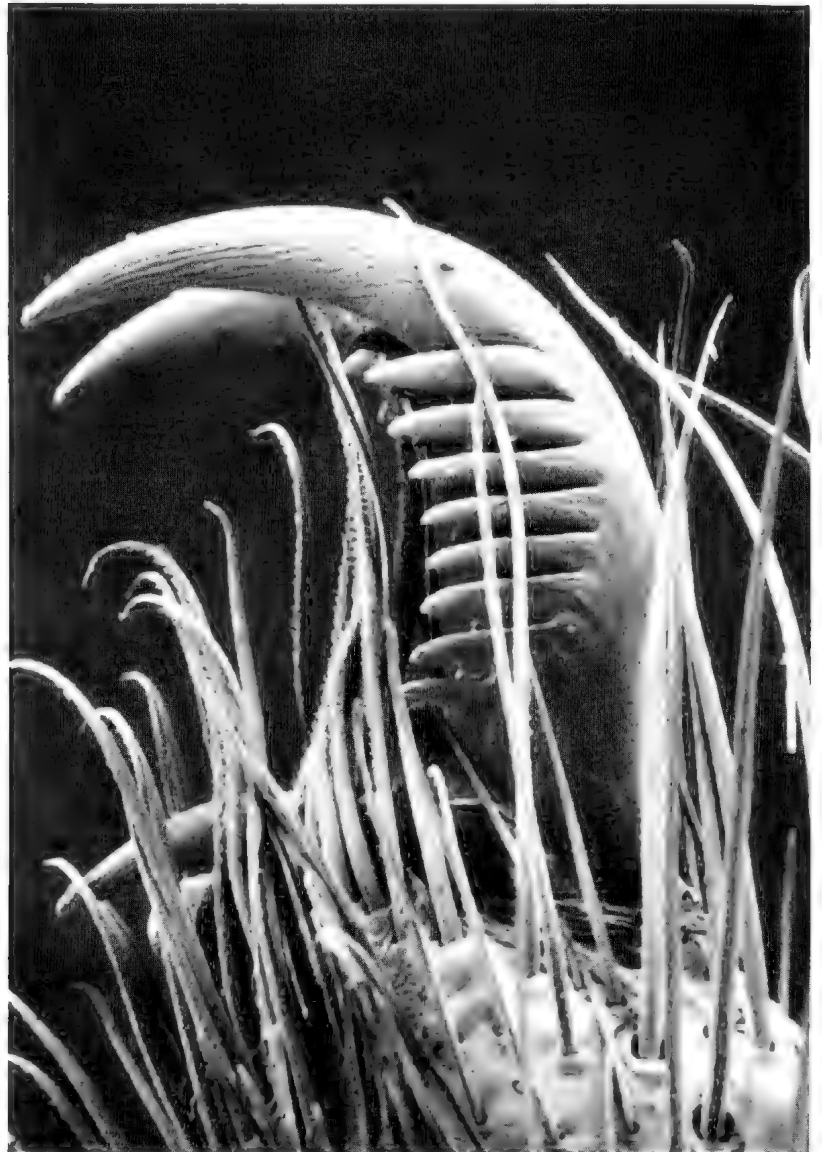


Bellenden Ker expedition leader Geoff Monteith (*left*) and Ted Edwards from CSIRO collect insects from a light trap inside the forest.



In camp at Bellenden Ker pinning small moths collected the previous night.

On the credit side, the museum holds important protozoan and helminth collections; earthworms that formed the basis of the taxonomic reviews of B.G.M. Jamieson of the University of Queensland; leeches from L.R. Richardson's works on Queensland fauna; mites from R. Domrow, Queensland Institute of Medical Research; ticks from F.H.S. Roberts, CSIRO. There are comprehensive collections of spiders resulting from the museum's own collecting efforts. Of the larger groups of insects, there are good collections of certain families of bugs, beetles and butterflies and moths and an important collection of cockroaches. However, on the debit side grasshoppers and crickets are not well represented, nor are flies and many other insect groups. The collections of Chalcidoidea contain 3,000 species described by Girault—but there are many habitats yet to be sampled and about 75% of the total number of species are estimated to be as yet unknown. Collections of non-marine molluscs are growing and constitute a unique resource, but there are many habitats yet to be sampled and a large part of the fauna remains undescribed.



The purchase of an ISI Akashi Super II scanning electron microscope in July 1977 greatly extended the museum's research capacity, making possible magnifications of the order of X10,000—about 10 times that of the light microscope—and projecting a three dimensional image. *Right:* tarsal claws of mygalomorph spider *Namea capricornia*; *Opposite page, top:* rostrum/head of scrub tick, *Ixodes holocyclus*. *middle and lower:* sponge spicules.

In the marine field, the Crustacea from Moreton Bay mangrove habitats are well represented in the collections. Good collections of portunid, grapsid and xanthid crabs that formed the basis of the taxonomic investigations of Stephenson, Campbell and Davie are held, as well as the barnacles collected by Munroe. Collections of Isopoda came from N. Bruce, D. Holdich and K. Harrison; and freshwater crayfish were donated by G. Morgan. In addition the museum holds crustaceans from the northeastern and northwestern continental shelf received, respectively, from Queensland Fisheries Service and CSIRO, providing a resource for future studies of deeper water faunas. The collections of the Ascidiacea are a comprehensive representation of the Australian species, as are the coral collections. However there are many other groups that await investigation and there are many habitats still to be explored. The museum has collections of echinoderms from Heron Island that formed the basis of Endean's reports in 1953-65⁸⁷ but systematic surveys and collections from other areas are lacking, as are identified collections of the class Crinoidea. Taxonomy of Queensland sponges, bryozoans, polychaetes, coelenterates other than corals and hemichordates await investigation; and the collections held in the museum require the attention of experts to build them up to the level of a useful resource. Larger marine molluscs are well represented although smaller species have not been sampled and, as yet, little scientific work has been done on the collection. Larger representatives of the benthic fauna in many phyla were taken from the north-eastern continental shelf in a trawl survey exploring waters down to 300 metres. Deeper waters of the continental shelf have not been sampled; nor have the smaller components of the fauna on the shelf.

There remains much to be done. The museum has never had the staff establishment that included experts on every group—nor indeed has any museum. By careful planning and judicious appointment of professional staff, including honoraries, the museum has, since 1970, gradually been building up its collections and its own taxonomic expertise. This will continue until it can provide a comprehensive reference collection and until the fauna of the state is understood. For it will be from this foundation that ecological, physiological and chemical investigations can be soundly based and the relationships and significance of all the components of the fauna be determined.

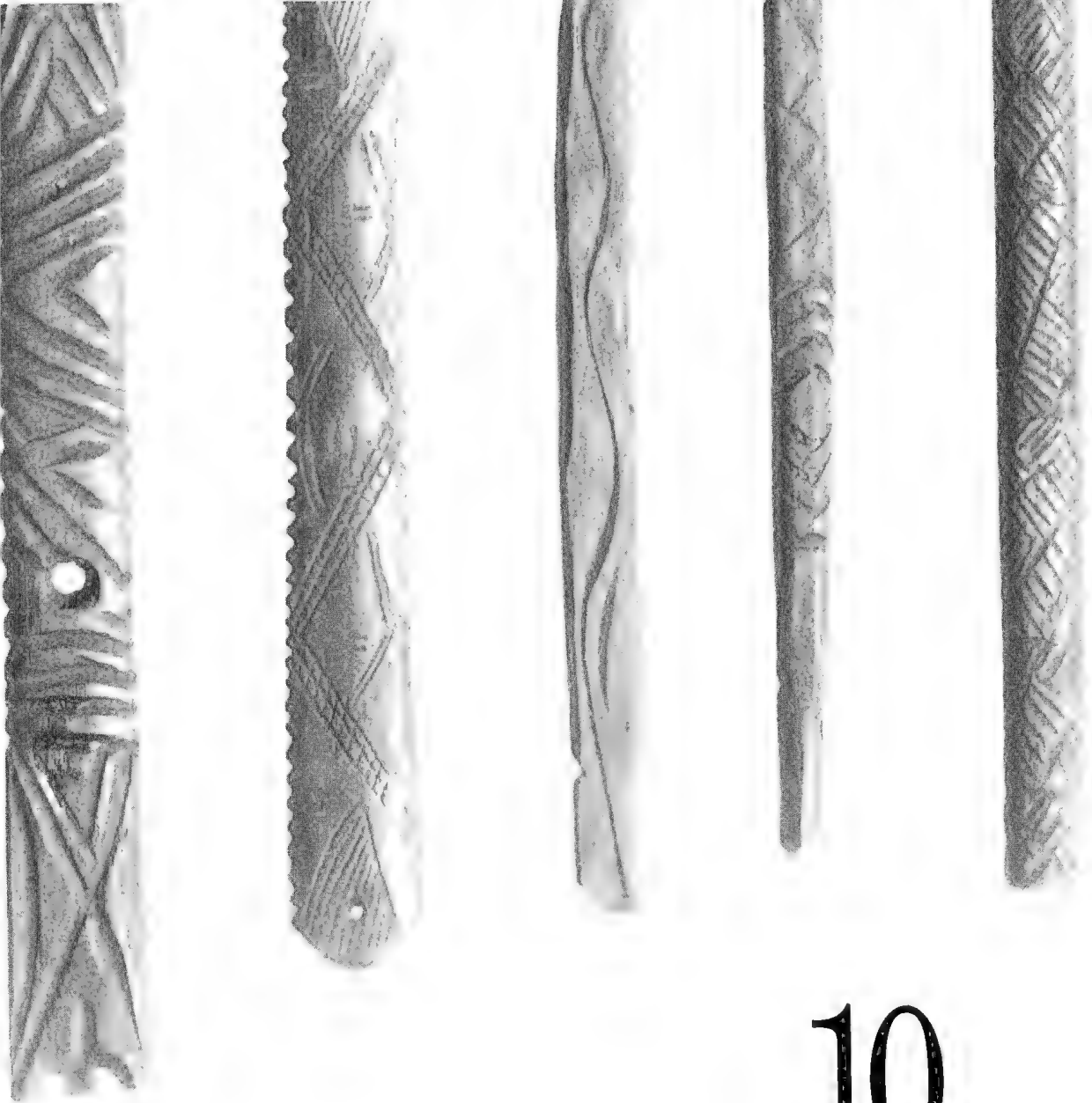


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1877

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10

PEOPLES
AND
LIFESTYLES

Anthropology



Many of the early colonists of Queensland who founded the museum—Coxen and his friends in the Philosophical Society—had broad, liberal educational backgrounds that enabled them to dabble in many areas. This was also true of others who had an association with the museum—members of the board of trustees as well as the directors, de Vis, Hamlyn-Harris and Longman. They were all interested in evolution, and the new concepts proposed by Darwin included the evolution of man. Aborigines were regarded as representing ‘living exemplars of one of the earliest stages in the evolution of mankind. Their social customs and material culture were deemed an appropriate subject for museums which were fascinated by evolution’¹. Aboriginal anthropology was therefore seen as a branch of the natural sciences and it was displayed ‘in taxonomic classification comparable to (that of) fossils or fauna’¹. Eventually this view was to have an unfortunate consequence, for in the 20th century it alienated Aborigines, who did not accept that museums were protecting, rather than exploiting, the material evidence of their culture. Nevertheless it was a view that had ensured that aboriginal and other anthropological material was collected by the Queensland Museum and, indeed, by the museums of other colonies too.

Hair combs decorated with red, yellow and black dyed cane strips from Malaita, Solomon Islands, collected by Captain W.H. Lawrence master of labour-trade ships, and purchased by the museum in 1901.



European notions of a paradise in the south-western Pacific were an additional influence on much of the collecting from the islands to the east and north of Australia. Pacific cultural material—ranging from embalmed heads to ornate spears and elaborately carved figures—was acquired by curio hunters and in due course found its way into museums. In fact, Pacific displays in museums appear to have been merely collections of curios right up to the early 20th century. Gradually, as men saw the south-western Pacific as less than paradisaical, the emphasis changed and the objects were classified and fitted into an evolutionary sequence in much the way Aboriginal and other anthropological material had been from the first.



A ‘tomahawk’ from New Guinea donated on 24 April 1874 is the earliest record for the museum’s anthropological collections. However, the inventory signed in February 1876 by A.C. Gregory, the first chairman of the board of trustees, shows that at that date there were already 227 anthropological items—171 from Australia, six from Torres Strait, 15 from New Guinea, 25 from Island Melanesia and 10 from New Zealand. Thus, it is probable that at least some of this material had been acquired earlier than 1874. The status of these anthropological collections is clear: they

Previous page: Message sticks from the museum’s collection discussed by Hamlyn-Harris in ‘On messages and message sticks employed by the Queensland Aborigines’ (*Mem. Qd Mus.* 1918 6:13–36).

were relegated to the last section of the inventory — headed 'Curios, Machinery, Weapons and Furniture'.

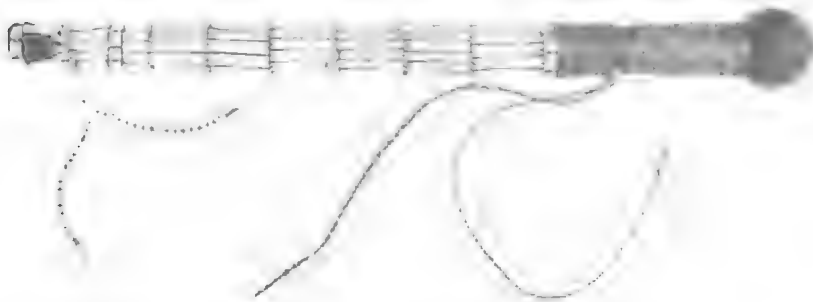
The South-west Pacific

By 1884 the anthropological collections in the museum had expanded to about 700 items, over half of which were from the islands of the south-western Pacific—a change had occurred in the ratio of Australian to Pacific collections from that of 1876 that foreshadowed a permanent bias. It reflected the growing interest of Queenslanders in the neighbouring islands and peoples as exploration revealed possibilities for trade, mineral deposits and cheap labour for the state's burgeoning sugar industry.



Wari hau ceremonial batons, South Malaita, Solomon Islands collected by Captain W.H. Lawrence master of labour-trade ships in the 1890s. Purchased by the museum in 1901.

The exploitation of these peoples for labour—the labour-trade—brought ships and men from Australia to the Pacific islands. Under government regulations each labour-trade vessel had to be accompanied by a government agent from the immigration department. These gentlemen were often reasonably well educated in the Victorian tradition, eager to do their bit for the advancement of science. They, in their turn, influenced the less scholarly ships' masters and both — often from the same vessel—collected zoological and, apparently as an afterthought, ethnological material which they offered as donations or for sale to the museum. Involvement in the labour-trade was often a violent and dangerous occupation, especially to the islander recruits, but also to the Europeans. Indeed, Douglas Rannie, previously a government agent and a donor, collector and librarian at the museum, noted that —



Whilst engaged on the work of classification (of the Queensland Museum collection) the names of former comrades as they recurred on the contributors lists recalled many pathetic incidents and associations of dear friends who sleep their last long rest beneath the waters of the blue pacific or whose lone resting place is known alone to the painted warriors of some savage isle².

Details are revealed in the records themselves: spear that wounded Captain J.W. Coath on the island of Espiritu Santo—18 March died 27 April 1874, donated by F.J. Pearce, government agent of the *Jessie Kelly* on August 12, 1874; the Ramparamp effigy from Malekula donated on 27 August, 1883 by Mrs Belbin the widow of Captain R.J. Belbin shot and killed on the neighbouring island of Ambrym the day after acquiring the item.

The major part of the museum's collections from the Solomon Islands and Vanuatu was acquired or collected (and donated later) during the period 1885–1906. Donors included senior public servants connected with



Ancestral board from a men's house at Maipua, Gulf of Papua, collected by Sir William MacGregor and transferred to the museum in 1894.

the immigration department, and politicians—notably Sir Thomas McIlwraith and Sir Samuel Griffith who were consistent political opponents not the least over the labour-trade issue.

The New Guinea Connection

This was the age of imperialism and annexation. Suspicion of German activities on the island of New Guinea, and perhaps a hope of more recruits for the labour trade, led to the declaration of the Protectorate of British New Guinea in 1884. The second special commissioner administering that protectorate from 1886 to 1888 was an ex-premier of Queensland, John Douglas, who was also on the museum board of trustees concurrently with his New Guinea appointment. Two collections were made during his administration, one for display at the 1886 Colonial and Indian Exhibition, London and the other for the Queensland Court of the Melbourne Centennial Exhibition of 1888. These collections were the beginning of a systematic sampling of cultural items rather than the random assortment of curios usually collected from this part of the world. In the end, the New Guinea collections represented a remarkable and almost unique archive of a people's 'lifestyle, which the collectors—mistakenly—believed to be entirely unaffected by western European incursions. The collections reflect foresight on the part of those who made them and an understanding of the true role of a museum—an understanding that is rarely found, even today.

The first collection, of some 178 items, was purchased by the Exhibition's Queensland commissioners—who included two museum trustees and the curator, and was intended as a donation to a proposed colonial museum in London. Fortunately, the collection was returned to Australia in error, and it was transferred to the Queensland Museum³. The colonial museum didn't eventuate in any case. The second collection was made by Anthony Musgrave of the British New Guinea administration at Douglas' direction and was intended for the museum after the exhibition had closed^{4,5}.

Meanwhile the protectorate had been replaced by another form of colonial government headed by a new administrator, Sir William MacGregor, an Aberdeen-trained medical practitioner with previous colonial experience in the Seychelles and Fiji⁶. Administration of the colony of British New Guinea was unusual in that it was divided between the Colonial Office in London and the separate self-governing Australian colonies of Queensland, New South Wales and Victoria, each contributing to its operation. All despatches to the Colonial Office were sent through the governor-in-council in Queensland. During the early part of his administration MacGregor looked to Queensland for aid in framing ordinances, auditing accounts and so on, so it was a normal occurrence for him to approach the Queensland government when he had to find a home for the collection of several hundred artefacts from Musgrave's collection at the close of the Melbourne Exhibition. MacGregor's intentions in regard to this collection were made in a despatch to Sir Henry Norman, governor of Queensland:

There was brought recently from British New Guinea a valuable collection of bird skins and there are other articles of natural history or ethnology collected by officers paid by the Government, and therefore public property. They are an asset of the Government of British New Guinea, as they have been procured by its paid officers but it does not appear to me that they should be kept in British New Guinea. It is therefore my opinion that it would be better that provision were made in the public museum in Brisbane for the

proper exhibition of New Guinea collections, as a separate and permanent branch of that establishment⁷.

Having received the agreement of the Queensland government MacGregor proceeded to have further large collections made under his direction. Initially these were zoological, the first ethnological consignment of 2876 items not arriving until October 1892. He later stated his reasons for undertaking this task:

The collection belonging to this Colony has been made with the object of it possessing as full a set of arms, utensils, products of different kinds, etc., as would illustrate its past and present position in the future⁸.

and again later he observed—

Timely warning has been taken by the omission by Fiji, Hawaii and some other places to secure collections.....of the natives before it is too late⁹.

Knowledge of these collections apparently reached the British Museum, for in late 1892 it requested through the secretary of state for colonies, Lord Ripon, that the British New Guinea administration aid it in the acquisition of ethnological collections from the Micronesian islands and New Guinea. MacGregor suggested that a catalogue of the collections in the museum should be forwarded to the British Museum for its consideration. Charles de Vis, the curator, appears to have stalled—he provided a manuscript catalogue that was forwarded to London. Augustus W. Franks at the British Museum complained that the catalogue gave insufficient detail¹⁰, and made a general request for items from a wide range of localities. de Vis pointed out that due to the reduction in museum staff—1893 being a depression year—he had ‘no longer the time to bestow upon’ the preparation of a systematic catalogue and that ‘until the catalogue is finished it would be injudicious to set aside for presentation to other museums any objects which until critically examined may appear to be duplicates. This has been done in cases which have been reported and regrettably mistakes have naturally been made in consequence’¹¹. He therefore recommended that the matter of the transfer of material to the British Museum be deferred, a conclusion with which the Queensland premier and Sir William MacGregor concurred. By that time MacGregor had amassed another large collection of 2136 items and this arrived in Brisbane on 1 August 1894.

During a visit to Brisbane that year MacGregor gained the impression, apparently in conversation with de Vis, that the museum understood it had the right to exchange specimens from the British New Guinea collections. He entirely dissented from this view, and formally notified the Queensland governor a year later that he regarded ‘the Curator and Trustees of the Queensland Museum simply as custodians of the British New Guinea collection and as possessing no power whatever to alienate any article in the collection’¹². Subsequent correspondence between MacGregor and the Queensland government over the next twelve months ended when the chief secretary Sir Hugh Nelson—also a donor— informed MacGregor that the government had ‘no desire to dispute the propriety rights of British New Guinea to these collections’¹³. However the chief secretary informed the governor (Lord Lamington)—

that notwithstanding their acquiescence in His Excellency’s (MacGregor’s) views as to the ownership of these collections, the Government are unable to regard with entire satisfaction the conditions which they are understood by him to maintain a separate



Shield from the Trobriand Islands, Papua New Guinea, collected by Sir William MacGregor and transferred to the museum in 1892.



Canoe washboard, Lower Fly River, collected by Sir William MacGregor and transferred to the museum in 1892.

and permanent branch of the Queensland Museum for the accommodation and care of property in respect of the accumulation of which they have no power or control.

He concluded:

it is thought desirable that His Excellency should be asked to propose some modification of his definition to the relations of the Trustees of the Queensland Museum to the British New Guinea collections which will not altogether leave out on account such powers as are generally understood to accompany trusteeship¹⁴.

Sir William MacGregor graciously modified his own stand in a despatch to Lord Lamington but he re-iterated his position in regard to the collection¹⁵:

The first and most important point is to make this official collection as complete as possible. To that I cannot but attach great importance, knowing as we do how seldom efforts are made to form a collection of that kind before it is too late. Its formation and preservation I have watched with jealous care, but purely as a public question and from the New Guinea point of view. I am now satisfied that it will be preserved intact and will not be broken up and dispersed.



Sir William MacGregor.

He then went on to suggest that the best specimens should be placed in the British New Guinea collection and that duplicates might be disposed of by the trustees, first to fill up vacancies in the national collection of the contributing colonies and in the British Museum and the remainder might be used as exchanges for the museum. These latter would 'be at the disposal of the Queensland Government as some acknowledgement for their co-operation in preparing and maintaining the British New Guinea Collection, without whose co-operation it could not exist'. Despite the fact that staff numbers had not changed since 1893 and that no catalogue had been completed, collections were assigned late in 1897: 949 items to the Australian Museum, Sydney; 833 to the National Museum of Victoria; 775 to the British Museum and 1635 to the Queensland Museum. The remainder comprised the British New Guinea collection and the museum's share of the duplicates, together with two further consignments that arrived in December 1897 and October 1898.

The British New Guinea collection of some 3000 specimens was not separately catalogued and, between 1908 and 1910, it was mixed with the museum's share and the duplicates, and the whole lot came to be known as the MacGregor Collection which in total comprised some 8000 specimens. This was to cause immense curatorial heartache in the future.

During MacGregor's administration in New Guinea 19 consignments of anthropological and zoological material (notably birds) were sent to the museum under the terms and conditions set out above. Anthropological items numbered 11,500, 'the most magnificent collection of Papuan specimens ever collected or ever likely to be collected'¹⁶. de Vis and other museum staff provided scientific appendices for inclusion in MacGregor's British New Guinea Annual Reports (see Chapter 8), but he was disappointed that the museum was unable to publish a printed catalogue of his anthropological collection. Later, during his term as governor of Queensland, MacGregor did have occasion to be pleased with the displays set up by Director Hamlyn-Harris.

Protectors and Collectors

Although the museum classified and displayed Aboriginal anthropological specimens, the staff actually collected ethnographic materials very rarely. During Kendall Broadbent's long service he made



Photograph from Wanigela Village, Collingwood Bay, Papua New Guinea, by Percy Money about 1904-1910. One of a series of 100 purchased by Hamlyn-Harris and used in the display of MacGregor material.


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Page from the MacGregor collection register catalogued by Rowland Illidge between 1918 and 1920.

only one small collection of 52 items from Cape York as early as 1884. Henry Tryon made minor collections in the Bunya Mountains and the Macpherson Range. A pattern had emerged for the Australian Aboriginal as well as the Pacific collections—a dependence on outside sources for acquisition.

A number of prominent Queensland residents were taking an interest in Aboriginal material culture. Notable among them were Dr W.E. Roth, Archibald Meston, Clement Wragge, Stephen Buhot, the Rev. N. Hey and J.C. Coghlan. Public servants, a missionary and a grazier, they were all donors or vendors of Aboriginal collections to the museum in the late 1890s and early 1900s. Between them they accounted for 77.5% of the total Aboriginal collections in 1910 (3027 items). In 1897 the first two were appointed, respectively, northern (later chief) and southern protector of Aborigines. They were all making collections that reflected a culture that was undergoing traumatic change as a result of the arrival of Europeans—the moving frontier had rolled over the Aboriginal people and they were already fringe dwellers.

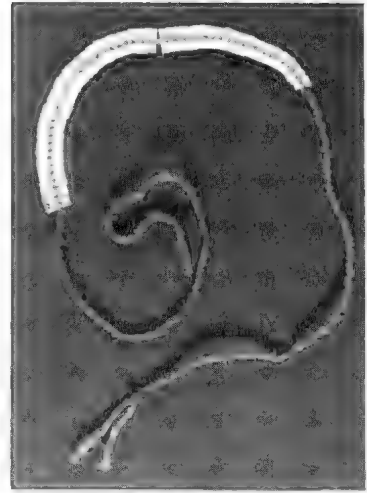
Roth, a scholar, carried out intensive ethnographic research in northern and north-western Queensland between 1894 and 1905. In a letter to de Vis he wrote: 'I am *trying* to do good scientific work.....my chief aim is to treat the northern ethnology from a comparative point of view'¹⁷. He also made collections 'I may tell you that I applied for and was



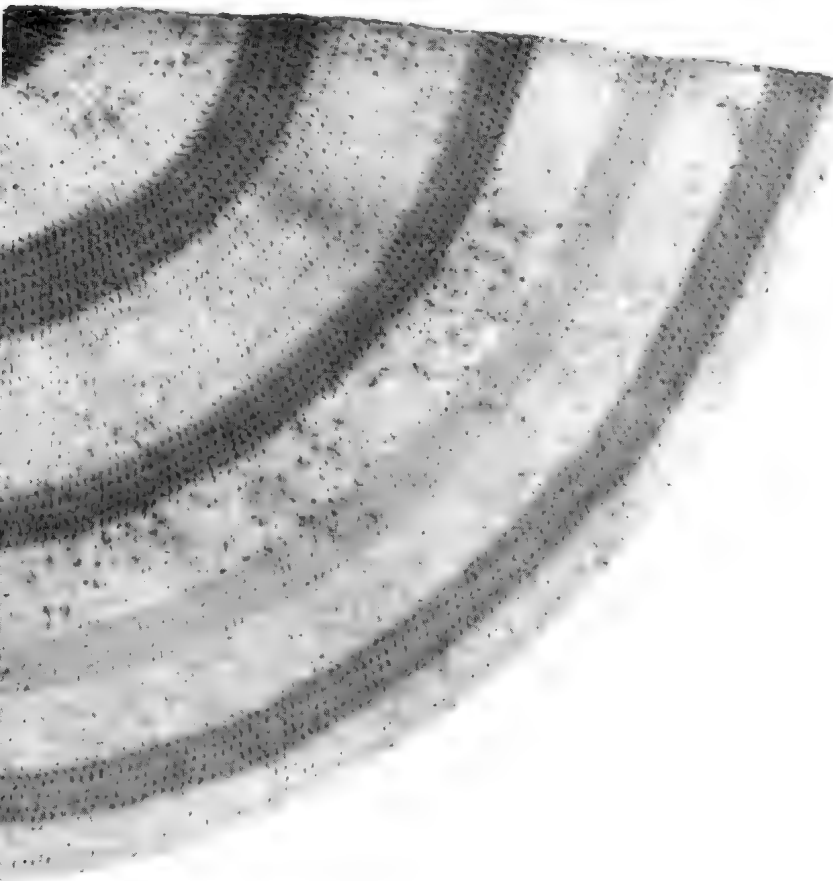
Pituri bag, used for carrying and storing pituri—a nicotine drug from the plant *Duboisia*, used and traded in western Queensland. One of 207 items purchased from J.A. Coghlan for £15.10.0 in 1897.

granted, a small amount of tobacco annually in order to purchase curios from the blacks for your museum'¹⁷. Between 1900 and 1903 Roth passed 330 well documented items to the museum; and the government, through the Home Secretary's Department, began publishing the first eight bulletins of his *North Queensland Ethnography*, as it had his earlier work *Ethnological Studies among the North-west-central Queensland Aborigines*. He resigned in 1905 amid some controversy which included his sale, to the Australian Museum in Sydney, of a collection of 2000 Aboriginal artefacts, a major part of which was certainly 'the property of the Queensland Government'¹⁸. Robert Etheridge indeed 'made a brilliant move.....when he acquired for the Australian Museum Roth's invaluable collections from Queensland and arranged for the (Australian) Museum to publish bulletins 9-18'¹⁹. It is not obvious why Roth would have abandoned the Queensland Home Secretary's Department as the publisher of his bulletins nor, indeed why he sold the specimens to the Australian Museum for £400—a large sum in those days. Certainly there had been rumours of his selling specimens as early as 1903 and perhaps he felt he had to leave Queensland. He may even have been concerned about the Queensland Museum's ability to conserve the material—de Vis, in 1905, being 76 and the staff then being reduced to four (see Chapter 3). However, if this was so, the mystery remains as to why he did not give, rather than sell, the collection to the Australian Museum.

While Roth was a professional scientist, Archibald Meston, at various times a member of parliament, journalist, editor and explorer, was, both



Necklace of mother-of-pearl stitched with fibre string, purchased from C.L. Wragge government meteorologist in 1900.





Ramparamp funerary effigy from Malekula Island, Vanuatu collected by Captain R.J. Belbin of the labour-trade vessel *Borough Belle* in mid-1883, donated by his widow following his death by gunshot on the neighbouring island of Ambrym.

before and subsequent to his appointment as southern protector of Aborigines, a collector and learned amateur. He was a keen observer but many of his published accounts were written thirty or more years after the events described. The museum acquired Queensland Aboriginal material from him between 1892 and 1907 and, as late as 1916, a further collection from Melville Island in the Northern Territory. Wragge, Queensland government meteorologist, was a man of completely different stamp who, in the course of his duties, travelled in the remote areas of western and northern Queensland and made large collections of Aboriginal material culture. He sold a large collection—in the vicinity of 900 items—to the museum in 1901.

Charles de Vis' major museological contribution began in 1892, when he started three separate anthropological registers—for New Guinea, for Australia and for the south-western Pacific Islands and elsewhere. They were numerical registers and the entries ranged from meticulous to slipshod, depending on workload and staffing levels. Importantly for later curators de Vis not only described items but he measured them too—in metric units.

After de Vis' retirement in 1905, C.J. Wild, in an acting capacity, directed a gentle slide into the doldrums. During this caretaker period donations were few although funds were found to purchase collections from Meston and Buhot. The new museum director, Hamlyn-Harris, was appointed in 1910.

The Hamlyn-Harris Approach

Ronald Hamlyn-Harris' appointment had particular effect on the museum's anthropological collections. He was the only director to profess a personal interest in ethnology and his influence can be seen in the collections, display, research and publication and public lectures.

As early as February 1911 he had distributed a printed circular to police officers (as protectors of Aborigines), missionaries and teachers in most centres of northern and western Queensland including the Torres Strait. The pamphlet sought their help in making ethnological collections for the museum. The replies were usually couched in the following terms 'Civilization has reduced the blacks in this district to a very few, who retain no weapons etc. of historic value'²⁰ and 'I am afraid so far as this District is concerned that I will be unable to accede to your request as the aborigines have been (such) a number of years civilized that they have abandoned using their native implements'²¹. However, collections were received that year from the more outlying centres of Croydon (Sgt Sullivan), Mapoon Mission (Rev. N. Hey), Turn-off Lagoon via Burketown (Const. E. Smith) and Mitchell River Mission (Mr H. Mathews). Collections continued to filter in over the next six years as a result of this circular and later there was some material from the chief protector of Aborigines and other correspondents from Weipa, Aurukun, Coen, Mornington Island, Cairns, Cardwell and Yam, Badu, York, Darnley and Murray Islands in the Torres Strait. The collections, together with a major purchase from the Cairns region made during Hamlyn-Harris' term, were the last major field collections of Queensland Aboriginal material culture made for the museum before the mid-1970s. Collections were also received from the Northern Territory notably Roper River, Melville Island and Port Essington. During this period over 2800 items were added to the Australian Aboriginal material culture collection—in seven years Hamlyn-Harris had almost doubled the Australian collections.

He also arranged for collections to be made on the Fly River in Papua

*All communications to be
addressed to the Director, R.
Hamlyn-Harris, D.Sc., F.R.M.S.,
F.Z.S., F.L.S., &c.*

QUEENSLAND MUSEUM,

BRISBANE, _____ 191

SIR,

The Director of the Queensland Museum, presuming upon your willingness to promote the growth of an Institution tending to the advantage and reputation of the State, respectfully begs your co-operation in his endeavours to further augment the collections under his charge, and in all Departments of the Museum.

The richness of this Country in objects of Natural History cannot be too fully represented in the National collections in their Mineral, Fossil, Animal, and Aboriginal Departments.

Since the Aboriginal Tribes are fast dying out, every effort should be made to acquire those symbols of the life of the original Australian inhabitants, whose rites, ceremonies, customs, and traditions are becoming obsolete and being entirely lost to us.

The Director, therefore, appeals to you in the confidence that you will take every opportunity of securing specimens of all kinds, and forward them to the Museum.

Instructions as to the best methods of preservation will be gladly given if desired.

I have the honour to be,

Sir,

Your obedient Servant,

(Signed) R. HAMLYN-HARRIS,

Director

Circular sent by Hamlyn-Harris to police stations seeking help with collections.

(Sir Rupert Clark Bt) and in various centres of occupied German New Guinea (W. Potter) and purchased collections from the Gulf of Papua (S.G. McDonnell) and the Solomon Islands and Vanuata (Mrs P. Tarnaros, C.A. Bernays).

A new museum-wide system of registration was introduced in 1911 Hamlyn-Harris followed the recommendation of the Etheridge report adopting and adapting the system used in the Australian Museum. Two registers were begun for anthropology early in 1911; QE for Queensland Aboriginal material and E for non-Queensland material. Later, in 1914, a third register—NGE—was introduced for New Guinea material. All incoming specimens were now documented and registered within days of their receipt by the museum.

In 1913 J.H.P. Murray the lieutenant-governor of Papua had again raised objections to the possibility of the museum exchanging items from the MacGregor collection and requested that a catalogue be prepared. Hamlyn-Harris vigorously denied that any material had been exchanged, stating that the collection had 'been zealously guarded and since I have been in charge not one single specimen has left the building'²². He agreed to compile a register and in fact £50 was placed on the Papuan government estimates for the financial year 1914-15 and sent to the museum to cover the cost of cataloguing. Two copies of a specially printed MacGregor (MAC) register conforming to the Queensland Museum format were purchased and paid for by the Commonwealth government. Compilation of the register began in 1915 but the work was laid aside due to depleted staff and the £50 was returned upon Hamlyn-Harris's resignation.

The Etheridge report had criticised the sad state of the anthropological displays especially the MacGregor collection 'The cases are crammed to repletion, the specimens roughly sorted and not a label!. Of what possible use is such a display?'²³. Hamlyn-Harris initiated a programme to modernize all the displays but particularly that of the MacGregor collection. He also supervised the construction of the diorama of the Aboriginal campsite which, with slight modifications, was exhibited until November 1985 (see Chapter 4).

Hamlyn-Harris was a marine biologist, not an anthropologist. In the manner of the time, this did not deter him from carrying out research and publication in anthropology. Some of this was pedestrian, some interesting and innovative and some archaic and still-born. Between 1911 and 1918 he published thirteen papers in the *Memoirs of the Queensland Museum* and a number of notes and comments in the *Proceedings of the Royal Society of Queensland*. Eight of the articles dealt with Queensland Aborigines, two with Torres Strait Islanders and four with Papua New Guinea and the Pacific Islands. Perhaps his most interesting and best researched project was a joint work with a chemist, Frank Smith, on fish poisoning and poisons used by the Aborigines of Queensland'²⁴. Here he combined his own talents with his wide range of informants who, at his request, collected the ethno-botanical specimens for the museum.

He was not a noted field worker, but he took the opportunity during a lecture tour to the north in May 1914 to do some collecting on Aboriginal campsites on Dunk Island and near Yarabah, the former in the company of E.J. Banfield—journalist and author—who lived on Dunk Island and was, perhaps, his most erudite correspondent and collector. In late 1915 he again made an archaeological collection from Aboriginal shell midden sites in sand dunes in the vicinity of Bargara near Bundaberg.

The series of popular science lectures at the museum introduced by



A necklace of reed beads strung on 2-ply fibre string from the Gulf of Carpentaria, sent by Constable Martin in response to Hamlyn-Harris' circular.

Hamlyn-Harris in 1912, as well as the lectures given in provincial towns, always included some anthropological titles such as *Primitive Man in Australia* (R. Hamlyn-Harris, 1912); *Manners and Customs of the Solomon Islanders* (D. Rannie, 1914); *Fossil Remains of Man* (A.B. Walker, 1916); *Aborigines and their Customs* (R. Hamlyn-Harris, Bundaberg 1915).

In his seven years Hamlyn-Harris raised the status of the study of anthropology within the museum, and consolidated and built up the collections especially from Aboriginal Australia. As a result the collections were, in so far as resources permitted, professionally documented and curated and the displays were classified and well labelled by contemporary standards.

The Longman Years, 1917-1945

Hamlyn-Harris resigned in September 1917 and was replaced by Heber Longman who had been his senior scientific assistant since 1911. Longman was essentially a palaeontologist, his only real interest in the anthropological field was in physical anthropology. He published one paper on human crania in the *Memoirs* in 1918, but a year later writing to Professor A.C. Haddon in Cambridge he noted 'my time is now so greatly taken up with routine and administration work that I am seldom able to work at the crania'²⁵. In fact, he published no further work in this area. However, he was assiduous in gaining human skeletal material for the collection, especially from the police, and in the early years of his tenure he continued many of Hamlyn-Harris' programmes. However, he gradually lost touch with most of his predecessor's anthropological correspondents except E.J. Banfield, with whom he remained in close contact until the latter's death in 1924.

In July 1918, the £50 cataloguing grant from the Papuan government was returned to the museum and Longman employed 'Mr Rowland Illidge, a well-known local naturalist'²⁶ to continue the registration of the MacGregor collection 'at a fee of £2.10.0 per week of 4 days working from 10 am to 4 pm excluding one hour for lunch'²⁷. He began in late September, compiling both a register and a card catalogue. In October Longman asked for and received a further £50 from the Papuan government for display case and storage furniture. He also envisaged a comprehensive printed catalogue prepared by an eminent 'specialist in ethnology' and he twice mentioned the name of Dr Bronislaw Malinowski in this context²⁸⁻²⁹ but was informed that he would not be available as he would be 'leaving for England at an early date'³⁰. Malinowski was one of the founders of the British structural-functional school of social anthropology³¹ and considering his later published comments, that he had 'always had a certain amount of impatience with the purely technological enthusiasms of the museum ethnologist and that he considered..... the fetishistic reverence for an object of material culture is scientifically sterile'³², it is doubtful whether he would have undertaken the job.

The registration task proved to be so great that Longman sought and received permission to use the Papuan government's extra £50 to continue paying Illidge instead of purchasing display and storage furniture. Later a further £10 was obtained before the project was completed in May 1920. Illidge made a copy of the register in 1922 for the sum of £12 and it was despatched to Papua. This copy appears to have disappeared from the Papuan government anthropologist's office and bungalow in Port Moresby when Australian militia troops rioted in February 1942.

Between 1919 and 1923 Longman continued to consolidate Hamlyn-Harris' display work. New labels were prepared and all display items,



A bag from the rainforest in the Cardwell area, sent from Constable Creedy in response to Hamlyn-Harris' circular.

particularly Queensland Aboriginal material, were re-registered. A large proportion of the reserve collections in storage were also re-registered to the QE and E registers between 1924 and 1928.

Anthropological material donated or purchased during Longman's time included a number of important collections notably from Dutch New Guinea—Irian Jaya (H. Jackson 1920), the large Dr C.F. Marks collection from Australia, New Guinea and the Pacific Islands (1920), the Lee Bryce collection from North Queensland and Papua (1921), the Hartmann collection from the Port Moresby region collected in 1887 (Toowoomba City Council 1924), the Skertchly collection of European palaeolithic implements (purchased 1926), the Denning collection from Fiji (purchased 1935), the Archbold Expedition collection from the Fly River (1937), the Petrie Family collection from the Brisbane area (1939) and the W.S. Chaseling collection from eastern Arnhem Land (purchased 1940).


Rainforest sword clubs illustrate the adaptation of a new artefact for a traditional use. *This page*: the traditional article, collected in 1900; *opposite page*: a sword club made from a cross-cut saw blade, collected in 1915.



G.K. Jackson was appointed as a cadet in October 1937. He was a naturalist with an interest in Aboriginal anthropology especially developed during two years he spent in southwest Queensland before joining the museum staff. He took over the day to day running of the anthropological collections, becoming responsible for registration of incoming material, working on displays and providing public information. He collected archaeological material from sites in southern Queensland and published a number of small papers in *The Queensland Naturalist* and the *Memoirs*. Ken Jackson joined the 2/9 Battalion AIF in October 1939 and served with it in the United Kingdom, North Africa, Syria and New Guinea. During his service he visited as many museums as possible and even made collections in Egypt, Syria and New Guinea. His absence from the museum had a particularly detrimental effect on the anthropology collections. Longman noted in a letter to Chaseling—the missionary from Yirrkala in Arnhem Land who had sold, at cost, significant collections to many Australian museums—'As Mr Jackson of our staff, who is in charge of this section, is abroad with the AIF, we shall not be able to do much until his return'³³. Lieutenant Jackson was killed in action in the 'swamps of Sanananda' on 12 January 1943. In his will he left his private collection of 126 anthropological items from Australia and the Pacific to the museum. Unfortunately his service revolver, also donated, was stolen from the display gallery in a burglary in the 1970s. Due to war-time exigencies Jackson's position, for which he had been credited with yearly salary increments, was not filled after his death. Longman referred to this in a letter to Colonel J.K. Murray, head of the Army School of Civil Affairs (later first administrator of the Territory of Papua and New Guinea) 'As we have at present no specialist on our staff who is able to give full time to ethnology, I regret that I am unable to give more assistance'³⁴. Storage space had also become a problem. In 1944 Longman was forced to exchange a valuable Mornington Island raft with the South Australian Museum because the museum had 'no storage space for it'³⁵. In exchange the museum received two plaster casts. Longman, now suffering from ill health, retired in late 1945.

A Bleak Period, 1946–1965

Between 1946 and 1960, during much of George Mack's administration, the position of the anthropological collections was bleak. Only a small proportion of the material donated was registered, consequently some documentation has been lost. Ursula McConnell's important collection from western Cape York, which had been deposited on loan from the Australian National Research Council in 1935, had to be sent to the South Australian Museum in 1948 because the museum felt unable to store it adequately, was not interested in displaying it, and could not provide an avenue for publication. McConnell published her paper 'Native Arts and Industries on the Archer, Kendall and Holroyd Rivers, Cape York Peninsula, North Queensland' in the *Records of the South Australian Museum* in 1953. Some of McConnell's material however was passed to L.P. Winterbotham of the Anthropological Society of Queensland. That same year Winterbotham founded the Anthropology Museum at the University of Queensland, under his honorary curatorship. During the next decade and a half, that museum, with the help of the Anthropological Society became the centre for museum anthropology in Queensland. The Queensland Museum all but withdrew from the area, maintaining its own substantial collections but not actively seeking donations and carrying out field work only in emergencies. Storage conditions did not improve—to a request from an American postgraduate student for information on the number and locality of tapa cloth, Mack replied 'the way in which it is stored make it almost impossible to state what there is in the way of tapa cloth'³⁰.



Mack was certainly conscious of the importance of the collections in his care and indeed had endeavoured to obtain the services of a professional anthropologist to curate them. However, having convinced the public service commissioner of the need for such a position, it was some time before he could make an appointment owing to the lack of qualified people in Queensland. In April 1953, M.J.C. Calley, an honours graduate in anthropology from the University of Sydney was appointed assistant in anthropology. There was an immediate clash both of personality and theory. Calley was a social anthropologist of the British school and Mack an old museum man. Calley resigned after four months to continue postgraduate study and, before his premature retirement and death, became a reader in anthropology at the University of Queensland. Ironically, he was one of those instrumental in ensuring that the university's anthropology museum was professionally staffed and housed in modern purpose-built premises in 1972.

Mack made no attempt to fill Calley's position. For the remainder of his directorship the anthropology collections were curated by the director himself or by geologists, J.T. Woods and, after 1960, A. Bartholomai, both helped by museum assistants, notably B.J. Smith. From 1960, staff increases allowed some field examination of archaeological sites. Bartholomai together with photographer Stan Breeden surveyed and later published two Aboriginal stone arrangements on the Darling Downs in 1960. Mack himself made one trip to Carnarvon Gorge and Injune in 1961 and preparator D. Vernon with Smith collected on Mapala Station in 1963.

When Jack Woods became director in February 1964, he moved speedily to appoint a curator of anthropology. The position was advertised late that year, but Woods anticipated difficulties, as he indicated to R.V.S. Wright of the Department of Anthropology, University of Sydney, 'While I realise that a suitable applicant may be difficult to find, I am very keen in getting this position filled if at all possible'³⁷. Eleanor Crosby, then a temporary lecturer at the University of Auckland, was finally appointed in April 1965. Her MA thesis commitments however delayed her arrival in Brisbane until October 1965. Meanwhile field inspections of sites continued to be made by other staff. A. Bartholomai and T. Tebble examined Aboriginal stone arrangements in the Emmet district in May 1964.

Putting Things Right, 1965-1985

When Eleanor Crosby eventually arrived she began cleaning and checking the collections, and registering the 19th century material — untouched since 1929. In fact, she tried to unravel the mysteries brought about by years of neglect. In two years Crosby and her assistant Penny Wippell added over 3000 entries to the anthropology register (in contrast to 266 entries between 1946–1960 and 709 entries between 1961–1965).

As the first permanent professional curator she also faced an enormous problem in the collection storage area. The collections were located in a number of separate nooks and crannies about the building; the storage furniture itself was inadequate, most of the collections being housed in galvanised iron storage tanks and old display cases, although a small number of custom-built, lightweight and insect proof wooden cupboards and drawer cabinets were in use. The mechanical damage due to overcrowding coupled with the lack of a conservator caused her much concern.

Because of the perceived need to concentrate on collection management and the limitation on funds, research opportunities were few. However, Crosby carried out archaeological fieldwork in the Condamine River, Taroom and Carnarvon Ranges in 1966 and on the Warrego River around Wyandra in 1967 and these trips resulted in research reports in the *Memoirs*. Some display projects were undertaken in conjunction with display staff, the most notable being the mini-diorama of the Samford Bora ring (see Chapter 4).



Eleanor Crosby, curator of anthropology, and Mary McKenzie, artist, measuring dimensions of the Samford Bora Ring, 1965. Penny Wippell, assistant in anthropology is standing at right.

Frustrated by the work situation, the lack of research opportunities, unequal pay for female professional staff and the possibility of forced resignation on marriage, and suffering a feeling of professional isolation—that could have been alleviated had the Queensland Public Service had a less parsimonious attitude towards professional development through conference participation, Eleanor Crosby gave three months notice of her resignation in early September 1967. She completed her PhD at the Australian National University in 1973 becoming a curator at the Northern Territory Museum and later a consultant archaeologist.

Michael Quinnell took over in February 1968. An honours graduate in archaeology from the University of Sydney, he had previous museum and field experience in Australia and India. Despite Eleanor Crosby's endeavours the collection management situation was still very grim. A mezzanine floor in the anthropology section, built after Crosby had left, created a little more space but there were no new storage units to use in this space.

Problems of collection management dominated staff activity for the next few years. Crosby's forecast in her letter of resignation—that there



Geoffrey Mosuwadoga, director of the Papua New Guinea National Museum, and Quinnell discussing the return of specimens from the MacGregor collection to New Guinea.

was at least three years work on the older collections—proved reasonably accurate. Some 4500 register entries were completed between 1968 and 1970 and another 1500 over the next five years. Inadequate storage proved to be a longer term problem. As the 1972 annual report pointed out 'The storage capacity for the anthropology collections has now reached an optimum. In the present space situation any further introduction of storage units will impinge on the already overcrowded work and office space, even though the storage is still inadequate'³⁰. The overcrowded storage, poor conditions including the lack of controlled environment, increased use of the material and lack of conservation facilities that were putting such strains on the collections and were so detrimental to their condition were alluded to in the Piggott Report¹. There was an improvement in 1976 when Australian ethnography, now a separate section under R. Hardley, moved into the south wing of the building that had been vacated by the Queensland Art Gallery. The Melanesian anthropology and Aboriginal anthropology and archaeology collections expanded into the new storage cabinets that by 1979 filled the recently acquired space to



Quinnell with artists Mary McKenzie and Eloise Gehrman (right) cleaning chalk marks off rock, Scrub Creek Aboriginal engraving site.



Stencil art, Carnarvon Gorge, recorded by a museum party led by Quinnell.

capacity. Storage was no longer at crisis point — it was merely inadequate. The unavoidable damage that occurred, due to crowding and lack of environmental controls, emphasised the need for conservation facilities and trained staff. The appointment of a conservator, Neville Agnew, in 1980 and the slow build up of a temporary laboratory over the next few years has only begun to address the effects of half a century or more of neglect.

Meanwhile the MacGregor collection again came to notice. As early as 1969, questions were being asked by members of the Territory of Papua and New Guinea administration about the ownership of a number of anthropological collections held in Australian museums. The matter was raised at the 1970 and 1972 meetings of the Conference of Australia Museum Directors by representatives of the Papua New Guinea Museum. Quinnell had been independently researching the origins of the MacGregor material as part of a collection management exercise and this led him, in 1973, to an intensive examination of source materials in museum, state and commonwealth archives. Legal interpretations of these documents resulted in the announcement by the Queensland premier in late 1974 that, in principal, the collection would be returned when the new Papua New Guinea National Museum building in Port Moresby was completed and that both museums would confer on the selection and transfer of the collection. Informal and cordial discussions at curatorial and directorial level, initially with expatriate staff, were then instituted and continued for a number of years. Close relations were established, and Director Alan Bartholomai was an official guest at the opening ceremony of the Papua New Guinea National Museum in its completed building in 1977. By this time the Papua New Guinea staff had taken control and a typical Melanesian consensus was achieved when, in mid-1979, agreement on cataloguing and selection procedures was concluded. A pilot selection of shields from the MacGregor Collection to be returned to Port Moresby was made in February 1980 by the Papua New Guinea Museum director, Geoffrey Mosuwadoga, and the Queensland Museum's curator, Quinnell. At the same time a joint meeting of the boards of trustees of the two institutions was held to formally conclude the agreement whereby a substantial portion of the collection would be returned to Papua New Guinea, while that part of the collection to be retained in Queensland, in keeping with Sir William MacGregor's instruction, would have a separate identity in the museum collections and would be maintained in perpetuity for education and scientific purposes. By 1985 six selections had taken place, some 2100 items being returned to Papua New Guinea and 1697 retained by the Queensland Museum. In the vicinity of 4000 items remain to be selected in this continuing cooperative programme.

In 1968 the anthropology and archaeology section of the museum was responsible for Melanesian and Aboriginal ethnography — the extant cultures and lifestyles — and archaeology — past cultures and lifestyles. It was staffed by the curator and one assistant and was even further overloaded by the negotiations about the MacGregor collection. In particular, the items that comprised MacGregor's Papua New Guinea collections which, between 1908 and 1910, had been mixed with the museum's share and the duplicates, had to be identified. An extra assistant, Janet Buhmann, was appointed in 1974 to concentrate on the indexing and stocktaking of the MacGregor collection. She was succeeded by Arthur Palmer who between 1976 and 1979, not only continued her work, but also photographed each item.

Meanwhile, in 1974 Richard Robins was appointed on a 12-month grant from the Australian Institute of Aboriginal Studies to catalogue Aboriginal ethnographical collections. Roger Hardley, who had succeeded Wippell in 1968 as the permanent assistant in the section, had begun to specialise in Aboriginal ethnography. When, in 1975, Aboriginal and Torres Strait ethnography became a separate section, Hardley became its curator. Julia Findlay, a graduate in anthropology, assisted him from 1982 to 1985, specialising in Torres Strait material.

Thus from 1975, some of the load — Aboriginal ethnography — had been lifted from Quinnell's shoulders. However, he was still deeply involved with the Papua New Guinea material, and Aboriginal archaeological items were being rapidly acquired by the museum as it was now the official repository under the *Aboriginal Relics Preservation Act 1968*. A solution was found by appointing an archaeologist to the position vacated by Palmer. Thus Robins, who had been working in the archaeology branch of the Department of Aboriginal and Island Affairs since leaving the museum four years earlier, was reappointed to deal with Aboriginal archaeological collections. Norma Richardson succeeded Robins in 1984 and, with two Aboriginal trainees, Lori Richardson and Shane Rawson, implemented the system Robins had developed.



Quinnell (*centre foreground*) surveying Aboriginal rock shelter, Oakey Creek, Carnarvon National Park.



Joint museum and University of Queensland archaeological excavation in south-eastern Queensland in 1968.

In the Field, 1968-1985

Despite the pressures of collection management, the sections of Australian ethnography and of anthropology and archaeology carried out field work throughout the state from the time they were established.

Archaeological investigations by Quinnell between 1968 and 1970 were confined to local small-scale excavations on the Gold Coast and surveys and site examinations for the Department of Aboriginal and Island Affairs — at Cooktown, Townsville, the Carnarvon Ranges, the coast and its hinterland both north and south of Brisbane and on Stradbroke Island. During the survey on Stradbroke Island Quinnell was detained by the police after he had been reported as behaving suspiciously with a coloured stick — a painted surveyor's ranging pole. In 1969 he recorded Aboriginal rock art near Gatton. Then, in a series of eight field trips between 1970 and 1975 that were funded by grants from the Australian Institute of Aboriginal Studies and the Department of Aboriginal and Island Affairs, Quinnell recorded and researched Aboriginal rock art in the Carnarvon Ranges. Museum photographer Allan Easton usually accompanied him on these trips. This work 'yielded a detailed description of a Central Queensland art body and defined the general framework for future work in the area'³⁹. In 1975 Harley participated in archaeological work on Moreton Island.

In ethnographic field work between 1975 and 1977, made possible by grants from the Aboriginal Arts Board of the Australia Council, Harley photographed and documented items of traditional and transitional material culture at the Edward River settlement on Cape York (with Easton); at Mornington Island and Aurukun; and at Kowanyama, Bamaga and Thursday Island (with Palmer). Palmer participated in a Queensland Museum-Queensland University Anthropology Museum ethnographic investigation in the Kimberley region of Western Australia.

Archaeological surveys and excavations were also conducted by Robins on Moreton Island in 1979 and 1980; and between 1980 and 1983 he began ethnoarchaeological work in north-west Queensland at Lawn Hill Gorge, on the Wellesley Islands, at Wujal Wujal on Cape York and at Doomadgee. Findlay participated in ethnographic field work in the Tully area in connection with preparations for a new Aboriginal display. Grants from the Australian Heritage Commission to re-examine and document



Michael Quinnell, curator of anthropology from 1968.

archaeological sites from which the museum already held items became available from 1980 to 1985 and funded the appointment of Norma Richardson and after her appointment to the permanent staff, the appointment of her successor Harvey Johnston.

Maintaining an interest in Papua New Guinea, Quinnell made field collections there during 1983 and made arrangements for the Papua New Guinea Museum to collect material for the museum in the future.

During these years most collection-based research by staff has been carried out as part of collection documentation procedures. An example of work of particular significance is that of Robins, Buhmann and M. Cause on the identification of woods used in Aboriginal spearthrowers. This demonstrated some of the inbuilt biases in museum collections that were made from a society undergoing rapid change. This is in part due to the museum's past role as a passive rather than active collector, dependant on donors from all walks of life who (with the exception of W.E. Roth) 'had no anthropological training and were neither sympathetic nor responsive towards the complexity of aboriginal society'. The collections show a bias 'towards the secular, technologically curious and materialist aspects of Aboriginal life'⁴⁰. For instance, while spears, boomerangs, stone axes and ceremonial objects were prized objects to these collectors, the simple humble objects of the people's lives—the objects used by the women, such as their digging sticks, were largely ignored.

Change, a continuum

No culture is static, for change occurs continuously. In indigenous Australian Aboriginal and Pacific Islander societies, influenced by European cultures and 20th century technologies and political and religious philosophies, change has been, and continues to be, rapid. These societies have gained high profiles in the world—overseas colonies have become nations and, in Australia, European cultures and peoples are changing too. Dynamic and adaptive societies respond to internal as well as external stimuli and cultures change accordingly.

The objects in museum anthropological collections are the raw data from which information can be derived about a culture now and in the past and about the modes, rates and directions of change. Collectors' backgrounds affect the content and context of the collections and the regions represented; and the perceptions of the observer are subjective—affected by personal and cultural influences. However, the objects themselves are real and true and the information that is contained in them is accurate and objective—for they are the material evidence, free of the interpretive ambiguity and the bias of written records.

A museum does preserve the evidence and the information but it does not preserve a culture, for a culture is a product and a part of a people's lifestyle.

When it moves to its new accommodation in South Brisbane the museum itself will be changing—by increasing and improving access to the collections and the information contained therein. Increased access will lead to increased participation by the community, and particularly by Queensland Aboriginal and Torres Strait Islander people, in research, education and display. Thus will they satisfy their needs to identify with their own cultural past and present and will recognise their part in the continuum of their peoples' histories.



Ceremonial mask, named Gasama, made by Ambram of Marawat Village, Yuat River, East Sepik Province, Papua New Guinea. Collected by P.J. Hallinan in 1982 and purchased by the museum in 1983.





11

MAN AND MACHINES

History and Technology



The members of the new colony who sought intellectual stimulation from one another at meetings of the Philosophical Society were interested in, and presented papers on, a wide range of subjects, including the technology of the day. William Pettigrew, one of the mechanically minded members, spoke on drainage, shipbuilding, railways and timber, usually illustrated by models. Charles Tiffin, colonial architect responsible for the first Brisbane Hospital building on its present site, gave an important paper on earth closets—one then on trial at the hospital he had designed himself. John Waugh, a medical practitioner spoke on spectrum analysis with a demonstration of his spectroscope; James Thorpe spoke on meteorology; and William Brookes on cotton growing in Queensland¹. However, this interest in technology did not extend to the collection of objects of a technological nature. With the exception only of the microscope donated by Tiffin and some stereoscopic photographs donated by Daintree, the society's collection consisted solely of natural history items. The first permanent staff member, Custodian Karl Staiger was also the government analytical chemist, but although he gave several papers on technological subjects as a member of the Philosophical Society he does not appear to have seen the museum in the context of technology. The staff members who succeeded Staiger were geologists and zoologists and the emphasis on natural history collections persisted—an emphasis that was reinforced in 1910 in the report to the premier by Robert Etheridge jnr, director of the Australian Museum in Sydney².

Curios, Machinery, Weapons and Furniture

As early as April 1881, the board of trustees had decided to press the government to allocate funds for a technological branch of the museum, but nothing further seems to have happened at that time. By 1884 there was no space:

There are many subjects of public interest which the Museum fails to illustrate for want of room. Mining appliances and processes, metallurgy, chemistry and its trade products, raw and manufactured materials of food and clothing, building materials, textiles and textile materials and wares—these with others should be sufficiently represented to assist in the rise and progress of colonial industries but they demand space³.

Nevertheless, the shortage of space did not affect the expansion of the zoological, geological and ethnographic collections. Lack of space was a rationalisation—the excuse given for the fact that the development of technology collections was low on the list of priorities for the museum. Despite this, technological and historical items were gradually being acquired.

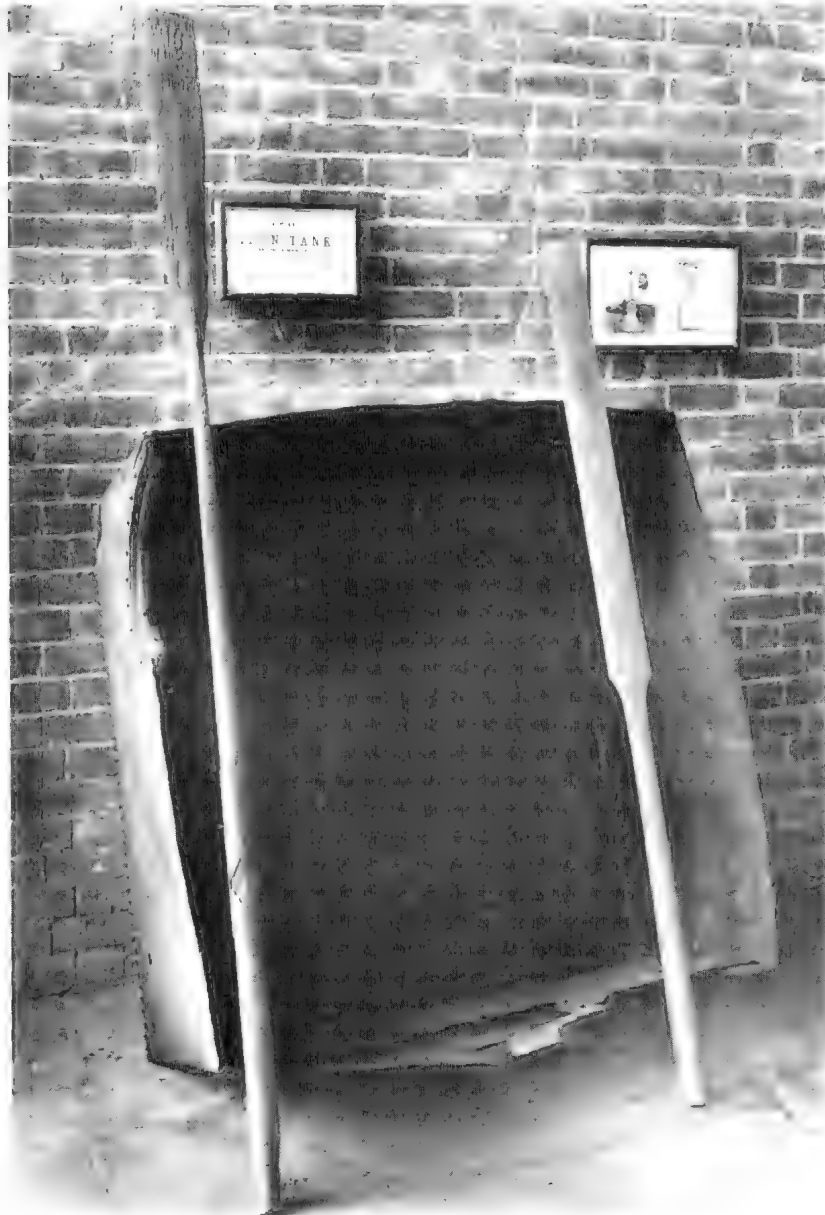
The first technological items in the collection came in 1873, from Richard Daintree. As government geologist for north Queensland he had gained a wide knowledge of the geology and the potential for mining. When he became agent general for Queensland in London he helped to promote mining development in Queensland by sending to the museum five cases of models of mining equipment then in use in the Cornish tin mines⁴.

The next reference to items of historical and technological relevance occurs in the earliest surviving complete inventory of the collection, carried out in 1876 for the board of trustees⁵. Among the mineral and natural history specimens listed there is a single section entitled 'Curios, Machinery, Weapons and Furniture', which lists 36 objects belonging to

Previous page: Attendant Len Taylor, with Bert Hinkler's AVRO *Baby* before its restoration by the Queensland Aero Club (photograph by courtesy the *Courier-Mail*).

the areas now covered by the history and technology section. The first two, a pair of 'Hindoo' bracelets and an English knitting sheath, are still in the collection. Some of the others lack sufficient description to allow certain identification. An ivory Chinese pagoda donated by Mrs J. Stephenson in September 1883⁶ is also still in the collection and has featured in various displays over the years. An additional Chinese item was acquired in April 1898 when the board made one of its few purchases for the history collection—a Chinese mandarin's suit from Captain W.H. Blake for £5. Over the next few years Captain Blake provided the museum with further interesting examples of Chinese crafts and items collected during the Boxer rebellion.

In 1887 a fine donation of ancient pottery and glassware, collected in Cyprus by Mr S. Brown, a member of the British team excavating there, had been presented to the museum by his sister, Iris Brown. Seeking a



On display on the verandah of the museum in 1922: Mary Watson's water tank, in which she, her baby and a Chinese servant fled from Lizard Island.



Mephisto, World War I German Tank A7V Kampfwagen. *Above*: at Vaux, France, after its capture; *centre*: arriving in Brisbane; *below*: hauled into the museum grounds by two City Council steam rollers in 1919.

better representation of the material being excavated in the Middle East, Director de Vis wrote to the director of excavations, Beni Assan, in April 1904, applying for a share in the distribution of Egyptian antiquities⁷. A promise was received that the museum would share in future finds. Shortly after, a collection of Egyptian pottery was received, although whether or not it was in response to the initial request is not known. It was excavated at Esna and Hierakonopolis for the University of Liverpool by John Garstang, and accessioned, without description, in the donor register as D 72673, dated 21 August 1905. Subsequently, this Egyptian material was mistakenly reaccessioned with the Cypriote items donated in 1887. It was not until 1981, when an inquiry was received from the Department of Egyptology at University College, London, that the mistake was discovered and the two collections were once again correctly attributed.

Although much of the material added to the collections at this time was donated, the director and the board did make some effort to develop the museum's technological and history collections. However the nature of many of the items acquired — donations as well as those that the museum bought — suggests that Australians did not regard their own artefacts as particularly interesting or significant, while objects from the Orient and from archaeological sites in the Middle East did excite their curiosity and interest. Further, apparently Queensland was seen in the context of an English colony and, in the first instance, the trustees invariably sought help from the great museums in London. At this time the museum's role was regarded as primarily educational rather than archival.

Toward a Technological Branch

In 1880 the new curator, W.A. Haswell, corresponded with the colonial secretary proposing that measures be taken to obtain specimens (in England) for a technological branch of the museum⁸. However, with Haswell's resignation at the end of that year the proposal lapsed for several years. Haswell's successor, de Vis, had developed some technology exhibits for the Manchester Natural History Museum before he came to Australia⁹ and he set about developing similar displays in Queensland. He obtained samples of local wool for the proposed technological branch, and he had some success in persuading the board to further actions. de Vis' influence can be seen in the board minutes of 7 November 1882:

In view of the importance of establishing a technological branch of the Museum it is suggested that application be made to the Science and Art Department, South Kensington, for a grant of the publications issued by it, also of such illustrations of the materials, constituents and adulterations of food and of the components of the body as it may be disposed to offer.

Again the response to the request took some time. In July 1885 the board requested that details be obtained of progress in forming the food and adulteration collection — three years after the initial request¹⁰. By April 1886 the curator was able to report that a food collection was being prepared in London for the museum. It finally arrived in 1887¹¹.

In June 1886 a W.A. Allen contacted the museum offering help in the formation of a technical museum. At the board meeting at which the offer was considered the following statement of intent was made¹²: 'Provision having already been made for a food collection, it is thought advisable to add a collection of drugs and other objects of technical interest which might be transferred to a Technical Museum if such should at any time be established'. This is the first comment from the board on the possibility of

a separate technology museum. At the same meeting the curator was authorised to procure photographic apparatus for the museum for research.

During 1888 the museum arranged to obtain standards of weight and volume through the agent general in London¹³ and it maintained responsibility, in Queensland, for weights and measures for many years after.

There was only a small amount of Australian material received during these early years. In 1887 Elizabeth Coxen presented a portrait of her husband, Charles Coxen, founding father of the museum. At the end of 1888 a significant addition to the small technology collection, the model of the Queensland government's new steam yacht, *Lucinda*, was placed on display¹⁴. A model of cattle station yards, prepared by Mr F.A. Blackman, was on display at the museum briefly, before shipment to London for the Colonial and Indian Exhibition in 1886. In April the next year, Mr Blackman donated the yards, now safely returned from England, to the museum where they have been regularly displayed ever since. Blackman became a member of the museum board of trustees in 1891.

In the museum board's annual report for 1888 Curator de Vis once again referred to the view that lack of space prevented development of the technology collections. de Vis stated 'the proposal to establish a technological department must remain in abeyance from sheer want of space'. This was the last mention of the possibility of a technological section for some time, as the state moved into a period of severe financial depression in the 1890s. The application of technology to the museum's general operation continued, however, with approval for the curator to purchase a typewriter in October 1892.

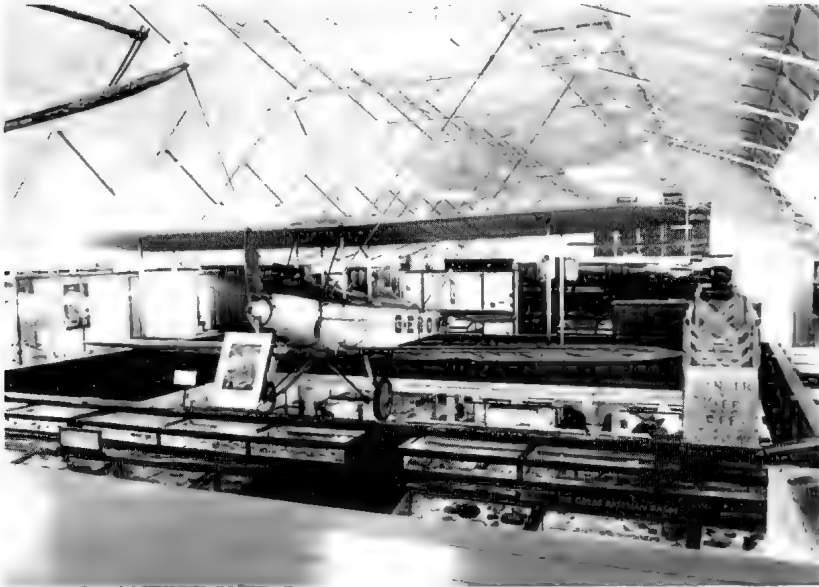
In December 1894, in another effort to improve the technological collections, the curator requested, through the agent general in London, specimens of porcelain products from Sir H. Doulton & Co.¹⁵. A competitor for items that were of interest to the museum now appeared. At the same board meeting, in April 1895 at which a favourable response from Doulton and Co. was received, it was reported that —

The AVRO *Avian Cirrus* flown on the first solo flight from England to Australia by Bert Hinkler. Acquired by the museum in 1929.



By order of the Colonial Secretary, issued with the consent of the Secretary for Public Instruction, the portrait of the Queen, the bust of Justice Mein and the vase of Doulton Ware heretofore in the Museum had been removed to the National Art Gallery, no letter of request or of acknowledgement having been received¹⁶.

C.S. Mein, had been a prominent member of the Philosophical Society from 1869. As minister for Public Works he had supported the moves for a museum building and when that failed had appointed Coxen honorary curator in 1871. Since this was the event that signalled the government's commitment to the museum, C.S. Mein could be said to one of the more significant people in its history. The bust of Mein was therefore an artefact that was of particular relevance to the museum's collection. Although the trustees received an apology, the items stayed in the art gallery. Overlap of interest in the area of decorative and applied arts between the



The AVRO *Avian Cirrus* on display in the Exhibition building from 1929 until the museum closed in November 1985.

Queensland Museum and the Queensland Art Gallery had begun and has continued over the years, though generally on more amicable terms than those of this inauspicious beginning.

In fact, in 1930, the Queensland Art Gallery moved into the concert hall section of the Exhibition building in Gregory Terrace. For the next 44 years it was the close neighbour of its sister institution, the museum—by then installed in the exhibition hall and basement of the same building. That the institutions co-operated well is illustrated in a remarkable incident that resulted from the vigilance exercised by the museum's chief preparator, D.P. Vernon, and culminated in the art gallery's acquisition of one of the state's most treasured works of art¹⁷. Vernon found, in the basement of the museum, a beautiful red wax, bas-relief sculpture, glazed and in a gilded, though shabby frame. On it, a pencilled note, possibly of Longman's—the director from 1918 to 1945—read: 'cf. Bologna Italian late 16th century'. Mack, the director at the time, received advice that the sculpture was not of any importance. However, Vernon's belief in the pencilled attribution persisted. He cared for the sculpture, and eventually, in 1965, the director of the art gallery discovered, following correspondence with the Victoria and Albert Museum, that Vernon was right. It was, indeed, the lost model called *The Flagellation of Christ*



One of the treasures from the Queensland Museum's horological collection, a bracket clock by the area clock maker Thomas Tompion, London. It was made in the early 18th century and presented to the museum in 1961 by Mrs. A. H. Marks.

created by Giovanni de Bologna, a contemporary of Michelangelo. Originally it was one of six wax models that were later cast in bronze for the Grimaldi Chapel in Genoa. The sculpture was presented by the director, J.T. Woods, on behalf of the museum, to Sir Leon Trout who received it on behalf of the art gallery on 1 December 1965.

Following the move of the museum to the Exhibition building during 1900 the curator's report of January 1901 detailed the layout of displays. His comment that 'Our industrial materials are not represented as such in any way' gives an indication of the museum's lack of success in building up a satisfactory collection for its intended technological branch in spite of the avowed intention, expressed repeatedly over the years, to do so. Despite this overall failure many significant items were preserved through the museum's effort during the latter part of the 19th century. With the move into the new building and the 20th century things did not improve markedly.

In August 1903 a number of manufacturers' samples, collected in England by the agent general, were displayed at the National Association Show by the Geological Survey Department¹⁹. These items were suggested as forming a good beginning for an industrial department of the museum. The question of soliciting more items was raised at a board meeting in the expectation that the concert hall space in the new premises would be handed to the museum in a few months²⁰. Neither happened.

Soon after Hamlyn-Harris took over as director in 1910 he initiated a new series of collection registers, including the A register, which started on 25 February 1911. This register included many of the items of history and technology in the collection, as well as archival and photographic items that had previously been recorded in the donor registers, or had not been recorded at all. Oddly, it also included natural curios such as the inevitable two headed chickens beloved of early museum visitors. Thus, although the A register is not an entirely reliable guide to the rate of increase in historical and technological collections, it does give some indication of their growth. At the end of its use in August 1966 number A4519 was the final entry. The rate of growth of the collections had been very slow indeed and there is, regrettably, no evidence that Hamlyn-Harris applied the same diligence to the historical and technological collections as that which he had so successfully brought to bear on the collections in zoology, geology and anthropology.

In 1882 the museum had obtained a typewriter; and in 1886 photographic equipment. The telephone, introduced to Brisbane in 1880, was connected to the museum in 1885²¹. The museum's failure to develop technology collections during these early years is surprising when at the same time it was so quick to use new technology for research and administration.

Elsewhere in Australia, the Industrial and Technological Museum (later the Science Museum) was founded in Victoria in 1870, taking over the mining and agricultural collections from the National Museum of Victoria. The Museum of Applied Arts and Sciences in Sydney was founded in 1880 as a result of interest created by the international exhibition staged there in 1879²¹⁻². Brisbane's own small international exhibition, in the Exhibition building in Bowen Park already under consideration as a home for the museum, was not held until 1897²³, and did not provide the stimulus for any significant change in the collecting interests of the museum.

The emphasis on primary production, and the lack of development

of significant secondary industry also contributed to lack of interest in technology collections, compared with Sydney and Melbourne. The Industrial and Technological Museum in Victoria was heavily oriented towards educating the population to develop local industries²². The founding of the University of Queensland in 1909 lessened the likelihood of the museum being able to build up technology collections for use in education; while the Royal Historical Society at Newstead House, rather than the museum, acquired many of the items significant in early exploration and settlement of the state.

Heber Longman, in taking over as director in 1917, sought to redress this situation. In 1918 he appealed to both the Royal Historical Society²⁴ and the University of Queensland²⁵: 'With a view to building up a distinct section of historical objects with local associations, I am endeavouring to supplement the few specimens of this nature now in the Queensland Museum. Any assistance by your society would be appreciated'. The rate of growth of the collections following this appeal does not indicate that there was any dramatic response to it. However, during Longman's time as director the two most important items currently in the museum's technology collections were acquired. These were the World War I German A7V fighting tank *Mephisto*, and Bert Hinkler's famous AVRO *Avian*, in which he completed the first solo flight from England to Australia. These two items are now firmly associated with the museum.

It was a minor accident to the AVRO *Avian* that ensured its preservation in Queensland. The under carriage had been damaged in a heavy landing at Hinkler Park, Bundaberg, in September 1928. While Hinkler was waiting for it to be repaired he received an attractive flying offer from an aircraft manufacturer in England. Although he would have preferred to fly back to England, there was a possibility of a long wait before the *Avian* could be repaired and a maritime strike forced him to a quick decision to go by sea—taking one of the last boats to leave Australia before it became isolated by the strike. He left the *Avian* with his family in Bundaberg until, early in 1929, he offered it to the Queensland government with the hope that it would be of educational value to young Queenslanders. It was a generous gesture—the plane was costly for Hinkler to replace—made in appreciation of the public's interest and support. QANTAS staff carried out minor repairs on the plane, and transported it to Brisbane where it was exhibited at the annual RNA show of 1929. It was then moved into the museum, where it was displayed, suspended in a flying position, until 29 January 1986 when it was lowered in preparation for the move to South Brisbane

The museum also holds what is thought to be the sextant belonging to Edmund Kennedy, the leader of the ill-fated expedition to Cape York in 1848. In an attempt to retrieve the expedition's equipment, a party led by a Captain Simpson subsequently returned to the place on the Escape River where Kennedy had been speared by Aborigines. There, on searching under a bush among the leaves, the horizon glass of a sextant was found²⁶. In 28 January 1937 an article in the *Courier Mail* recounted how a party surveying for stock routes had come across further relics of Kennedy's expedition. Perhaps it was this reminder that resulted, some two months later, in the museum receiving a parcel containing an ebony sextant—its horizon glass missing, a sailor's jackknife, a shell ornament and an Aboriginal dilly bag. There was neither a message nor a return address either on or in the parcel. At about the same time Director Longman, received a letter from an A.R. Meldrum, a newsagent at Cooktown. It read:



Arnold Sweetser, technician in the museum 1966-74, a man of diverse skills.

Mr M. O'Shea has asked me to send you some information connected with the murder of Kennedy the explorer also some relic he has in connection with same²⁷.



The Commissariat Store in 1978.

At first, Longman did not connect the parcel with the relic referred to in Meldrum's letter. He replied to the latter asking if O'Shea had any further information, referring him to Jack's account of the expedition²⁸, and offering to pay freight on any 'small relics suitable for exhibition'²⁸. Nine days later—possibly after he had done some research, he did realise that the contents of the parcel were the supposed relics. 'I am assuming that the Sextant and Knife are specimens associated by Mr O'Shea with the Kennedy Expedition'²⁹. He asked where the objects had been found, but did not receive a reply. Then, in September, four months later, Professor Richards of the University of Queensland forwarded a letter from Cmdr T.F. Roberts who was involved with a nautical survey on Cape York Peninsula for the Department of Harbours and Marine. Roberts wrote:

An old boot-maker joined the ship in Cooktown and spun me the following yarn. Many years ago he was prospecting up the Pascoe River and came across some nomad blacks, one of whom (an old gin) had a sextant in her dilly bag. He persuaded them to give him the instrument and firmly believed it had belonged to an explorer named Kennedy who was killed by blacks up in that country³⁰.

Roberts went on to say that O'Shea had got Meldrum to parcel up the articles and send them to the museum; and he gave the address of O'Shea's son who later brought his father to Brisbane to see the articles on display in the museum. Longman said, in his letter of acknowledgement to O'Shea's son³¹, 'it is seldom that we receive historical specimens of such interest as these relics'.

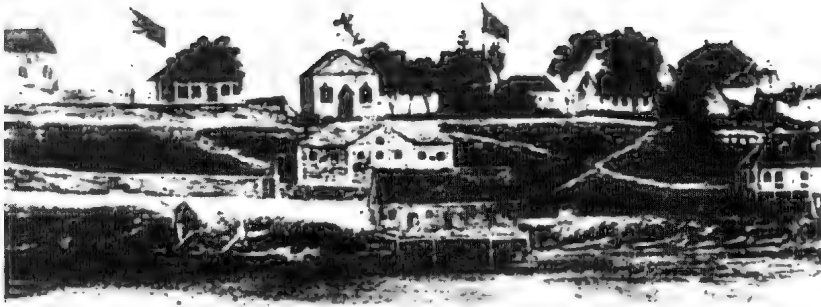
Although it has not been possible to prove that the items are correctly attributed, the sextant is of the right age, its horizon glass is missing and T.F. Roberts, in 1985, recalled O'Shea's strong conviction that it had belonged to the explorer.

Another fine gift during Longman's term started the museum's horological collection. In 1919 the museum received, from the Victoria and Albert Museum, twelve watches and five watch movements from the 18th and 19th centuries, duplicate material from the collection of Evan Roberts. In 1954 there was another gift of four splendid clocks from Mrs A.H. Marks on behalf of her late husband, Dr A.H. Marks. Two of these, a Thomas Tompion bracket clock and an Earnshaw chronometer, are of particular importance and mark the beginning of the recent growth of the collection.

The Hall of Science Industry and Health

While there was organised community support for the museum in the days of the Philosophical Society only at one other time did this happen again. It began after World War II with the surge of interest in science and technology that occurred then. In about 1947 the idea of developing a technological museum in Brisbane was raised by the Queensland Electrical Institute—an organisation concerned with the proper training of those engaged in the electrical industry. The museum proposal was supported by a number of technical and professional organisations³².

As a result a Committee for the Development of a Technical Museum was formed and in April 1949 a letter signed by J.S. Johnston as chairman of the committee was forwarded to Premier E.M. Hanlon MLA, urging that in parallel with the Queensland Museum there should be established a



Brisbane 1856. The Commissariat Store, built in 1829, is the building half way up the hill in the centre of the picture—partly obscured by the boat-builder's hut and store on the wharf. Today it is one of the two buildings of the convict era to survive (photograph by courtesy Oxley Library).



Ian Sanker, curator of industrial technology, and Michael Quinnell, curator of anthropology and archaeology working on the excavation of the Commissariat Store, 1979.



The brick-lined underground drains of the Commissariat Store.

'Museum of Science, Industry and Applied Arts'. Collecting material was not considered to be a problem, as much was already available, but accommodation and staffing obviously required state government funds.

The proposal was referred to the director-general of Education who supported the arguments for a technological museum, but the Public Service Commissioner's Department concluded that satisfactory accommodation was neither available nor in sight; further, at the time, suitably qualified staff would be difficult to obtain and such as were available were wanted by other government departments. The outcome was that 'the question will be reviewed by the Government on a more opportune occasion'.

The idea then seems to have lapsed until 1963 when two of the original supporters, I.O. Marsh a senior engineer with the City Electric Light Co. and John O'Hagan of the Red Cross Blood Bank, discussed with Professor S.A. Prentice of the University of Queensland the possibility of reopening the matter, but no plan of action emerged. However, a year later the graduates and students section of the Institution of Engineers Australia, Brisbane Division, included in the annual display of the Engineering Undergraduate Society a combination of old and new electrical apparatus.

This display received a deal of interest and early in 1965 the time seemed opportune to canvass a wide selection of the Queensland community to ascertain the extent of interest in development of the technological side of the museum. All relevant learned societies and similar bodies were included and, at a meeting in April at the University of Queensland, representatives of these interests agreed to the formation of a committee which adopted the name 'Queensland Hall of Science, Industry and Health Development Committee'. A council and an executive committee of the council were formed—the latter consisting of chairman S.A. Prentice, senior vice-chairman J.E. O'Hagan, junior vice-chairman I.O. Marsh, honorary treasurer C.F. Cottis, and acting honorary secretary L. Wager. The council represented a wide range of technical interests—agriculture, architecture, education, engineering, health, industry, science, veterinary science as well as the museum and the graduate students' section of the Institution of Engineers Australia, Brisbane Division.



Arnold Sweetser assesses the problems before collecting the Beam Engine from Lars Anderson's Sawmill at Esk, 1968.

A constitution was approved by the Department of Justice in 1966 and this included the appointment of three trustees to deal with property of the committee. The object of the committee was to work with the museum toward the development of a display hall of science, industry and health³³. Accommodation for the desired development remained a problem. The Brisbane City Council's disused power house at New Farm was carefully studied as a possible solution and in 1970 the council of the Development Committee prepared a report, entitled 'Suggested Development of the Queensland Museum', on the intended development of that site. However, the estimated cost of building modifications to the power house was considered too great for the matter to be taken any further.

Thus, although displays in the museum resulted from these efforts, a separate Hall did not. Nevertheless, real development of the museum's activities in history and technology was initiated by the Queensland Hall of Science, Industry and Health Development Committee. In addition to raising public support, and being responsible for the addition of many important items of early technology to the museum's collections, the committee realised that the museum did not operate under legislation — and it saw this as a serious drawback. It produced the first draft of what was to become *The Queensland Museum Act 1970*, which made provision for a board of trustees and defined the museum's charter in the broadest terms, with responsibilities for history and technology as well as natural history collections. Prentice, one of the driving forces behind the Hall of Science, Industry and Health, was an appropriate appointee to the re-established board of trustees — for it was largely through his efforts that history and technology was to become a well recognised and well supported responsibility of the museum, and that the museum itself acquired a firm statutory base. In 1971 the Hall of Science, Industry and Health Development Committee became the Museum Society of Queensland; which, in 1985, became the Queensland Museum Association Incorporated — thus continuing in the supportive role of its predecessors (see Chapter 3).

The Final Commitment

Meanwhile, in 1959, the museum had staged its first major display on the history of the state for the Queensland centenary celebrations. The display was a great success, and although many of the items had been loaned (some from Newstead House) it firmly established the museum as an authority on the state's history and its responsibility to maintain collections of material relevant to the history of Queensland was now recognised. From this time on the emphasis changed and acquisition of large collections of exotic items from China and the Mediterranean, already well preserved in museums throughout the world, were not actively sought for the museum's collections. In 1970 the museum was involved in another historical display for the bicentenary of Captain James Cook's voyage of discovery up the east coast of Australia. It also prepared and installed displays in the James Cook Museum in Cooktown for the National Trust of Queensland.

In 1966 the museum at last made a real commitment to the development of a history and technology section when it appointed Squadron Leader H.A. (Arnold) Sweetser, a retired airforce engineer, to the staff, with responsibility for reorganizing and actively expanding the collections in these areas. Items were sorted, researched and reacquired in the newly established historical and numismatic registers and additions to the collection were actively sought and acquired.



Errol Beutel (*left*), assistant in history and technology, helping Sweetser to assemble the restored beam engine in the museum grounds, 1973.



The museum's Garrett traction engine during its working life with the Normanby Shire Council at Harrisville in about 1920.

Vernon recalls that on one occasion Sweetser was contacted by a member of the public wishing to know about telegraph insulators. The inquirer made an appointment to visit the museum the following week. Sweetser, meanwhile, read up all he could find on telegraph line insulators. Having done that he contacted the postmaster-general's office (responsible in those days for telephones) and, with his newly acquired knowledge, persuaded it to donate a collection of insulators. When the original inquirer called at the museum he was provided with all the information he needed.

Publicity for these new activities, together with Sweetser's enthusiasm and hard work, led to dramatic improvements in certain displays and new ones, showing glimpses of the state's historical and technological development, were fitted in wherever space was available in the galleries. Workshop facilities gradually improved to keep pace with the restoration and display programme. Eventually, the first curator for the section, D.J. Robinson, was appointed in 1972.

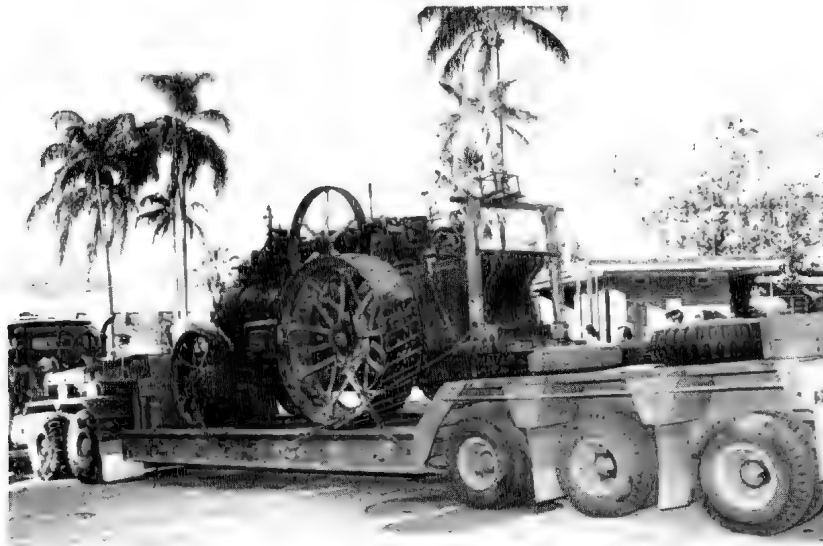
In 1974 I.G. Sanker was appointed curator of industrial technology and initiated involvement by the museum in historical and industrial archaeology in the state. This involves field studies of history and the local use of technology. The evidence sought are sites and material remains as well as documentary and pictorial records. Studies have included a convict building, industrial and mining sites, and a regional study of the industrial history of the Darling Downs.

The most important item added to the collections during Sweetser's tenure was an 1866 beam engine. Sweetser realized that a beam engine represented the most important type of early steam engine and he believed there was a chance that one might have survived in Queensland. His inquiries led him to an engineer who had done maintenance work on such an engine during the 1930s. Following up this lead, Sweetser located the engine in Lars Anderson's sawmill at Esk. The Anderson family donated the engine to the museum, and, through the efforts of the Queensland Hall of Science, Industry and Health Development Committee, it was collected and restored with the assistance of the Southern Electric Authority. The technological collection now includes many other important engines restored in the museum workshop by M. Schofield who succeeded Sweetser on his retirement in 1974. These items include a 1925 Republic truck; a 1919 Ransomes, Sims and Jefferies

portable steam engine and boiler; a 1910 Tangye oil engine; a 1917 I.H. Mogul kerosene engine; an Ericsson hot air engine; a 1911 Garrett's 6 n.h.p. traction engine; and an Austral oil engine.

One technological area that has benefited from many local donors is the weapons collection; and the historical accession register records similar donations in the past. L.H. Maynard, an honorary collector appointed by Hamlyn-Harris, began the collection in 1912 with a large donation of 90 weapons. In 1936 E.F. Tristrom gave 45 and over the years the Marks family have donated more than 64. In addition, interesting collections of obsolete firearms have been transferred to the museum from the Comptroller General of Prisons and the CIB have handed on firearms confiscated and surrendered during amnesties. Perhaps the most diverse assortment of confiscated weapons, including such things as swordsticks, has come from the Customs Department.

Through the efforts of E. Wixted, the museum's librarian and a keen historian of aviation, the museum also acquired many items of aviation



The Garrett traction engine transported to the museum by the army, 31 May 1979.



1911 Garrett steam traction engine after full restoration by M. Schofield and metals workshop staff.

history. The most important of these were Bert Hinkler's *AVRO Baby* and the wreck of Sir Charles Kingsford Smith's and Captain Bill Lancaster's *Southern Cross Minor*, recovered from the Sahara desert by a British expedition co-ordinated by Wixted (see Chapter 4). Sir Charles Kingsford Smith memorabilia were donated by his family, now resident in North America, and, escorted by Director Bartholomai, were flown to Australia by QANTAS.

The *AVRO Baby* G-EACQ, like his later *AVRO Avian*, had been damaged on landing—this time on a Newcastle beach, and Hinkler left it behind when he returned to England by ship in 1921. The aircraft had several owners in Australia—the last being a Mr J.J. Smith. In 1969 the assiduous Wixted eventually found Smith—albeit a not very distinctive name—through the owners of the Footscray house in which he had lived



Bringaree Indian, a Royal Worcester porcelain figure of 1888, modelled by Hadley. From the Ben Ronalds collection, donated to the museum by Mrs. A.M. Ronalds in memory of her husband, Ben.

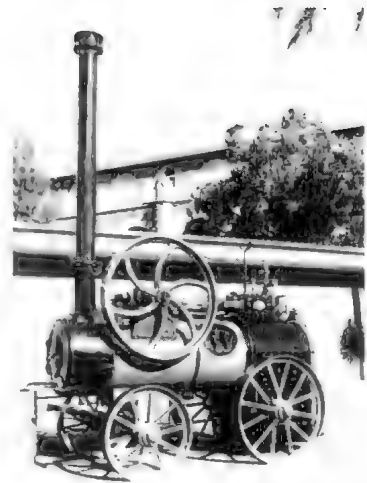
in 1930. Smith had the plane stored under a relative's house. Supported by Bert Hinkler's brother, Jack, Wixted persuaded him to donate the aircraft to the Queensland Museum. The government airline (TAA) through the Queensland manager, Ben Cochrane, undertook to transport the plane to Brisbane but no road haulier would undertake the job. No DC4 aircraft, which had suitably wide cargo doors, were in commission either. Then one was brought back into service—with a recertified crew—to provide aerial delivery of dairy products from Atherton. It was this plane that brought the AVRO *Baby* to Queensland on 2 March 1970. It was the only flight that DC4 made—the aerial dairy delivery never eventuated. The *Baby* was displayed by the Royal Flying Doctor Service at Archerfield aerodrome soon after its arrival in Brisbane. Then, beautifully restored by the Royal Queensland Aero Club—of which Hinkler had been a member—to commemorate the 50th anniversary of his 1921 flight, Jim Smith presented the plane to the museum at a ceremony on 26 May 1972. It is Smith's monogram that adorns the tail—and it was agreed that it should remain there, commemorating the 39 years that he had owned the *Baby*.

Among the many historical items that were acquired during the two decades from 1970 is the Ben Ronalds collection of over 800 pieces of ceramics and glassware, including nearly 250 pieces of Royal Worcester porcelain. This collection was donated by Mrs A.M. Ronalds in memory of her husband Ben whose hobby it had been over many years.

The history and technology section is now deeply involved with a new venture for the museum—the setting up of branch museums at various centres in the state. The first, *WoodWorks*, the Forestry and Timber Museum, a joint development with the Department of Forestry at the Gympie Forestry Centre, opened in 1984. It deals specifically with the history of forestry and the timber industry in Queensland and displays equipment and technology used in the early days. Proposals for future branch museums include the Cobb and Co. Museum of Animal Transport, at Toowoomba, which will provide a home for the extensive collection donated by the Bolton family; and a Printing Industry Museum in the old State Government Printing building in William Street, Brisbane. Under the *Queensland Transport and Technology Centre Act 1984* administered by the premier, a centre was planned to collect and display recent transport, energy and mining technology at Coomera, south of Brisbane. Later, as a result of a decision to rationalise museum services, the Act was repealed as from October 1985 and responsibility for the future of the centre will be assumed by the museum. Thus, in the long term, the museum is to develop a specialist branch dealing with technology, at Coomera, on a site originally selected by another department.

While early policies to build up historical and technological collections were educational, the increase in the collections over the last 20 years is probably a result of the recognition of the museum's function to preserve an archive of artefacts. There is no doubt that community interest in its own history has also developed in recent years. Thus, by providing study and display collections on the history of settlement and the technology of Queensland, the museum can provide a deeper understanding of the past.

The section has an extensive range of responsibilities. For instance, in 1973 a temporary display on China, using articles from the museum collection, was followed by a display celebrating the 500th anniversary of the birth of Copernicus and later, a display of pottery. Public enquiries about routes and relics of early explorers, coins, ceramics, glass, weapons, shipwrecks, clocks, industrial machinery, transport, garments, uniforms,



The Ransomes Sims and Jefferies Portable Steam Engine of 1919 undergoing steam tests at the museum after restoration, 1978.



D.J. Robinson, curator of history and technology, in his office in the eastern end of the storage shed that also housed a large part of the collection as well as the metal workshop at the western end.



fabrics, musical instruments and more — often involving research — are daily answered. The diversity of objects, both in size and fabric, in the history and technology section's collections — from aircraft to abacus and ploughshares to lace pillowslips — has always posed problems of storage and display. From time to time, as the collections have swelled, temporary relief has been found by using storage space wherever possible — in the technology workshop and storage building in the museum grounds in the late 1960s; in the former art gallery section of the main building in 1975; in the old New Farm power station in 1980; and from 1982 in rented storage in the West End area³¹.



WoodWorks, a branch of the Queensland Museum, operated in conjunction with the Forestry Department at Gympie.

That the history and technology section, with its remarkable spread of collecting interests and commensurate range of artefacts, should experience problems in preserving its collections in the Queensland climate and under primitive conditions of housing is self-evident. The storage of the collections—in a tin shed adjacent to the railway line in which summer temperatures soared and winter ones plummeted, and in every nook and cranny of the main museum building from the 'earth basement' to the galleries above the old concert hall—exacerbated the problems of saving old and often delicate objects. Accordingly, until the appointment of a conservator, N.H. Agnew, in 1980, it was the curator of history and technology who, perforce—to save his collections—had to develop expertise in conservation and methods of preservation. Indeed, before 1980, D.J. Robinson extended his offices in conservation to other sections of the museum, as well as advising the public on matters as diverse as saving grandmother's christening robe from decay and constructing a time capsule.

Erie mill engine being removed from display in 1984, for full restoration, to be used to drive the steam sawmill under construction at WoodWorks, Gympie.



Arrival at the museum of the remains of the *Republic* truck, donated by Gilltrap's Auto Museum, Kirra, for use as a source of spare parts for restoration of the museum's 1925 model 20 W.C. *Republic*—now on display as a working exhibit at WoodWorks, Gympie.





The branch museum to be opened in Toowoomba will celebrate the era before railways when animal transport provided the sole means of communication.



Cobb and Co. coach lent to the museum for the centenary of Queensland exhibition 1959, by W.R.F. Bolton of Toowoomba. The coach is part of the collection given to the museum by the Bolton family and will be exhibited in the Animal Transport Branch of the museum in Toowoomba.

When it was decided that the museum would become part of the Cultural Centre on the South Bank of the Brisbane River it was acknowledged that this site would not be the permanent home of technology nor, for that matter, of the growing maritime archaeological collections. The move to the new museum building in the Queensland Cultural Centre in 1986 is thus only one more step in the story of the state's technology collections.





12

PANDORA'S
BOX

Maritime
Archaeology



Ships brought the colonists and the precious personal belongings and supplies that they needed to start their lives anew in Australia. Later, it was through the use of ships that the earliest industries developed—whaling, sealing, pearling, guano mining. Ships were, and still are, the vehicles for trade with other countries; and, until aeroplanes became the principal means of travelling between and across continents, ships were the only line of communication between Australia and the rest of the world. Cultural and political links with Europe were maintained only through the ships that carried the mail, the government despatches, the goods, and the immigrants with their knowledge, skills, beliefs, traditions and customs as well as their household goods, machines and books. It is through ships that the Australia of today was born and developed—a fact sometimes overlooked when histories of Australia have focussed on the daring and tragedy of inland exploration.

A shipwreck preserves a record, occasionally almost intact, of a moment in time. Shipwrecks are the result of a catastrophe in which there was little or no time to remove any of the objects; nor have those objects since been subjected to the weathering of rain and sun. A shipwreck contains the evidence of the history and of the lives of the shipboard community of people who may have made a long voyage together. Only the flesh and blood of those who had begun the voyage is lacking. Shipwrecks are the physical remains of our maritime heritage.

Maritime archaeology, as a scientific discipline, was first developed in Australia at the Western Australian Museum. It came about as a result of the discovery, in the late 1950s, of the wrecks of 17th and 18th century Dutch East Indiamen on Australia's west coast. For nearly two decades the Western Australian Museum had the only recognised underwater archaeology unit in the country. Through its excellent and innovative work on the Dutch wrecks it firmly established Australia on the world scene in this developing scientific field. It was as a result of these efforts that recognition of the significance of Australia's rich underwater cultural resources became widespread and culminated in the federal government's enactment of the *Historic Shipwrecks Act 1976*. This legislation, designed to protect and preserve historic shipwreck sites, is framed in such a way that the implementation of the legislation to each individual state's territorial waters is only at that state government's request.

Although the Aboriginal people of Australia had canoes and rafts in which they could reach the islands off the coast, they were not a sea-going people. The first ships that sailed in Queensland waters were probably those of fishermen from Macassar and Chinese explorers who had found their way down the eastern Australian coast¹. In the 16th century, when Europeans developed the spice trade with the East Indies, there may have been ships that sailed on from the Portuguese colony in Timor. There is some cartographic evidence of a few of these early voyages and there may have been shipwrecks¹—but no material remains have thus far been discovered.

Through the 17th century, Dutch spice traders, sailing due east from the Cape of Good Hope with the westerly trade winds—so called because they carried them to the islands of the East Indies and their spices—were being wrecked on the coast of Western Australia. Sufficiently accurate chronometers were not available and without them longitude could not be well determined and mariners did not know when to turn to the north. However, no such winds blew toward the eastern coast of this island

Previous page: Divers descending the 34 metres to the *Pandora* site.

continent and the Spanish vessels, crossing the Pacific to the Philippines, passed to the north of Australia. Perhaps, also, there were earlier mariners who, like the French explorer, the Chevalier de Bougainville, were discouraged from venturing into these waters. In 1768 he was sailing west from Tahiti and turned away when he saw —

an endless line of shoals and rocks on which the sea thundered with great violence. This last discovery was the voice of God and we were obedient to it².

The only known shipwrecks on the eastern Australian coast are those that happened after 1770 when Captain James Cook sailed northwards inside that 'endless line of shoals'. Indeed, his ship the *Endeavour*, was nearly lost on the reef that now bears its name². Endeavour Reef is only one of about 2000 in the Great Barrier Reef — a barrier of extreme hazard to navigators, and even today not thoroughly charted in some areas away from regular shipping routes.

Navigation in eastern Australian waters increased in 1788 with the first settlement, Port Jackson. It increased again after 1839 when the Moreton Bay settlement became a free town and when port facilities developed in provincial towns, such as Gladstone, Rockhampton, Townsville and Cooktown, to serve the growing populations and industries such as agriculture, grazing, timber and gold mining and a developing trade with countries to the north. Matthew Flinders and other Royal Navy surveyors worked off the north-eastern Australian coast and in the Great Barrier Reef area in the last decade of the 18th century and the first half

Divers working on the *Pandora* site
(photograph Pat Baker).



of the 19th century. However, the hydrographic data gathered were very incomplete. Inadequate charts and the coral reefs with strong tidal currents resulted in the many shipwrecks that occurred and still do occur in these waters. Indeed, every year sees the addition to the long list of vessels—now more than 2000—that have come to grief off the Queensland coast.

It was the mutiny on the vessel HMS *Bounty* under Lieutenant William Bligh which, in due course, led to one of Australia's most historically important shipwrecks in Queensland waters—resulting, nearly 200 years later, in the involvement of the Queensland Museum in maritime archaeology. On 29 August 1791 HMS *Pandora*, a 24-gun frigate built in 1779, was wrecked on a small reef at the northern end of the Great Barrier Reef at the eastern entrance to Torres Strait. Sailing under the command of Captain Edward Edwards—an inhuman martinet—*Pandora* was returning 14 of the *Bounty* mutineers to England for trial. The mutineers had been captured in Tahiti where they had remained while their erstwhile collaborators sailed on in the *Bounty*. On their capture the prisoners were locked into an 11 x 18 foot (3.4 x 5.2 metres) box not more than 1.75 metres high on the deck of the *Pandora* where, starving and vermin infested, their hands and legs in irons, they sweltered for five months while Edwards unsuccessfully searched the tropical Pacific for the other mutineers, who were now safe on Pitcairn Island. When the *Pandora* struck, Edwards had been trying to find a way through the reef. In desperate straits he let three of the prisoners out of their box to help with the pumping. The other 11 remained imprisoned until, a moment before the ship sank, seven saved themselves when the master-at-arms threw them the keys of the irons, and a brave boatswain's mate opened the hatch through which they escaped³.

In November 1977 the wreck of what was believed to be HMS *Pandora* was discovered. The Commonwealth and Queensland governments shortly afterwards declared the *Historic Shipwrecks Act* to apply to Queensland and gazetted the wrecksite as protected against disturbance or vandalism. In April 1979 the federal government



Divers working with the water dredge under the survey grid near the stern of the *Pandora* site (photograph Pat Baker).

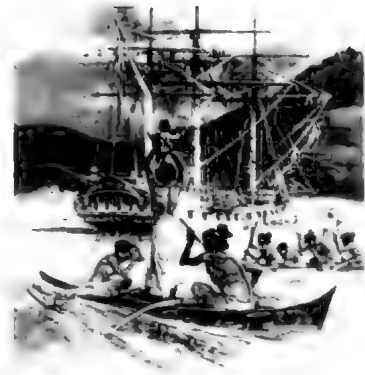
commissioned two maritime archaeologists from the Western Australian Museum, G. Henderson and P. Baker, to examine the site to confirm its identity and to evaluate its archaeological significance. The results were conclusive. The wreck was, indeed, that of *Pandora* and the archaeological potential, because of conditions on the site which appeared to be likely to favour preservation of much material, was enormous. Unlike many ships wrecked on coral reefs, the *Pandora* did not break up before she sank, and she settled onto coral sand in deep waters—34 metres—out of the reach of breaking surf that would have pounded and scattered her remains. Objects that were on the ship at the time she sank are likely to be in place, contained within the apparently almost entire hull, protected by the sediments that have been settling over the site for nearly 200 years. These sediments have excluded the oxygenated water that would have hastened the deterioration of many of the artefacts. Further, she was an up-to-date naval vessel, and historical information gained from the study of the equipment on board was thought likely to be significant.

The Queensland Museum Board of Trustees, as early as 1972, noting the successful work being done in Western Australia, had given serious consideration to the future entry of the museum into the field of maritime archaeology. The discovery of *Pandora* and the declaration of the federal historic shipwrecks legislation to apply in Queensland waters brought the museum closer to a commitment to the establishment and development of a maritime archaeology section. There was also a pending application to have gazetted another Queensland wreck—that of SS *Yongala*, which in 1911 had disappeared without trace off Townsville.

On 1 August 1980, under the terms of the Act, the premier nominated the museum as the competent authority to administer the legislation in Queensland and the director of the museum as the Queensland delegate to the federal minister of Home Affairs—now Arts, Heritage and Environment. The museum was now fully committed to a responsibility for maritime archaeology, a responsibility officially assumed in January 1981. In June of the same year Ronald Coleman was appointed maritime archaeologist, becoming curator in 1982. He had had many years involvement with investigations on shipwrecks in other parts of the world and, while employed as the display designer on the museum staff, had done the preliminary work associated with the establishment of maritime archaeology in the institution.

Among Coleman's first activities, was a preliminary inspection and photographic survey of the *Yongala*, which had been declared a protected site on 5 June 1981. In this survey he was associated with film-makers Ron and Valerie Taylor who were producing a documentary television film on the *Yongala* wreck. Work on a register of the shipwrecks off the Queensland coast also began and by May 1982, after archival research, the list of some 2000 wrecks had been compiled.

The next problem to be tackled was that of personnel. Work on submerged wrecks requires teams of people—many more than could ever be maintained on the permanent staff of the museum. A source of man-power and skills presented itself in the growing number of amateurs in the field. Thus, in July 1982, Coleman formed the Maritime Archaeological Association of Queensland Inc. to bring these amateurs together. This association gives members an opportunity to participate in the museum's work and, at the same time, to gain practical experience in the field. It also provides the experienced volunteer staff that the museum regularly needs to pursue its maritime archaeological programme. It



The *Pandora* in Matavai Bay, Tahiti (painting by courtesy of the *National Geographic*).

enables the museum to conduct training courses and provides the back-up organisation that contributes to the co-ordination of field parties. The membership of the association quickly grew to more than 100, and, with the experience gained as a result of participation in museum programmes, the association is now able to initiate some of its own. In addition to the assistance in the field provided by this association, the employment of staff on National Estate grants helped to alleviate the serious shortage of professionals.

Now, with strong back-up personnel it was possible to undertake a variety of field projects. In December 1982 a site inspection of a wreck that had been found 75 nautical miles northeast of Townsville was conducted. The wreck was subsequently identified as the *Foam*, a 'blackbirder' wrecked in 1893 while en route to the Solomon Islands with Kanakas being returned from the Queensland sugar-cane fields. The wreck was particularly interesting because of the quantity and variety of trade goods it contained. The study and description of the trade goods was of interest to anthropologists and ethno-archaeologists studying the influence of European penetration on the indigenous peoples. Both the *Foam* and the



Preparing to lift recovered artefacts to the surface from the *Pandora* site (photograph Pat Baker).



Some of the artefacts recovered from the *Pandora* site.

Yongala were inspected again at later dates to monitor their condition and ensure that the sites were not being vandalised.

Another project was the investigation of a mysterious wreck site at Happy Bay on Long Island in the Whitsunday Group. The wreck had been romanticised as a Spanish galleon—yet another one of several such fabled wrecksites reputed to exist around the Australian coast—because its timbers were thought to be mahogany. The wrecksite was investigated and recorded and the remains were shown to be those of the *Valetta* dating from 1825. The ship had been built in Calcutta in 1821 and the main structural timbers were, not surprisingly for an Indian-built vessel, teak and not mahogany. Early in 1985 the maritime archaeology section conducted surveys off Lady Elliot Island to identify shipwreck sites and remains in that part of the Capricornia section of the Marine Park at the southern end of the Great Barrier Reef.

Meanwhile, in late October 1983, by now with some experience of working in Great Barrier Reef waters, with confidence in the capacity of the team and with support and encouragement from maritime archaeologists and historians both in Australia and overseas, the first expedition to HMS *Pandora* was organised. The excavation of the *Pandora* is possibly the most ambitious project in maritime archaeology ever undertaken in Australia in terms of difficulty of access, depth of the wrecksite, and the number of artefacts that probably will be recovered and that will require extensive and sophisticated conservation treatment. A team of 20 professional underwater archaeologists gathered from around Australia and overseas. The museum conservator joined the party to supervise treatment of the excavated material. The wreck lies 100 kilometres off the mainland coast in a remote area east of Cape York. The team of SCUBA⁴ divers and support personnel had to be maintained on-site over a period of eight weeks and the logistics were complex. The diving programme was strictly supervised to ensure the divers' safety at 34 metres—and this, of course, restricted the time that each person could work on the site. The weather was a critical but uncontrollable factor. October was chosen as a time before the cyclone season when the prevailing south-easterly winds would not be a problem. However this choice was not altogether vindicated and fine weather did not persist

throughout the eight weeks. Nevertheless, the site was surveyed, mapped, transects were laid down and, in a preliminary excavation, the remains of the doctor's shipboard surgery were found with unguents and medicines still stoppered and in place in their jars. The expedition was documented by David Flatman Productions in the film 'HMS *Pandora*: In Pursuit of the *Bounty*', subsequently televised nationally in Australia and sold overseas. The second *Pandora* season in November 1984 was equally successful⁴. A larger expedition is planned for October 1986.

Maritime archaeology is costly. It involves large teams in the field for long periods, ship charter, tenders, computer data compilation, acquisition and use of survey equipment, conservation facilities for immediate treatment of materials recovered, and the complex logistical organisation necessary to move personnel, equipment and supplies; as well as provisions to deal with contingencies such as bad weather, loss of equipment and injuries to team members. The more remote the site from land and the deeper the wreck the more expensive an expedition becomes. The *Pandora* site ranks high on both counts. The financial resources required are of the order that generally would be beyond those of a state museum. Federal government funding through the Department of Arts, Heritage and the Environment complemented a state subsidy for the *Pandora* and other projects and to some extent this alleviated the problem. However, contributions from private persons and commercial organisations have been generous and without them the programme could not have proceeded at the level maintained since it began in 1981. Captain Philip Gibson, a consultant appointed by the board of trustees, advises on aspects of the *Pandora* project to ensure that the funds received are used in the best possible way.

Donations from the corporate sector in excess of \$10,000 came from Arcom Pacific Pty Ltd and Entercomp Pty Ltd for computer software and hardware; NEC Information Systems supplied, maintained and updated computer hardware; Grace Brothers transported equipment to and from points of departure and gave additional funding. The Inflatable Boat Centre supplied a number of Zodiac inflatable boats for work on-site and site access; Bendeez Pty Ltd contributed the all-important complex oxygen safety systems for the divers; David Flatman Productions supplied funds and, in filming the operations at the *Pandora* site, made it possible for the world to share in these excitements, as did the National Geographic Society which, in addition to a generous cash donation, published a richly illustrated account, of the *Pandora* saga. The Queensland-based brewer, Castlemaine Tooheys, commissioned the construction of a valuable model of the vessel and, by provisioning the first expedition with a generous supply of its product, averted a serious freshwater shortage when the desalinator on the work vessel broke down. A large cash donation came from John Walker and Sons Ltd, and Flamingo Bay Charters provided services including the use of the vessel, *Flamingo Bay*. These contributions together with many more from individuals and other commercial firms have made it possible for the programme to

proceed effectively and for those taking part to have confidence in the equipment that ensures their safety⁵.

Not the least part of the cost of establishing a maritime archaeological section is that associated with the provision of conservation staff, facilities and equipment to preserve, for study and future display, the myriad artefacts of many materials—bone, leather, wood, metal and even textiles and paper—that can be raised from a wrecksite. Some objects recovered are huge, such as cannon; while others, such as needles or tiny glass trade beads, are minute. On being raised, all require conservation treatment to prevent accelerated deterioration owing to the combined effects of salt and exposure to fresh air. Treatment of a cannon may need upwards of a year to stabilise it against further corrosion. In 1980 the museum had established a conservation section to start to address the long neglected problem of deterioration in the collections—notably the anthropological collections. However, the conservation section inevitably became deeply involved in the preservation of objects, particularly *Pandora* artefacts, presented to it by the maritime archaeologist.

Meanwhile, linking the new maritime archaeology section with the long history of the museum, the section considered one of the earliest maritime artefacts acquired by the museum. In the board of trustees minutes of 3 June 1906 there appears the following report:


a small bronze cannon which had been purchased.....was found on a northern reef by the black, supposed to belong to a wrecked spanish vessel.

It came to the museum from the Office of the Chief Protector of Aborigines and the purchase price was £2.0.0 It was picked up on the northern point of Ashmore Reef in Torres Strait and the natives who found it said there were two other larger cannon near it, as well as the 'large timbers of a vessel'⁶.

Now, some 80 years later, it has been established that this early acquisition to the museum's collection of maritime artefacts is of French origin, one of a type manufactured in the early 19th century. It was made specifically for the French navy for shipboard use and it would have been effective against hostile natives in dugout canoes—it was light, easily used and portable and would fire rounds of grape shot with enough force to penetrate skin and bone.

When the mystery of how it got to Ashmore Reef is solved, one more piece of the history of navigation and exploration in Australian waters will be known.

To a maritime archaeologist it is not surprising that others should find shipwrecks fascinating. Much of history is mysterious and history preserved in the seas is particularly so. In the museum the maritime archaeology section will continue its exploration of these mysteries. From the study of the sites and the objects recovered from the sea, it will add to the knowledge and understanding of the events and the people that have made Australia.



Flint-lock Espingole—model ANIX. Made in Ruelle, France, in the first half of the 19th century, for the French Navy. In 1906 it was purchased for £2 by the museum, from Torres Strait Islanders who had recovered it from Ashmore Reef.





13

THE NEED
FOR
SCIENTIFIC
WORKS

The Library

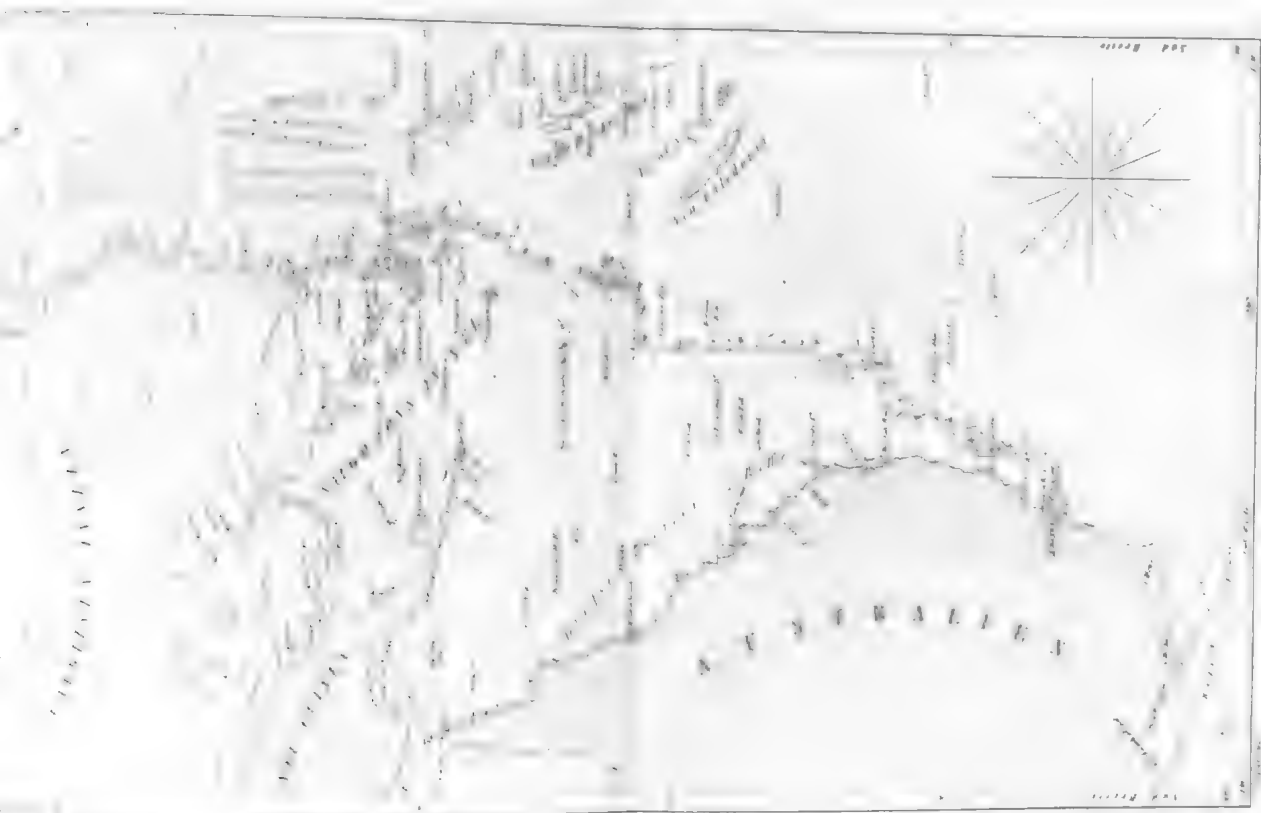
I beg also to mention that there is an utter want of proper books for the Museum. Many Zoological specimens and fossils can not be properly named and classified without the aid of such. I sincerely hope you will take this matter in to your consideration².

Staiger's working office at this time was the old Post Office building in Queen Street and even if the minister had responded to his request there would have been little space to house more than a very small library. Even six years later, in 1879, Bailey, the keeper of the herbarium—a department of the museum from 1874—reported that he did most of his work at his private residence—

there being no room at my disposal at the present museum and all the requisite books of references, being my own library³.

Apparently in 1873 parliament had approved £50 for a botanical library although it was never spent.

For three years from 1857 the Austrian frigate *Novara*, sailed on a voyage of discovery across the Atlantic, Indian and Pacific Oceans. The reports of that voyage, contained in the 16 volume *Reise de Novara*, were donated by the Imperial Academy of Science, Vienna. This was the first substantial international work acquired by the museum library. Here reproduced is the meteorological data for part of its passage and the chart of the vessel's course in the western Pacific.



The Formative Period, 1876–1881

Charles Coxen, the honorary curator of the museum also had his own small library that he probably used to help him work on his own collections as well as those he had given to the museum. Soon after his death in 1876, the board of trustees, appointed earlier that year, received an offer from his widow to dispose of his collection to the museum and this offer was recorded in the minutes of the board meeting of 20 June 1876. It was some time before all the negotiations were finalised, payment not being authorised until 24 January 1877. The acquisition of the Coxen collection of books can be said to be the beginning of the museum library.

On the same date that payment was authorised to Mrs Coxen the board decided that quotes should be obtained for an insurance policy 'for Museum collection and books'—an independent confirmation of the existence of an embryonic library. The board's interest was further demonstrated when, at its meeting on 20 June 1877, one year after receiving the offer of the Coxen collection, it authorised payment of the sum of £4.10.6d to Otto Hagen, a bookbinder who conducted a business in nearby Roma Street. Unfortunately no record exists of what Hagen's account covered but the sum expended suggests that more than twenty volumes had been bound, unless the publications were of an extra large size. One of the important publications that was acquired with Coxen's library and specifically mentioned in the annual report for 1876 was Mr Gould's *Australian Birds*⁴. Another important acquisition took place in the latter half of 1877. Silvester Diggles, a leader on the Brisbane scene in both music and the natural sciences, offered his 21-part *Ornithology of Australia* to the trustees for £20, and the offer was accepted immediately⁵. The board had had some dealings with Diggles earlier in 1877, paying him an amount of £12.19.6, but it is not known if the items supplied on that occasion included books⁶. To the end of 1877 the sources of library supply appear to have been valuable second-hand publications previously owned by leading citizens, or local work such as that by Diggles.

January 1878 marked a new phase in the development of the library when the board received an offer of the 16-volumes of the *Novara Expedition*⁷. The *Novara* was a frigate which carried out a voyage in the



years 1857–1859 collecting natural history specimens, and the publications, which were offered through the agent-general in London by the Imperial Academy of Science in Vienna, were the scientific reports on the material collected. *Reise der Novara* was the first substantial international work offered to the museum library. Administrative arrangements for the forwarding and delivery of international donations were of such a nature that it was to be August 1879 before these volumes were obtained from the colonial secretary's office in Brisbane⁸.

Staiger was fully occupied as an analytical chemist and the function of custodian was an additional duty. There was little work involved in the administration of the small library collection and from 1878 it was probably done by the temporary clerk Charles Chester. The history of the museum library is, in part, the history of those who controlled the institution and of their attitudes, for it was to be 25 years before a member of staff was officially designated librarian. The documents of the period give a clear



Gould's *Birds of Australia* was one of the first sets of volumes acquired by the museum. It was part of Coxen's library which, with his collections of shells and birds, the museum trustees purchased for the sum of £239.2.0 from his widow, Elizabeth. It is now probably the most valuable set of volumes in the museum library—the plates being collectors items. Here reproduced are two of the plates from Gould's great work. *Opposite page: Chlamydera nuchalis*—the Great Bower Bird; *this page: Chlamydera maculata*—the Spotted Bower Bird.

indication that the board of trustees saw the importance of developing adequate library resources. Explaining its estimates for 1878–9, the board's view was that provision had been made 'for moderate additions to the scientific literature of the Museum library, a feature *the importance of which cannot be ignored*'⁹. In this short reference there is also the recognition that a library with its own identity existed within the museum.

Modest indeed was the sum spent on the library during the financial year 1878–1879 for the amount outlaid was £8.16.0¹⁰. The previous year £47.11.6 had been spent on the library in an 11-month period, so there had been a considerable drop, probably reflecting a lack of awareness as to suitable sources of supply of appropriate publications¹¹. There were a few donations, so the library was growing. However, without expertise in relevant areas and without adequate reference works, specimens usually had to be referred to outside specialists for identification¹⁰.

In 1880 the museum was installed in its new building in William Street. It had basement, ground floor and upper floor with a mezzanine gallery. On 2 April 1879 the board of trustees inspected the structure and held a scheduled meeting there. They advised the architect that a 'room under the first floor would do for a board room and that space need not be



Leatherjackets, plate 227 from volume 5 of the *Atlas Ichthyologique des Indes Orientales Néerlandaises* by Peter Bleeker, published by the Netherlands Colonial Government, Amsterdam, 1876–77.

screened off the main floors'. In later years the room where the board held its meetings was identified as the library in the basement¹².

William A. Haswell, the new curator, brought with him invaluable knowledge of how things were done elsewhere. It was to institutions and learned societies in Britain that the museum would have to look for reference works suitable to its purposes. Haswell's stay in Brisbane was fruitful in respect of the library. That he was active immediately is evident from a letter from Williams & Norgate, booksellers of Covent Garden and, later, Oxford. Dated 28 May 1880, and addressed to Haswell, it reports that all the publications required had been obtained 'with 2 exceptions'¹³. The annual report of the board for the year 1879–1880 contained the following:

The necessity for the efficient working of a Museum of a library containing at least a fair assortment of standard works in the various departments of science, has induced the Trustees to sanction a larger expenditure than usual on the library, so that at least a nucleus has been formed round which, in future years, by donation and purchase, it is hoped a useful scientific library will be formed. With this end in view, orders have been given to Messrs. Williams and Norgate, London, for a few standard works, including the *Zoological Record*, Gould's *Mammals of Australia*, Owen's *Fossil Mammals of Australia*, Carus and Engelmann's *Bibliotheca Zoologica*, etc. etc., which are expected to arrive very shortly. From the Trustees of the British Museum a very valuable addition has been made to this department in the form of a set of the British Museum Catalogues in 164 volumes. A series of statistical works have been presented to the Museum by the Department of Public Instruction, Paris, as an overture in the direction of exchanges to be carried on with the French Museums; and the Peabody Institute of Cambridge, Massachusetts, has presented a series of the valuable scientific reports issued annually by that institution¹⁴.

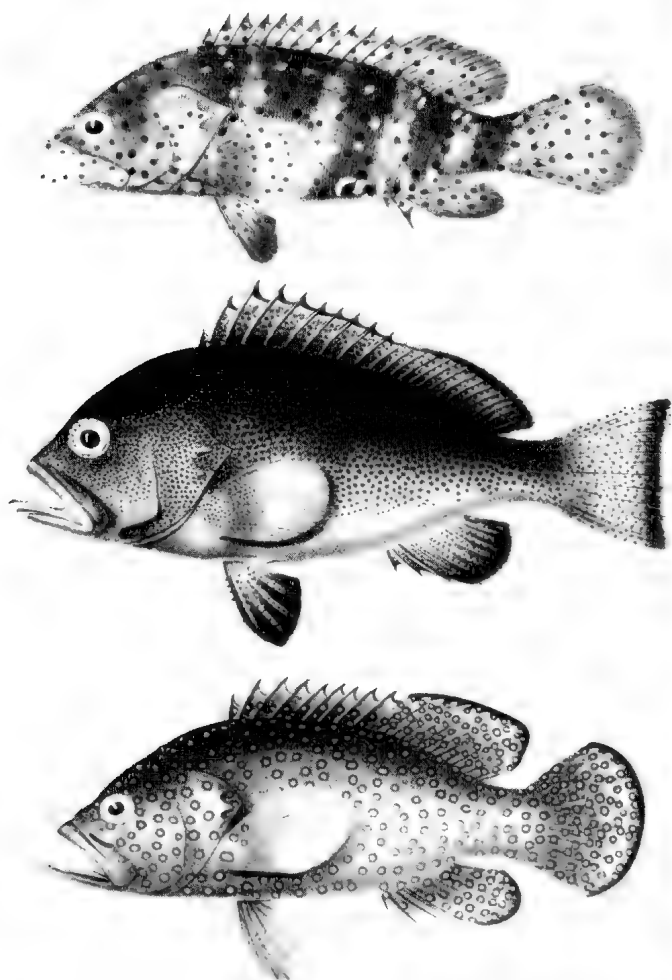
The catalogues from the British Museum were not the result of action taken by Haswell but had resulted from a board initiative. In 1856 a library open to the public on a subscription basis had been opened in Brisbane. This was the School of Arts library in Ann Street. In its collections there was *The Catalogue of the Fishes in the British Museum* and this was made available on loan to Staiger at the museum. Early in 1879 the School of Arts required the Catalogue to be returned, and on complying the museum board wrote to the British Museum asking for a copy for its own use¹⁵. Almost immediately it realised that the British Museum might be happy to supply its full range of catalogues and the board decided to ask on 19 February 1879. Publications of this type are exceptionally useful working tools and the British Museum Catalogues were invaluable for many years.

Zoological Record, ordered by Haswell, was and still is a fundamental research tool in the natural sciences. The Zoological Society of London began this publication in 1864. In annual issues it indexes the world-wide literature on zoological subjects. Divided into classified sections, with author and subject lists, *Zoological Record* permits a researcher to establish and identify literature published on any particular topic. Naturally, it cannot provide the literature itself and eventually other tools were evolved that would. Haswell's action ensured that the museum library was equipped with a complete set of *Zoological Record* from 1864 onwards.

The publications from Paris had a somewhat different significance. On 4 December 1879 the board of trustees received a communication from the Service des Echanges Internationaux, Ministère de l'Instruction Publique des Beaux Arts, Paris. It offered an exchange of publications issued in

France for material published by the museum. The system of exchanging publications was later to be a valuable source of acquisitions by the museum library but in 1879 the Paris overture was a little premature for the museum had nothing to exchange.

Generally in Queensland at this time libraries were in their infancy. The parliamentary library was well established and for that reason tended to receive reference works that would have been better suited to other libraries, had such special libraries existed. On 7 September 1880, the librarian of the parliament advised that he had been empowered by his library committee to pass a selected publication to the museum¹⁶. While functions and collecting policies of such libraries as existed remained undefined this type of interchange and co-operation would be essential. It was to continue for many years and important accessions to the museum library resulted. On 25 September 1880 board approval was given to the



Syngnathus punctatus (Forsk.) *Syngnathus punctatus* (Forsk.) *Syngnathus punctatus* (Forsk.)

Reef Cod, plate 283 from volume 6 of the *Atlas Ichthyologique*. Peter Bleeker was a surgeon of the Dutch East Indian army. During his service in Batavia, 1842–60, he wrote 432 articles on the fish fauna of the Indo-Australian archipelago. However, the *Atlas* was his chief work. As well as providing descriptions of a comprehensive range of species from the region, many were illustrated for the first time in the nine volumes of the *Atlas*, which were purchased by the Queensland Museum in 1884—one of the few original sets in Australia to this day. As in so many zoological works of this period, the plates are chromolithographs, each individually hand painted.

Queensland Philosophical Society to store its books on museum premises and no doubt this expanded the library resources then available to the museum staff.

After Haswell vacated the curatorship towards the end of 1880 to accept a higher paid appointment in Sydney, and had been replaced temporarily by F.M. Bailey, the library collection continued to grow. On 18 May 1881, in the minutes of the board meeting, there is the first mention of any person being given a specific library responsibility. There were some unusual features:

It was also agreed that Mrs Fenwick purchase a stamp suitable for stamping the books of the Library. Also that a list of the books be prepared. Also if duplicates were in the Museum two native catskins were to be given to Mrs Fenwick.

It would seem that the catskins were to be Mrs Fenwick's reward for the labour involved. John Fenwick was a member of the board of trustees.

At first much of the basement portion of the William Street museum building had been almost useless and the board of trustees, in its annual report for 1879-1880, drew attention to the fact that this area could 'by but a very moderate expenditure' be used for preserving and storing of specimens and materials¹⁴. Such use would, of course, have a direct impact on the library environment. Towards the end of 1881 the improvements were effected to the basement¹⁷. The carpenter on the staff was also authorised to prepare shelving in the basement though this was not necessarily for the use of the library¹⁵.

This was the state of affairs on 24 January 1882 when the board selected Charles Walter de Vis for appointment to the vacant curatorship of the institution. Initially appointed for six months, he was a major influence on the development of the museum. It is also with the appointment of de Vis that the second significant period of library development began.

A Period of Consolidation, 1882-1890

The year 1882 saw the issue of two annual reports by the board, the first relating to the financial year 1881-1882 and the second to the calendar year 1882. These reports assist in tracing the development of the library. In the first it was said:

During the last year the extensive botanical library, previously kept in the Curator's cottage at the Botanic Gardens, has been transferred to the large room in the basement floor of the museum building, where Mr Bailey now works as government botanist. In this room are also contained the few works of reference belonging to the museum and the varied library of the Philosophical Society¹⁹.

At this time, in addition to the library where the botanist also worked, there was a laboratory used by de Vis for examining and classifying specimens and there was working space for the taxidermist and museum carpenter¹⁹. Just before June 1882 the additional working areas were laid with asphalt and lighted with additional windows¹⁹. Until October 1882 natural light provided the only form of lighting anywhere in the museum building. In that month a gas connection was made to the basement²⁰. Internal stairs provided access to the basement from the ground floor. These were closed off with a small gate at the head of the steps when it was found that members of the public were mistakenly descending the stairs in search of further exhibits²¹.

The main source of material for the library in 1882 appears to have been donations. There was one that was remarkable, the first of its kind. It

came from an anonymous source and was a £10 cash donation for the purchase of books²².

The annual report for 1882 showed the enthusiasm of the board for the library to be undiminished:

The very scanty resources of the museum library, when brought under the notice of the late minister, received from him the consideration which was desired, and the works of reference most immediately required for research were at once ordered. The board respectfully recommend that this, the only collection of scientific literature freely open to the student, should be rendered as complete as possible in every department of inquiry²³.

The importance of the museum library to the community is thus recorded. Its only competitors in Brisbane were the schools of arts' libraries which were not free but available only on payment of a subscription. No such thing as a free public library existed in Queensland at that time.

The attitude of the minister responsible for the museum was also an important factor in determining the course and rate of development of the museum library. In 1882 the requests of the board did not fall on deaf ears. This is evident in the comments of the trustees in the annual report for 1883:

In attaining that measure of success we have been chiefly aided by the liberality with which our requirements have been met by the Government. We refer more especially to an ample grant of the furniture needful for the display of specimens, and for that increase of our small library which is now providing partially for the necessities of research. The importance we attach to the formation of an efficient collection of books of reference will, we hope, excuse us in cherishing the expectation that the favour we have obtained in this work will be still further extended.

By the help of the library — imperfect as it yet is — and by that of our collections, our officers have been enabled to supply the nomenclature of, and other information respecting, natural objects to many inquirers.....²⁴.

This happy conjunction of a board and a minister, who both recognised that an adequate library was not a luxury but a necessity, was responsible throughout the 1880s for consolidating the efforts of the museum administrators of earlier years — Staiger, the board of trustees and Haswell.

On 5 June 1883, payment was authorized to the booksellers Williams and Norgate of an amount of £223.7.0d. The list of acquisitions shows that the library got more than full value for the money for there were some outstanding and far-sighted purchases²⁴. These included *Annals and Magazine of Natural History* 1838–1883 (90 volumes); *Quarterly Journal of the Geological Society* 1845–1883 (39 volumes); *Proceedings of the Zoological Society* 1830–1883 (56 volumes); *Transactions of the Zoological Society* 1835–1853 (9 volumes); *Transactions of the Palaeontographical Society* (36 volumes); *Zoology of H.M.S. Erebus and Terror* (2 volumes); *Histoire Naturelle des Poissons*, a series by Cuvier and Valenciennes (22 volumes of text and 19 of plates). These and similar purchases of inestimable value created the basis of the museum library, and gave it an importance as a reference source for the natural sciences that was disproportionate to its size. This has continued throughout its existence. Nor were the donations for the year 1883 without significance²⁴; The Hon. Captain Hope gave the 16 volumes of Cuvier's *Animal Kingdom*. The museum's former curator,

Haswell, was the author of one publication—*Catalogue of Australian stalk- and sessile-eyed Crustacea*. de Vis and the board acknowledged that—

many valuable additions, both by gift and purchase, have been made to the Library. The Trustees of the British Museum and those of the Australian Museum Sydney, and most of the scientific Societies and establishments of Australia and New Zealand have enriched it with their several publications; but the most numerous examples of this liberality have, as usual, been received from the United States through the Smithsonian Institution²⁴.

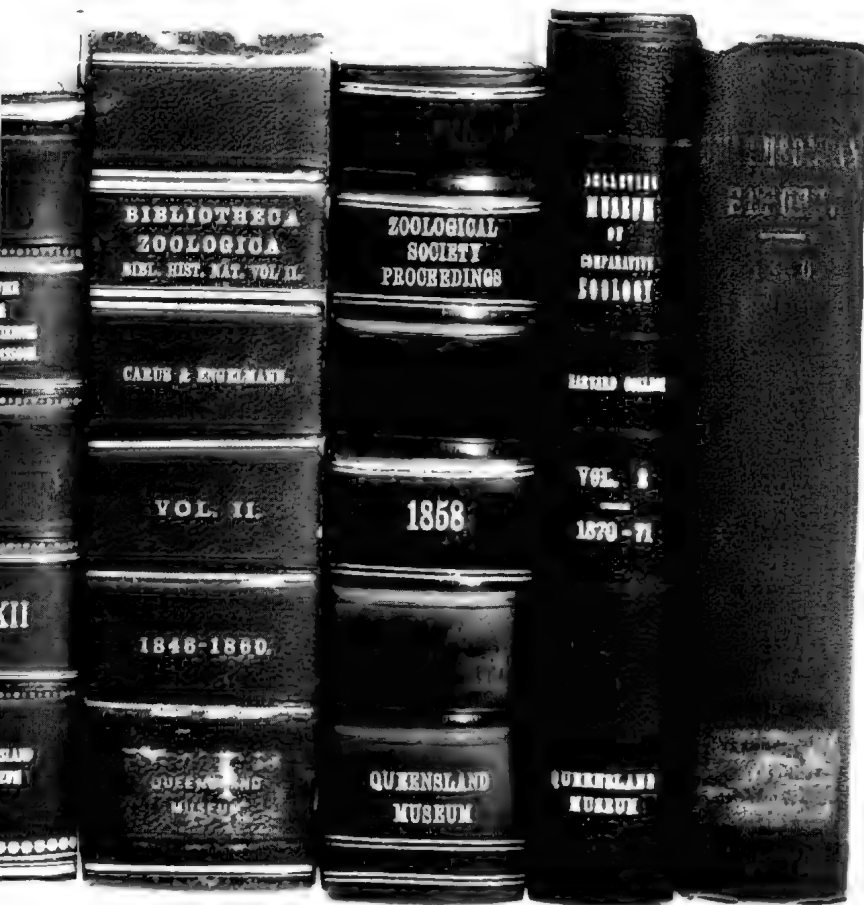
Towards the end of 1883 the Philosophical Society gave way to a newly-formed organisation, the Royal Society of Queensland and it applied to the board for the use of the museum premises for its inaugural



meeting²⁵. The new society had already enrolled some 67 members²⁶. There was an external entrance to the library through a gate from the William Street footpath, at the south-eastern end of the building. It was almost certainly down the pathway from this gate that many of the leading men of science made their way to the gaslit library on the evening of 8 January 1884. It is appropriate that this meeting should have taken place in the only scientific institution that then existed in Queensland—the museum.

Already by the end of 1883 space for the museum's collections was a pressing need, and at the meeting of the board held in the library on 12 November 1883 Douglas gave notice that at the next meeting 'he would move that the government be addressed in reference to the establishment of a free library in the present museum building, and the construction of another building better adapted to the purpose of a museum'.

Although furnishings for the library were purchased in 1884—six chairs and a clock²⁷—difficulties were growing in that department, de Vis reporting that the library apartment was inconveniently small and its shelves already filled. What was called the library was now, in fact, a study occupied in common by three and frequently four officers engaged on different subjects—to their mutual hindrance. It was also a reception room for visitors²⁸. The upper floor of the museum was used for the display of molluscs, anatomy and botany, and one end was filled by the herbarium.



Some of the important acquisitions to the museum library before 1883 (L to R): *Annals and Magazine of Natural History*, volume 1, series 1, 1838. The first of an uninterrupted run of this much-used journal that continues to the present day. *The Zoology of HMS Erebus and Terror*. The scientific reports of a journey of exploration that circumnavigated the Southern Ocean, 1839–43. *Reise de Novara*, 1862–5. One of the 16 volume set of the scientific reports from the voyage of the Austrian frigate 1857–9. *Corals*, by Milne Edwards and Haime, published by the Palaeontographical Society, 1850–54. *Histoire Naturelle des Poissons* by Cuvier and Valenciennes, 1828–50. One of 22 volumes, purchased in 1883. *Bibliotheca Zoologica*, Carus and Englemann, 1846–60. A natural history bibliography purchased in 1880. *Proceedings of the Zoological Society, London*. The museum continues to subscribe to this classic journal, first published in 1830. It is now known as the *Journal of Zoology*. *Bulletin of the Museum of Comparative Zoology, Harvard College* vol. 2, 1870–1. Acquisition continues today through exchange. *Smithsonian Reports* 1880, a gift from the great American Institution—one of the many publications it donated to the Queensland Museum. Acquisition of the *Reports* as *The Smithsonian Year* continues through exchange.

On the ground floor were displayed minerals, fossils and anthropological items. Zoology was in the mezzanine gallery.

In the basement the crowding was compounded by the arrival of an important donation to the library in 1884. This, the *Specifications of Patents* from 1617 to 1881 inclusive, came from Britain. The board of trustees had always intended that the museum should be concerned with technology as well as natural sciences, and patent specifications were a first priority for a technological section. Space was somehow found and the *Patents* volumes were arranged in a special apartment fitted up for the purpose²⁹. Late in 1884 the government announced that a new museum would be built, but years would pass before the prospect of additional space became a reality.

The inward flow of serials and monographs continued unabated, each year bringing acquisitions of scientific value. Ten years after the library's modest beginnings in 1876 it was receiving further publications of lasting value such as *Archiv für Naturgeschichte* (101 volumes), *American Journal of Science* (131 volumes), *Zoology of the voyage of H.M.S. Beagle* (5 volumes), as well as many scientific catalogues, guides and serial parts from interstate and worldwide sources, such as the British Museum, the Museum of Comparative Zoology at Harvard University, and the Indian Museum at Calcutta, to mention but a few³⁰. Volumes of the reports of the important *Scientific Results of the Challenger Expedition* arrived regularly from 1884 onwards³¹. In 1887 and 1888 purchases were not so numerous, but donations maintained a steady level. The Brisbane School of Arts made a donation of the report on the Crustacea of the *Norske-nordhave Expedition 1876-1878*³², and Brisbane and Sydney booksellers were being approached for publications—though the supply from the latter source was small³³. In 1889 an important source of publications appears in the donation lists for the first time: Her Majesty's Stationery Office, London³⁴. In the initial donation several hundred official publications covering a wide range of subject areas of interest to the museum were received. Perhaps, in view of the shortage of space, it was fortunate that, in 1888, the museum was instructed to transfer the *Patents* to the Registrar General's Office.

Conditions in the basement library could not have been pleasant in 1889 for William Street was being lowered and explosions and dust were daily nuisances³⁵. Maintenance of the library had also become a problem. Apart from space difficulties there was the question of binding. Otto Hagen bound hundreds of volumes and supplied other items but it appears that, about 1889, his business closed, at least at its Roma Street address³⁶. The need for binding was urgent. In 1890 the museum requisitioned for 200 volumes to be bound by the Government Printing Office, apparently unaware that funding would have to be arranged despite the fact that a government department was being called on to provide the service³⁷. Binding by the Government Printing Office was thus not to provide the solution.

The supervision of the library collection was now probably the responsibility of the clerical assistant, Henry Tryon, who came to the museum in September 1883³⁸. Tryon became assistant curator in 1885, though there appears to have been no change in his duties. Tryon, 'a young and distinguished student', was also secretary of the newly formed Royal Society³⁹. On 1 April 1887 the curator sought approval of the trustees for a youth, H. Hurst, 'to perform on trial without salary the duties of clerk and librarian for as long as may be convenient to the board'. Hurst came on the staff, but his unpaid status—which seemed to place him even lower on the reimbursement scale than Mrs Fenwick with her two catskins—was not to

remain long. In September he became the geological collector and soon after was referred to as the 'Keeper of Minerals and Fossils', although the library remained his responsibility for some years⁴⁰.

In November 1890 the contents of the library were catalogued, presumably by Hurst³⁷. This was the first time the items, which had been accumulating for 14 years, had been brought to account in a central listing. The form of the catalogue appears to have been a handwritten list, for the museum did not acquire a typewriter until October 1892⁴¹, and de Vis spoke of the catalogue being 'kept posted to date'⁴², almost as though it was written up like a ledger account. In this period, and for many years afterwards, it was the custom for many libraries to issue published catalogues of their holdings as a working tool for those who wished to use it. Although it was intended that the catalogue of the museum library be so published³⁷ this proved to be too costly. By this time the library had taken on that character which it bears today, with a preponderance of scientific periodicals and fewer books.

The Exchange Programme, 1891-1910

It had been the practice until 1889 for the Royal Society of Queensland to publish scientific work submitted by de Vis, the curator of the museum⁴³. However, de Vis was prolific and this was not entirely practical, so the museum began publication of its own journal (see Chapter 7). Issue No. 1 of the *Annals of the Queensland Museum* was published in 1891. By the time that No. 2 was presented for approval on 6 May 1892 material sufficient for No. 3 was ready. Continuity of publication seemed assured. The museum now had something to exchange for the publications of other institutions and learned societies. The earliest records show that, by 1895, the *Annals* was being sent to exchange partners in many countries—Argentina, Austria, Belgium, Germany, Brazil, Chile, Costa Rica, Denmark, France, Ireland, Scotland, England, South Africa, Ceylon, Nova Scotia, Canada, Newfoundland, India, Mauritius, New Zealand, Straits Settlements, Guatemala, Holland, Italy, Japan, Mexico, Norway, Peru, Philippines, Portugal, Finland, Russia, Spain, Sweden, Switzerland, U.S.A. and the West Indies. A number of copies were also addressed to private persons some of whom had sent copies of their own published works to the museum⁴⁴.

Not so happy was the situation in respect of staffing of the library. Because 'the work of the office and library at present performed by the Keeper of the Minerals and Fossils was to the neglect of his duties as an expert' the board decided, on 5 June 1891, that 'a youth should be engaged for clerical and other subordinate duty at a salary of about 6 shillings a week'. At least the youth was to be paid for his services which must be considered some sort of improvement on the terms of Hurst's original appointment. Hurst did not remain in employment with the museum for very long thereafter, leaving in November of the same year. The youth, appointed in September 1891 to look after the library and clerical work, was A. Preston. In the course of time, after one or two upwards adjustments in his wages, the board decided there would be no further increases for him because, there being no opportunity for promotion, they felt it unfair to induce him to stay⁴⁵. It seems that Preston went to Ballarat School of Mines⁴⁶. When he left the museum he was replaced by A.J. Norris and subsequently, from 1898, by G.H. Hawkins (see Chapter 3).

The year 1893 was something of a disaster for the institution. This was the beginning of the great economic depression and the year of the great flood. Funding was slashed and many staff were retrenched⁴⁷. The



Kathleen Thomas (née Watson),
librarian 1933-42.

museum library was destined not to be restored to its former position for several years. Nevertheless, it remained open to students and learned societies. The curator had been left with 'barely sufficient means to keep the museum open to the public'⁴⁸. The reduction of staff meant that some space in the basement was unoccupied and certain other organisations were given permission to use it. They included the Royal Society, the newly formed Natural History Society and the Queensland branch of the Royal Geographical Society of Australasia^{48,49}. The office clerk was the only staff member available to handle the library's affairs. A reduction of £150 in the library estimates⁵⁰ was partly offset by the sale of £38 worth of duplicate material to the British booksellers Williams and Norgate⁵¹. Other duplicates were exchanged for publications needed by the library and some were given to the Department of Agriculture library⁵².

The collection continued to expand through donations from other institutions and societies, and as a result of the exchange of the *Annals*. Some purchases, mainly books, had been made and additional book cases obtained⁵³. Lack of binding was becoming a problem of great magnitude. Hundreds of volumes lodged with the Government Printing Office were eventually returned unbound on the minister's authority⁵⁴. Binding was a major problem for a library collection in which scientific periodicals predominated. When, in 1899, preparations were being made for the move to the Exhibition building a library stocktake revealed 7,342 volumes. However there was still no card catalogue and no furniture in which it could have been kept⁵⁵.

Among the temporary staff recruited to assist with the move was Ernest Albert Lower⁵⁶. In seeking a position Lower wrote that he had 'been in the employ of Dr. Jas. C. Cox of Sydney as Conchologist & Travelling Naturalist for a number of years; have also a very fair knowledge of Botany'. Lower was given a job in October 1899 as 'packer'⁵⁷. On 3 March 1900 he became 'printer'. He wrote a very fair hand and appears to have been engaged on the preparation of the countless labels needed for exhibits in the new accommodation. On 18 February 1901, some six weeks after the museum re-opened to the public—the opening took place on 1 January, Federation Day—Lower was appointed 'Librarian and Label Writer' by the minister for Public Instruction⁵⁸. His appointment was backdated to 1 July 1900. The library seemed assured of continuing supervision for the first time, but on 27 June 1902, de Vis was notified that the services of Lower and three other museum staff were to be dispensed with three days later. The period was eventually extended to 30 July⁵⁹. The state was still in a period of economic depression and the new free public library—the Public Library of Queensland—opened, at the end of April 1902, in the old museum building in William Street⁶⁰. The staffing required at that new library seems to have been compensated for by retrenchments at the museum. Lower was the first appointee to be designated 'librarian'. In later years he developed a very fine collection of shells, numbering 3000, and resided in Sydney. At this time he recalled his duties at the museum as including librarian, writer, printer, keeper of aquariums and clerical duties⁶¹. A classified card catalogue of the library was completed in July 1901 and Lower probably made a contribution towards its preparation⁶². Presumably the catalogue card cabinet, on the need for which the trustees had deferred a decision in September 1899, was later obtained⁶³. In April de Vis reported that he had acquired, from the parliamentary library, the 46 volumes of the *Scientific Reports of the Challenger Expedition*. This is one of the mysteries of the museum library

that has not been resolved, for the museum was purchasing these volumes from 1884. It indicates very clearly that proper registration procedures for the library were needed⁶³.

Director de Vis was now more than 70 years of age. Museum library holdings had passed 10,000 items in June 1904, about 90% being volumes and the remainder fugitive material⁶⁴. Control of the institution passed from the Department of Public Instruction to the Department of Agriculture and then to the Chief Secretary's Department. The board of trustees held its last meeting about September 1907⁶⁵. The *Annals of the Queensland Museum* had continued as a medium of exchange but its publication rate slowed. One improvement did take place before the board was disbanded — more than 300 volumes were being bound, in April 1907, by bookbinder George Hooper of Elizabeth Street⁶⁶. There remained a vast backlog — one that has never been overcome.



Kylie Whitehead, library assistant, watches as her colleague, Victoria Coops, uses one of the near vertical ladders supported on the horizontal fixed rails that were installed in 1934 — after librarian Nora Holdsworth had sustained an injury while 'standing insecurely on a ladder'.



The library outgrew its accommodation and wound its way through the building—along both sides of the passages, through the basement, and into curators offices and the lecture theatre.

A Re-awakening, 1910-1917

The appointment of Hamlyn-Harris as director in October 1910 re-awakened a sense of direction and opened the next phase of library history. Before taking up the position officially he visited museums in other Australian states and referred back to the museum lists of publications he considered vital for its library to possess⁶⁷. The lists were checked against holdings and approval was obtained from the Chief Secretary's Department for the purchase of those not already held. Vere Chambers, rumoured to be the grandson of de Vis, had been appointed a short time previously to carry out library and clerical duties⁶⁸⁻⁹. Robert Etheridge jnr, in his 1910 report to the premier, describes Chambers as 'a young man of eighteen years and about two years service' whose 'books are neatly kept..... He has only an elementary knowledge of library work'⁷⁰.

Although attempts to catalogue the library had been made previously, there were no proper accession or registration procedures and it was impossible to check holdings and record loans adequately. Hamlyn-Harris arranged for two registers to be opened, one for books and the other for journals. The first entries were made in 1911 and included the existing collection. Museum staff who later recalled this period said that it was Hamlyn-Harris who gathered together the publications previously scattered throughout the building and housed them in one very large 'light and airy' room in the basement. From that time forth this room became the library. The new director, imbued with a sense of purpose, was also energetic in his endeavours to develop the exchange programme. For this purpose a new publication with a larger format—the *Memoirs of the Queensland Museum*—replaced the *Annals*. A number of publications were found to have been lent to private persons and never returned so Hamlyn-Harris bent his energies to their retrieval⁷¹. He laboured under irksome restrictions, requiring approval for even small expenditure on important items. A letter, dated 31 January 1911, sought the authority of the chief secretary to have Roth's *Bulletins on Queensland Aborigines* bound⁷².

Vere Chambers resigned in 1911 and his place was taken by Clarice Sinnamon, a member of a well-known Brisbane family⁷³. Douglas Rannie continued what would prove to be a line of librarians. He was appointed in June 1913 on a salary much less than half of what he had previously received as a classified officer⁷⁴. At one time he had been Inspector of Factories and Shops and Superintendent of Labour at Charters Towers. His testimonials included one from Sir Samuel Walker Griffith at that time Chief Justice of Australia⁷⁴. Cuthbert Butler—later to be a member of parliament⁷⁵—was the next librarian (1915-1917). World War I had begun and there was a consequent breakdown in many exchange arrangements, particularly those in continental Europe.

Hamlyn-Harris had consolidated the library and given it an identity. A man of cultivated background, he understood the need and relevance of a properly functioning library. In other Queensland institutions at this time and for many years thereafter there was, apparently, a view that libraries, however neglected and lacking in continuous control they might be, could somehow instantly deliver services to an expected standard on demand. In this respect Hamlyn-Harris was ahead of his time on the local scene.

A Period of Financial Strigency, 1917-1945

Heber Longman, who succeeded Hamlyn-Harris, became the longest-serving museum director. Joining the staff in 1911, he became director in 1917 and remained in charge until after World War II. It was a stagnant

period for the library, with neither expansion nor contraction in a long period of financial stringency. Museum staff were fewer at the end of Longman's tenure than at the beginning. The survival of the institution in the face of the economic depression between the two world wars was an achievement in itself. Librarians in Longman's time were Alec Fenwick (1917–1930), Nora Holdsworth (1931–1933) and Kathleen Watson (1933–1942). Fenwick had been president of the Waterside Workers' Federation⁷⁶. The attributes he brought to the job were not those which aroused Longman's enthusiasm but they were probably those most needed for the library at that time:



Librarian E.P. Wixted (*right*), and E. Crome—collector of aeronautical memorabilia—with Mrs Mary Tully, Sir Charles Kingsford Smith's widow, examine part of the Kingsford Smith collection of memorabilia presented to the museum aviation collection by Mrs Tully on behalf of the Kingsford Smith family.

A Librarian in a State Museum should be an educated person with a definite interest in science, and with ability to arouse interest in the work of the institution. Mr Fenwick lacks both the temperament and the training for this work, and at times his manners and his methods are not in keeping with his position. As a technical custodian of books, however, he has done excellent work, and he keeps the library in good order. He does the work to the best of his ability and is regular and methodical⁷⁷.

Nora Holdsworth was a graduate in science and Kathleen Watson a graduate in arts. In 1934 an injury was sustained in the library and the record of the event reflects the shortcomings of the library accommodation:

Sir,

Owing to the height of our Library, and the fact that there are no less than thirteen shelves, one above the other, in most of the series, there is an element of danger in removing books from the upper shelves, when standing insecurely on a ladder. I should be extremely obliged if the Department of Public Works could assist us by placing some kind of rod or rail on the shelf lines where the long ladder rests, on which it would securely remain, without slipping, whilst in use in any one section.....⁷⁸.

The rails were put in place and they were there until the museum moved in 1986—more than fifty years after the incident.

The Modern Period, 1946-1986

George Mack became director in 1946 and inherited an institution in a depressed condition following World War II. In the disturbed post-war period there was a rapid succession of librarians and assistants (see Appendix 2). Claire Forde, who stayed longer than most — from 1957 to 1962 — and made a substantial contribution, was the daughter of F.M. Forde who had been prime minister of Australia for a few days in 1945. Shirley Gunn, a zoological assistant, also helped in the library and later became a well known University of Queensland librarian.

A major part of the library's periodical collection was not bound. George Mack set himself the task of rectifying this situation, channelling funds into its accomplishment. He took pride in having secured approval for a contract with a private firm of bookbinders instead of the Government Printing Office^{7d}. Smith and Paterson, the firm engaged, did much to reduce the massive backlog until the business closed in the early 1970s.

The publishing practices of the many hundreds of organisations from whom the museum received publications showed endless variation. They varied within each publication, from period to period over a spread of more than fifty years, and from one series to another. Preparation of complete volumes for binding was laborious and tedious with unending searching and checking.

A fixed location system had been instituted by Hamlyn-Harris in 1911 and was still in use at that time in many other libraries. It designated the position of a publication by panel, number of shelf and position on shelf. The location 11/1/2 meant panel 11, shelf 1, book 2. After fifty years of this system periodicals in the same series were scattered in a variety of places on the library's 700 shelves — space at the original location having run out. Shelves were crammed and the topmost holdings much in need of

An illuminated address to Kingsford Smith from the Municipality of Lane Cove — from the collection of memorabilia presented by the Kingsford Smith family.



cleaning. It was Mack's particular desire that *all* the periodicals and other publications emanating from one institution or organisation should be found in one place on the shelves and this was an instruction given to E.P. Wixted when he was appointed librarian in April 1961. A new system was developed and the holdings re-sorted. The new system identified the publisher as Mack insisted it should. The principle was similar to that used by the U.S.A. Public Documents Library.

By this time the library had outgrown its accommodation and had begun wending its way through the building. The process continued and eventually library material was located in more than thirty rooms and corridors. The space difficulty was compounded in the late 1960s with the development of a history and technology section. Subject areas and library suppliers proliferated accordingly. Publications on clocks, porcelain, silverware, pottery, costumes, medals, period uniforms, engines, coins and so on, were now acquired in addition to those on natural history. Some sections, such as art, needed to be strengthened and others, such as conservation and maritime archaeology beginning in the early 1980s, had to be developed from scratch.

Special collections, usually including material other than books and periodicals, relating to a specific subject area or object, are also an innovation in the library. At this stage the special collections are a newspaper collection (1900–1933), Australian patent specifications covering some seventy years, and a collection of aviation memorabilia and papers.

The aviation collection was named in 1973 for Queensland aviation pioneer Thomas Macleod. It is interesting that much of Macleod's pioneering effort took place in 1911 on a hillside at Oxley on a property now owned by the Sinnamon family. It was also in 1911 that a member of that family, Clarice Sinnamon, became museum librarian. There is also a link between the Queensland museum and aviation history in Sir Charles Kingsford Smith's, aircraft *Southern Cross*. The original owner of that aircraft was G.H. — later Sir Hubert — Wilkins, who had bought it for his

Wixted (*left*) with pioneer aviators Harry Purvis and Norman Lennon in the room housing the Thomas Macleod Queensland Aviation Collection. This room had previously been the museum's spirit collection store — until a more appropriate external building was constructed for the purpose in the early 1970s.



1926 Arctic expedition partly with savings from his 1923-1925 exploring expedition to Queensland and the Northern Territory. Those savings resulted largely from the free rail travel provided by the Queensland government and the use of the museum as a base for the expedition (see Chapter 7).

The patents collection also recalls early years of the museum, for the library lost its original British *Patents* in 1888 and gained another, more relevant, Australian collection ninety years later.

Since 1965 there has been a marked extra workload in the library that has been generated by a growing and increasingly diverse collection, a larger professional staff and by the problems associated with the administration of a resource that was scattered throughout the building. The excellence of the library holdings, especially in the area of natural history, effected by the efforts of the first board of trustees, and Haswell, de Vis and Hamlyn-Harris, has also now resulted in its frequent use by other scientists, either directly or through interlibrary loan. Fortunately, with the exception of the years 1965 and 1966 when he had to do without help, Wixted had one, and from 1976, two library assistants.

The museum library is now installed in its new building at South Brisbane with its computer print-outs and visual display units that resolve, in seconds, profound bibliographic problems that formerly would have kept library staff occupied on literature searches for very long periods. The library has come a long way since 1879 when it moved into its first new building with its embryonic collection in which the most important volumes were those acquired from Charles Coxen and Silvester Diggles and the *Reports of the Novara*—a gift from the Imperial Academy of Vienna. Those who, like Wixted, studied in the basement of the Queensland State Library in the early 1950s will be able to imagine what it may have been like before 1900—before gaslight, telephone or typewriter were installed and with the museum botanist, the carpenter and the curator working nearby.



Charles Kingsford-Smith, with his family, visited the museum's aviation collection in July, 1978, while he was in Brisbane to celebrate the 50th anniversary of his father's epic trans-Pacific flight from Oakland, California.



14

MEN OF
GOODWILL

The Boards
of Trustees



In November 1863 everything seemed to be going well for the Philosophical Society, for the government apparently had accepted its museum as the Queensland Museum. Not only had the government provided the Windmill accommodation and given £100 to further the society's aims, but also the minister for Lands and Works had just indicated that it was prepared to provide a site outside the gates of Government House for a museum building. The society delegated three of its members to discuss this last proposal with the minister and to raise with him the appointment of trustees for the museum¹.

Those discussions of November 1863 were not fruitful. A museum building was not seriously discussed again until 1871 and it was to be even longer before the matter of trustees was raised a second time. The honorary curator, Charles Coxen, seeking relief from the minutiae of the museum's management, wrote to the secretary of Lands on 18 February 1874, suggesting that he should be appointed, together with W.H. Miskin and A.C. Gregory, to a board of four members in which would be vested 'all matters connected with the management of the Queensland Museum'². However, it was not until 26 January 1876 that Under Secretary for Mines G.L. Lukin recommended the appointment of trustees:

the work that would devolve upon Trustees is performed entirely by Chas. Coxen Esq. By appointing several trustees Mr Coxen would be relieved from some of the duties and responsibilities which are now becoming very onerous. The following gentlemen—C. Coxen Esq., F.O. Darvall Esq., J. Fenwick Esq., W.H. Miskin Esq. and A.C. Gregory Esq.—who would consent to accept the Trust would as Trustees give material aid in advancing the objects of the Institution.

Secretary for Mines H.E. King MLA, accepted the recommendation in principle but deleted Darvall from the list and added George Raff, Gresley Lukin and John Douglas MLA³. The trustees that Secretary King recommended to cabinet on 17 February 1876 were Coxen, Douglas, Gregory, Raff, Lukin, Fenwick and Miskin. The governor—W.W. Cairns CMG—approved the appointments on 25 February 1876⁴. Karl Staiger, the custodian of the museum and government chemical analyst, was the secretary to the board. The next day, the under secretary (Lukin) writing to the appointees, referred to the notification of their appointments in that day's issue of the *Government Gazette* and went on to say—

The Honourable the Secretary for Works and Mines desires me to request that among the first matters that call the attention of the Trustees you will be so good as to take into consideration the eligibility of either of the following sites at present available for the erections of a New Museum, viz.

- 1 At the corner of Queen and William Streets, at present occupied by the Audit and Harbours and Rivers Offices.
- 2 In the Botanical Gardens.

Subsequently the Trustees will be called upon to consider what description of building will be most suitable for the purpose.

A sketch plan of a Museum building proposed to be erected on the first named site is now in this office for inspection by the Trustees⁵.

Now and for some years to come the museum was referred to interchangeably as either the Queensland Museum or the Brisbane Museum in official circles. The trustees, at a meeting on 7 March 1876, decided that it should be called the Queensland Museum and by 1880 this was the name invariably used officially.

Previous page: Mrs Charles Coxen donated this portrait of her husband—'Charles Coxen Esq'⁶ CMZS, First honorary Curator, one of the earliest Trustees and Contributors to the Museum' (board of trustees minutes, 6 August 1887).

Sir

Brisbane 18 July 1874

In accordance with your request I do myself the honor to submit for your consideration the following suggestions having reference to the management and conduct of the Queensland Museum

That a Board be appointed to consist of four members in whom shall be vested the general management and supervision of all matters connected with the Museum and I submit that the Hon^{ble} the Minister for Works Mr Gregory (Survey General) Mr McKinn (Curator of the State Estate) and myself be nominated as the members forming the Board. In naming..... to the present date more than equal to the salary received by Mr Staiger and from the increasing demand for his services there can be but little doubt that with increased application his services would be well supported.

I have the honor to be
Your Obedt Servant
Charles Coxen
Hon^{ble} Curator
Queensland Museum

Charles Coxen to the Hon. the Secretary of Lands, 18 July 1874 (QSA G149/3) recommends 'that a Board be appointed' and draws the minister's attention to the revenue earned through Staiger's assay work.

A Beginning, 1876-1882

At their first meeting, on 29 February 1876, the trustees decided on the Queen and William Streets site for the new museum. They asked the government to inform them what operating funds would be available and the government's views regarding their use. By 7 March 1876 there is an indication of some hedging by the government when it informed the trustees that they were not confined to the two sites previously advised, but could put forward others for consideration. The trustees resolved to adhere to their previous decision.

At the same meeting they considered some further instructions they had received. They had been asked to examine and report on the present state of the museum and accordingly a sub-committee consisting of Gregory, Coxen and Miskin was delegated to prepare an inventory of the collections. The trustees were also asked to advise on the proposed plans of the new museum building and to make suggestions as to its regulation and management. The trustees invited colonial architect Stanley, then



Augustus Charles Gregory KCMG, scientist, explorer and surveyor general of Queensland and the first chairman of the museum board of trustees (photograph by courtesy Oxley Library).

absent, to meet them on his return and they decided to obtain copies of management regulations in force in Sydney and Melbourne. Stanley submitted his plans on 21 March and they were broadly approved. He agreed to complete and resubmit them to the board. Gregory and Miskin were deputed to draw up a set of by-laws for consideration by the board.

The board was launched. Coxen, the only person associated with the museum who had any practical experience of museology, died on 17 May 1876. However, both Gregory and Miskin understood the role of a museum and appreciated the importance of the collections. Gregory was a scientist and explorer of some renown who was establishing a noteworthy career as the colony's surveyor-general, and Miskin was a public servant whose hobby was entomology. With the exception of Lukin who was a public servant turned newspaper editor, the other trustees had pastoral affiliations—Douglas, although now a parliamentarian, had been a squatter, as had Coxen in his earlier days; Fenwick was a stock and station agent and well-known woolbroker; and Raff was a merchant, woolbroker and sugar grower⁶. Actually, many of the affluent and influential men in the community were associated with the pastoral industry at this time and, further, many were members of the Acclimatisation Society and had some knowledge of natural history. On 4 July 1876 the governor-in-council approved the appointment of Joseph Bancroft MD⁷, a medical practitioner of considerable repute who was also interested in natural history, to take Coxen's vacant place on the board⁸. Attached to the file is a memorandum stating 'These are trustees of management only'. Thus no property was vested in them.

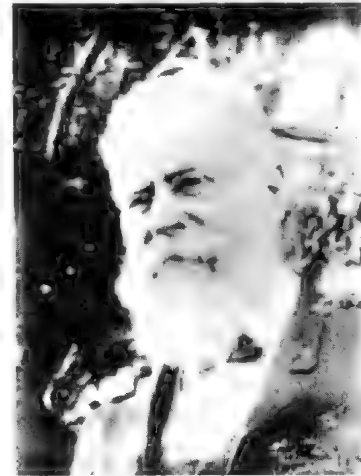
In the meantime, realising the wait they would have before a new building became a reality, the trustees had sought increased storage space in the existing Queen Street premises—the old Post Office building. In June 1876 Gregory, Miskin and Raff were delegated by the board to see the premier (George Thorn MLA—who was vice-president of the executive council, minister for Public Works, Mines and postmaster-general) to seek the rooms then occupied by the detective force in the same building. At the next meeting Dr Bancroft agreed to discuss with the hospital board the removal of the hospital dispensary, but it was not until July 1877 that the museum acquired that extra space (see Chapter 2).

In September 1876 the trustees heard that the government was intending to select an alternative site for the new museum. The minister hastened to reassure them promising, on 20 October 1876, that the museum would be erected on the site of their choice, namely the Queen and William Streets corner. He further promised that £3000 to fund the building would be put on the supplementary estimates.

Although it seemed that the building plans were now secure, this was not the case. It was almost a year before the trustees could confidently anticipate the move to the new building. On 19 December 1876 they learned from their colleague Douglas—then secretary of Public Lands—that the Treasury claimed a prior right to the Queen and William Streets corner. Further, noxious gases said to emanate from the museum would preclude choice of a main thoroughfare site⁹. The trustees objected strenuously, as the site was a 'twice chosen one', and decided to wait for further advice from the government. Then, on 3 January 1877, they accepted a site extending from the Colonial Stores to Queen Street, between William Street and the road to the old ferry (now called Queens Wharf Road) and on 24 January they were informed that the government had called tenders. The board of trustees approved the amended plans on



W.H. Miskin, amateur lepidopterist, public servant and lawyer (photograph by courtesy Oxley Library).



Joseph Bancroft MD, (photograph by courtesy Oxley Library).



John Fenwick, stock and station agent and woolbroker (photograph from *Jubilee Review of English Masonry in Queensland*, Fowler and Whitby, Brisbane, 1909).

6 February, but indicated that the laboratory and chemical department should be in a separate building. One further setback occurred on 1 March—they were informed that the government wanted part of the site returned. The trustees, now thoroughly fed-up, declined this request. Nothing further was heard of it and they now anticipated that the new building would be ready for occupation by September 1878. Eventually, it was not to be ready until the end of 1879, and even then there was some difficulty about the government handing it over. On 12 November 1879 Miskin threatened to resign:

he had heard the government had offered the new museum building to the National Association for their January show. As he thought this showed that the wishes of the Trustees, who desired to move the collections.....as soon as possible, were to receive no consideration from the government he intended to resign.

Fenwick explained that approval of the trustees was a condition of the government's arrangement with the National Association and Miskin 'allowed his resignation to remain in abeyance for the present'. On 21 November the Queensland Insurance Company objected to the collections being left in the old building—a low premium having been offered on the understanding that they would be in the new building. Then, although the government was prepared to hand the building over on 1 December, the trustees decided to wait until Haswell, the new director, arrived. He was handed the keys and told to engage labour to convey the collections from the old to the new building on 7 January 1880. Extra labour for the move cost £116.5. and a drayman £4.5.0. By 15 March 1880 the museum was installed and open to the public.

Insurance of the collections, arranged early in 1877 in preparation for the move, was for £4,000, a big sum for those days, showing that they were by no means insignificant even then.

During its first six years, despite an almost overwhelming preoccupation with the acquisition of a building, the board had concerned itself with many other aspects of the museum's operation. The colonial government was sympathetic to the concept of a museum as a repository for the flora, fauna and geology collections of Queensland. Indeed, it had set up the board and provided the museum with a building for just that purpose. Thus, the definition of the primary function of the institution was not a problem. The trustees proceeded to develop the collections. Between 1876 and 1879 the minutes reveal that a great part of the board's business was concerned with additions to the collections—by purchase, donation and exchange—and the museum's responsibilities for those collections. In fact the trustees did much of the work that, today, would be done by a curator, actually inspecting specimen lots offered for purchase and refusing material with which they were dissatisfied. They established the conditions under which specimens could be loaned—and these were usually stringent—they agreed to loans for scientific research, but loans for other purposes were not so readily agreed to; nor would they lend unique specimens. On 20 October 1876 the secretary was directed to inform the curator of the Australian Museum—

That however willing the Trustees were in forwarding the curator's scientific work, they could not allow that the Museum part with its unique specimens even for a short time.

Of course, not all the trustees were intransigent about loans—but Miskin was. His convictions are reflected in the minutes of the board meeting of 16 April 1877, where he referred to a special meeting of the

board, called by Fenwick, that he—Miskin—had not attended. It had been convened to reconsider and to rescind, a previous decision not to send specimens to the Sydney agricultural exhibition. Although there was not a quorum at the special meeting, many of the trustees had signed a minute authorising the despatch of mineral specimens.

Mr Miskin protested against, in the first place, the singular manner in which the meeting had been convened, the notices only having been issued upon the same day as that for which the meeting was called at noon.....; next a re-opening of a matter which he contended had already been decided by resolution at a previous and properly convened meeting (20th March) that nothing should be exhibited at the Sydney exhibition except the colour photographs; further against the adoption of the practice of the Board coming to a decision upon matters affecting the management of the institution by written memorandums signed singly by the members instead of discussing them in open meeting—and again most strongly against the principle of allowing any of the specimens forming part of the Museum collections to leave the Museum premises and custody of the Trustees.

Later in the meeting Miskin 'objected to the accounts for expenses incurred in sending specimens to the Sydney Exhibition being paid from Museum funds'. Following this incident the board unanimously resolved, on 18 July 1877, presumably in regard to type or unique specimens for exhibition—

that it was now time to absolutely set the matter at rest..... and.....decided that for the future it is inexpedient to make any exception to the rule of strict refusal to allow any portion of the museum collections to leave the museum premises for any purpose whatsoever.

There was general agreement that 'spare duplicate' specimens could be loaned provided there was no expense to the board. At this same meeting another important decision was made—the 'sale of museum materials to any person was beyond the scope of the board'.

A few years later the trustees received a request from the National Association to send a collection for an international exhibition, again in Sydney. At the meeting of 7 August 1879, Miskin was persuaded that it was desirable for the museum to be represented and undertook to select the items to be sent. He selected so few that the colonial secretary protested that surely the Queensland Museum could do better in view of the importance of national representation. The board appointed two others of their number on 18 August to help Miskin make a further selection of material. Miskin may have been right in his reluctance to lend material. Following the international exhibition in Sydney the items were sent on to the Melbourne international exhibition. By June 1881 they had arrived back in Brisbane severely damaged 'the contents of all the larger packages being a perfect wreck' owing to 'gross negligence displayed in their packing'¹⁰. The museum had received a medal for their display (see Chapter 4).

Meanwhile, as the new building was nearing completion, the trustees had decided that a curator should be appointed. As early as 21 March 1876 Coxen had pointed out that Staiger was doing the work of a curator. No doubt this continued after Coxen died, even though his dual role as museum custodian and analytical chemist probably made it difficult. Nevertheless, Staiger never became curator—he appears to have lost the trustee's confidence and they looked elsewhere (see Chapter 3). The board minutes 6 March 1879 record that it was thought that—



John Douglas MLA, squatter and politician, later magistrate at Thursday Island (photograph by courtesy of Oxley Library).

a good man might be procured at £400 a year and that when the collections were removed to the new building a man of suitable attainments and the requisite business capacity for carrying on unremitting correspondence with scientific bodies in all parts of the world was, at present, the most urgent need of the institution.

In the annual report of 1878–9, recommending the urgent appointment of a suitable officer to superintend the detailed management and supervision of the museum, the trustees nominated a higher salary:

The Board (members) are strongly of the opinion that a first class man should be secured from the old country and they think that £600 per annum is the least that could be offered (particularly as there are no quarters provided for residence) likely to attract the attention of a man of such attainments as would raise the institution to the position it is hoped it will command.

The salary, eventually offered was a mere £200 per annum. So William Haswell BSc, MA (Edinburgh) came, and went within the year (see Chapter 3).

One of the applicants for the position of curator was Gerard Krefft, formerly the curator of the Australian Museum in Sydney. Krefft had been relieved of his position in that museum on what appear now to have been contrived charges made by the Sydney trustees. He never had been reinstated nor had he been able to find another position. Friction between Krefft and his board had developed over some of its members's unilateral manipulation and use of both museum staff and collections. Naturally Krefft had objected. Ultimately, in September 1874, without power to dismiss him and being unsuccessful in obtaining his resignation, the trustees had had him evicted from the curator's quarters in the museum¹¹. Two of the most reliable trustees had resigned over the incident, one of them observing that—

it would be difficult to find a Curator to work like Krefft; he has made our Museum the admiration of the scientific visitors¹².

Krefft is now regarded as the best Australian vertebrate zoologist of his day. He had been the first to recognise the significance of the Queensland lungfish, *Neoceratodus forsteri* Krefft. He published monographic works on snakes and mammals of Australia and his authority in the field of vertebrate palaeontology at that time was challenging Sir Richard Owen's in the British Museum:

Krefft was one of the first to raise the banner of colonial independent expertise.....backed by the rising importance and stature of the colonial museum¹³.

He had written, on 11 March 1879, to let the Queensland trustees know that he was an applicant for the 'position of curator at the Queensland Museum', enclosing testimonials, offering his library and collection to the museum at nominal cost if he should be appointed, and offering—

to begin work without payment for a month or two just to become acquainted with the.....rich stores which your museum undoubtedly possesses¹⁴.

Krefft died, destitute, in 1881, at the age of 51.

Haswell's application for the Queensland position, received by the board on 19 February 1879 was supported by a recommendation from Krefft's successor in the Australian Museum, E.P. Ramsay. Haswell's academic record was good—but that on its own does not explain why the museum board choose the untried and inexperienced man from



Gresley Lukin, public servant and newspaper editor (photograph by courtesy Oxley Library).

Edinburgh in preference to Krefft, except that perhaps the choice reflects the influence of the Sydney trustees. Certainly Krefft had had the support of at least one eminent naturalist in Queensland—Silvester Diggles—who wrote to the *Brisbane Courier* suggesting Krefft as a suitable curator for the new museum¹⁵.

In any case, Haswell's scientific stature, as the board had hoped, did confer a new prestige on the museum that was probably enhanced by its new building. The collections continued to expand. On 20 August 1880 the minutes record that during June and July the museum had received:

214 bird skins, many of them rare, besides mammals fishes etc. from collector Broadbent (then on contract to the board) at Cardwell; also a good many from other sources; a collection of corals from a dealer at Bowen; 2 cases of fossil bones from Clifton, Darling Downs; specimens of Fiji products from the Fijian government; 2 dugongs purchased.....

A taxidermist had been appointed and the *Queenslander* of 13 March 1880 concludes a glowing account of the displays in the new building with the remark that—

one of the many advantages of a competent scientific gentlemen as curator is that opportunities of judicious purchase are not likely to be lost.

The trustees proudly refer to the museum—the only scientific institution in the colony at that time—as the scientific centre of the 'great and varied territory of the colony' in their report of 1879-80. In the same report they express their embarrassment about Haswell's low salary:

provision made for the remuneration of this officer—*viz.*, £200 per annum—being, as is obvious, of but a mere temporary character to meet the occasion, requires now to be placed on a more satisfactory footing, and it is hoped that the Government will recognise the necessity of remedying this palpable incongruity by providing a salary consistent with the importance of the office and adequate to the acquirements of the holder thereof.

The government was not convinced. Haswell's resignation came after a disappointing parliamentary debate from which it was apparent that his salary would not be increased. At least the move to the William Street building was achieved during his tenure.

It was March 1882 before Haswell's replacement, Charles Walter de Vis BA (Cantab.), was appointed. All through 1881, F.M. Bailey, the keeper of the herbarium then in the museum, was temporary curator and the business of the museum proceeded as usual. At their regular meetings the trustees discussed the collections—more exchanges, loans, purchases; the educational role of the museum; and the library—then the only collection of scientific literature in the colony freely open to students. They wanted the library to be as complete as possible. It was an ambitious project but one that they did have some success with. Today the library is one of the most important repositories of early zoological and geological works in the state and this is due to the efforts of the first board of trustees in the 1880s (see Chapter 13).

They also recommended that the museum be open on Sunday afternoons and, despite opposition from the churches, the minister for Mines decided, on 13 October 1881, that this would be done. It was a decision that the public welcomed and one that has continued to this day.

Despite its successes during its first six years, board meetings were not well attended. Miskin relates one of the inconveniences resulting from this in a letter tabled at meeting on 25 September 1877. Apparently Under



George Raff, merchant, woolbroker and sugar grower (photograph by courtesy Oxley Library).



Louis A. Bernays FLS, clerk of the Legislative Assembly (photograph from *Queensland 1900*, Alcazar Press, Brisbane).



John M. Macrossan MLA, miner and politician—secretary for Mines (photograph by courtesy Oxley Library).



K.I. O'Doherty MD, pardoned political deportee (photograph by courtesy Oxley Library)

Secretary Lukin detected what he regarded as an irregularity in the way the board dealt with the vouchers presented for payment. Miskin and Custodian Staiger had pointed out to Lukin that there was no permanent chairman—the chairman was elected at each meeting—and no number was set down for a quorum. Miskin continued:

it has been the practice not to entertain other business than the passing of vouchers with a less number than three; and the members present if less than three.....sign the vouchers (even if only one) there having been a difficulty in obtaining a regular attendance of three members of the board at ordinary meetings. Mr Lukin still persisting in refusing to receive the vouchers.....I have, to satisfy his scruples, signed the vouchers as Chairman, notwithstanding the seeming incongruity of making myself Chairman of a meeting at which I was the only member present. It is necessary that the vouchers should be passed in order that the claimants may receive their money, otherwise I would have declined to commit so absurd an inconsistency.

The board's existence was also marred by constant change in its membership. It seemed that no sooner was a vacancy filled than another arose. Before the move into the new building, the minister for Mines nominated extra members—Kevin Izod O'Doherty, Irish nationalist and medical practitioner who had originally been transported to Australia and subsequently was unconditionally pardoned; and Lewis Adolphus Bernays FLS, the clerk of the Legislative Assembly¹⁶. They were appointed on 7 February 1878¹⁷. Bernays became honorary secretary to the board from 30 August 1878 to relieve Staiger, but relinquished the position three months later when he visited New Zealand. He took specimens to New Zealand with him 'with a view to the initiation of friendly intercourse between the museum and kindred institutions..... which might prove mutually advantageous'¹⁸. Indeed it was—the board entered into correspondence with his contacts in that country and donations and exchange of material resulted. Bernays also was particularly anxious to develop the herbarium. He resigned from the board on 9 May 1879¹⁹, apparently frustrated by governmental interference, the board's impotence, and perhaps some dissatisfaction with Staiger:

I have felt that it would be impossible to secure for the museum a high character among kindred Institutions in other parts of the world, or its proper sphere of usefulness within the colony unless the policy of management could be entrusted for carrying out to an officer in whose capacity for the work of the curatorship the managing body had implicit trust, and over whom they had entire control.

This indispensable condition of successful management of the Institution being absent, and the credit of the Trustees being thereby seriously compromised, I did not see any other course open to me than to resign²⁰.

The appointment of Bernays' replacement, John Murtagh Macrossan MLA, former miner²¹, was gazetted on 18 October. He formally accepted the position only on 3 March 1880, possibly because of a slip-up in paperwork. As Macrossan was the minister the oversight hardly mattered. Gresley Lukin also resigned in March 1880. Charles Hardie Buzacott MLC²², newspaper proprietor and editor of many years standing, was appointed on 28 July 1880²³ and resigned after only 15 months—on 28 October 1881. Reading his letter of resignation one wonders why he had accepted nomination:

My time is already over-taxed and I am opposed to the management of public institutions by nominee, honorary and irresponsible boards. I suggest the cost of the Museum be defrayed by rates or contributions and the Board could then be elected by the ratepayers or contributors. Where the entire cost is met by the State, administration would be much more advantageously conducted by a responsible Minister of the Crown²⁴.

It was almost a year later—23 October 1882—that the premier wrote to the minister for Public Works and Mines advising that he wished Sir Arthur Palmer KCMG to be appointed a trustee of the museum. This was gazetted on 5 November²⁵. Palmer was a pastoralist of substance. He had been a member of the Legislative Assembly and premier and, at the end of 1881, had been appointed to the Legislative Council as president²⁶. He eventually became chairman of the museum board of trustees and some stability in the membership ensued.



Charles H. Buzacott MLC, newspaper proprietor, editor and politician (photograph by courtesy Oxley Library).



Arthur H. Palmer KCMG MLA, pastoralist and politician—premier and president of Legislative Council (photograph by courtesy Oxley Library).

A Period of Growth, 1883-1892



Richard Gailey, architect (photograph by courtesy Oxley Library).



The Hon. Berkley B. Moreton MLA, secretary for Public Instruction (photograph by courtesy Oxley Library).

In 1880, after the move to the new building, rumours were spread about the disappearance of specimens during the move (see Chapter 8). The trustees rejected these rumours but the government did not. A select committee was set up to enquire into and report on the working of the museum²⁷. This enquiry is not referred to in the board minutes. Nevertheless it may have been the recommendations from that enquiry that resulted in the more liberal treatment the museum received from the government after Haswell resigned.

de Vis' appointment, on a salary of £400 per annum, heralded a decade of respite from the ever present museum staff problems that otherwise plagued this board for the whole of its existence. In its annual report for 1882 the board thanked the government for the liberal manner in which its needs had been met. At this time, as well as the curator and the taxidermist there were two collectors, and another scientist, Henry Tryon, was appointed as clerical assistant the following year. The museum was able to get on with its jobs of collecting specimens of the state's fauna and geology and providing an interpretive and educational centre for the community.

The trustees were proud of the collections and were anxious to improve them. Fearful that a refusal would prejudice further gifts from donors they tended to accept all material offered. The two collectors were also busy in the field amassing specimens for a museum that, before very long, was to overflow. Every month the curator's report to the board contained long lists of specimens donated, exchanged and purchased. Between 1879 and 1893, the board's proceedings, including the director's report complete with its list of donors and specimens, were published in the *Brisbane Courier*—no doubt encouraging others to donate material to the museum.

In its 1883 annual report the board warned the government that the new building was too small. In 1885 the board expressed its regret that there were no preparations for a new building despite the government having invited its recommendation on this topic. In 1887, again in its annual report, the board expressed its regret that although the sum of £40,000 had been voted nearly five years previously for the erection of a new museum and library no steps had yet been taken—'The present (William Street) building (as has frequently been brought to your notice) though capable of conversion to a public library is totally unfit for a museum'.

The board must have been feeling frustrated for at its meeting of 3 October 1890 it raised, again, a matter that was referred to many times during its history:

The derogatory position of the Board as Trustees in name only without any legal faculties became a subject of animated expression of opinion and the Curator was instructed to draft a letter to the Chief Secretary conveying to him the pronounced feeling entertained on the matter and requesting him to create them or others a Trust by legislative enactment.

Then, in 1890 plans of a proposed new museum building in Albert Park—on the northwest side of the central city area—were examined by the trustees and approved. The government called tenders, but in 1891 the trustees lamented that no tender had been accepted. There must have been indications even then of the dark clouds of the depression looming on the financial horizon.

However, before the storm broke, an event of significance in the history of the museum occurred. Miskin was an amateur entomologist, his hobby being Lepidoptera (butterflies). He had published numerous taxonomic papers on this subject between 1874 and 1892 and had been awarded fellowship of both the Linnean and Entomological Societies. In 1890 he wrote *A Synonymical Catalogue of the Lepidoptera Rhopalocera (Butterflies) of Australia*. The work represented over twenty years study of the subject in Queensland and he offered it to the board. It was accepted and published in 1891 as the first issue of the *Annals of the Queensland Museum*. The creation of the *Annals* certainly pleased the curator, de Vis, whose research output was prolific and who sometimes had to resort to publication in the daily press (see Chapter 7). Thus began the publication of the museum's own journal — now the *Memoirs of the Queensland Museum* — reporting the results of its researches to scientists around the world.

Meanwhile there had been further board changes. In 1885 responsibility for the museum and its board was transferred from the Department of Works and Mines to the Department of Public Instruction. On 1 May 1885 Dr O'Doherty, writing from Sydney, resigned from both the



F.A. Blackman, grazier (photograph from Clarke, C.G.Drury, 1985, in *J.R. Hist. Soc. Qd* 12 no. 2).



Albert Norton MLC, formerly speaker of the Legislative Assembly (photograph from *Queensland 1900*, Alcazar Press, Brisbane).



James Chataway MLA, newspaper proprietor and politician—secretary for Public Lands and Agriculture (photograph from *Queensland 1900*, Alcazar Press, Brisbane).

Central Board of Health and the Queensland Museum board²⁸. The museum board could not have been informed for on 8 August 1885, de Vis by direction of the trustees, wrote to the minister pointing out the poor attendances at board meetings of certain trustees (namely O'Doherty and Douglas) 'whose absence from Brisbane on official duties precludes their attendance at meetings'. O'Doherty was often absent on intercolonial visits, while Douglas by this time was resident magistrate at Thursday Island. The letter concluded by nominating Albert Norton, speaker of the Legislative Assembly, for appointment to the board. The secretary for Public Instruction, Berkely Basil Moreton MLA, whilst approving the letter on 14 August never had it acted upon. Instead, on 28 August, Moreton himself was appointed a trustee²⁹. Moreton, a younger son of the Earl of Ducie and both pastoralist and politician³⁰ was another example of a minister of the crown being appointed to the board — others being Macrossan and Douglas. In late October 1888 Norton was again nominated to the board and on this occasion was appointed³¹. Raff died in 1889, to be followed by Macrossan in 1891. Then, on 30 September 1891 Miskin resigned from the board³². To replace Miskin, Raff and Macrossan the board nominated the under secretary of the Department of Public Instruction — on an *ex officio* basis, Richard Gailey — a well-known architect, and Frederick Archibald Blackman — a semi-retired grazier resident in Brisbane³¹. On 12 March the under secretary advised the board he considered it desirable from the official viewpoint that he should not be a trustee so, on 22 March, the board asked the minister, W.O. Hodgkinson MLA — formerly explorer, journalist, civil servant³³, to accept nomination, which he did. Thus on 21 April 1892 all three — Gailey, Blackman and Hodgkinson — were appointed³⁴.

Shortly after his appointment Blackman developed a hearing disability. He became so deaf that he tendered his resignation a little over a year later³⁵, a real loss to the board. He was a friend of Norton's and was interested in natural history and museums, being the donor not only of reptile species subsequently described by de Vis³⁶, but also of the model stockyard (see Chapter 11). Hodgkinson lost not only office but his seat in the Legislative Assembly on 13 May 1893. He went at once to Western Australia where he won wide respect as an expert on mining. He resigned his seat on the museum board towards the end of 1893³⁷. In June 1894 Bancroft died. It was to be the end of the century before steps would be taken to fill these vacancies.

A Period of Regression, 1893-1907

The economic collapse of 1893 was disastrous for the museum. Not only were the plans to have a new building abandoned but also there was little joy for the trustees at all as can be seen from the general history of the museum from this year. They saw themselves as conducting a holding operation and the various regressive moves upset them deeply. Many of the staff were retrenched, leaving the director — de Vis, two attendants and a young clerical assistant to run the museum. It was not possible to take any initiatives to make the museum more useful and attractive to the community. They had to stop supplying educational collections to state schools and schools of arts; the library vote was cut off with consequential loss of serials and it was not then always possible to answer inquiries about new scientific discoveries; and after only two issues (1891 and 1892), publication of the *Annals* ceased until 1897.

In 1896 the gloom began to lessen. The government opened discussion with the trustees about the adaptation, for the museum, of the

financially troubled National Association's Exhibition building on Gregory Terrace. The trustees found the proposal acceptable. The building was to become available in June 1899, but without the section known as the concert hall. Alterations to the exhibition hall and basement to adapt it for the museum's use took some months to complete. The museum in its William Street building closed its doors to the public on 2 November 1899, on 2 October it had begun to pack, and all materials and collections had been moved from William Street to Gregory Terrace by 18 December 1899. The museum was in a suitable state to reopen to the public in its new domicile on 1 January 1901. There had been only two hitches. In his diary de Vis records that the only injury during the move was to a large dugong which had slipped from its sling and was much damaged in its fall. And on 31 December 1899 troops of the second Queensland contingent, on their way to the Boer War, had been quartered in the building—rank and file in the concert hall, NCOs and the doctor in the exhibition hall and officers in seven of the ten rooms in the basement. They had been installed by order of the premier, having been flooded out of camp at Pinkenba. de Vis, in reporting it to the board on 6 January 1900, complained that it was making it very difficult to unpack. It was 29 January before the troops were reported to have vacated the building.

Right through the bad years from 1893 until the board's dissolution in 1907, Norton and Gailey were zealous in their attendance at board meetings. The minutes reveal that these two, usually on their own, continued with the usual business of the board—negotiating specimen and library acquisitions, approving vouchers and generally supporting the hard-pressed curator who, without this support, might well have despaired utterly. Their efforts certainly kept the board going and very likely the museum too. Other board members showed their lack of interest by not attending. Perhaps they felt there was nothing much to do with the fortunes of the institution at a nadir. Perhaps they had troubles of their own. Palmer had died, whilst still a trustee, on 19 March 1898. Ill health had dogged him in the last years of his life and a reasonably good attendance record at board meetings had fallen to virtually nothing. Gregory, scientist, foundation member of the board and effectively its spokesman and its leader in its formative years, was another of those who no longer attended meetings.

The government decided to do something about this board of absentee members. At the end of July 1899 the minutes note a letter from the minister of Public Instruction thanking Norton and Gailey for their attention to the affairs of the board and asking if they thought it ought to be strengthened in the event that resignation of some of its present members should occur. In August Norton and Gailey, the only trustees now attending meetings, nominated Cameron, Marks and Sutton, and reminded the minister of the board's 'desire to be constituted a corporate body'. On 30 September it was noted that, although the names submitted were acceptable to the minister, the board had no power to procure resignations from the inactive trustees as the minister had suggested it should.

Eventually, on 17 November 1899, the government did dissolve the old board. On the same day Norton and Gailey were reappointed, while new appointments were John Cameron, pastoralist, company director and politician; James Vincent Chataway MLA, newspaper proprietor and politician (secretary for Public Lands and Agriculture); Charles Ferdinand Marks MD MLC and J.W. Sutton, iron master with an interest in physical



Charles F. Marks MD MLC (photograph from *Queensland Men and Industries*, Brisbane 1888).

science³⁸. The members not reappointed were Gregory, Douglas, Fenwick and Moreton. Early in 1901 Chataway's health failed and he died in April 1901, but was not replaced immediately.

The annual report for 1899, signed by Norton, concluded with yet another appeal to the minister to establish the board's—

administration of the Museum on a more satisfactory basis by giving us statutory powers as we have before suggested.

On 26 April 1902 there were further retrenchments—the staff was reduced to four again and the budget was halved. The trustees observed that the museum could carry on if its activities were reduced to the cleaning and the preserving of specimens—and indeed that was what happened. In the same year the control of the institution passed from the secretary for Public Instruction to the secretary for Agriculture and Stock. The board's annual reports became short sectional articles in the reports of the Department of Agriculture and Stock. On 14 November 1905 Alfred Jefferis Turner, paediatrician and entomologist, and Ernest George Edward Scriven, under secretary, Department of Agriculture and Stock were appointed trustees³⁹. On 10 November 1905, shortly before Scriven was appointed to the board, Gailey sought to resign on the ground that the reduced appropriation left little for trustees to do. By direction of Minister Digby F. Denham MLA, Scriven wrote to Gailey on 15 November requesting him to withdraw his resignation. Gailey replied the next day stating that as it was the desire of the minister he would do so. He set forth the whole of the reasons for his resignation:

- 1st There is very little to do for so many trustees.
- 2nd I am coming up to 70 years of age, which is beyond the Limit prescribed for the Civil Service, and thought that, that limit might be applicable to Trustees also.
- 3rd That your appointment to the Trust indicates a desire on the part of the Minister to manage the Institution directly through his Department and was really Tantamount to a want of Confidence in the existing Trustees.
- 4th I had no desire to stand in the way of any Contemplated reform by the Minister and hence left him free to make fresh appointments if he so desired.

But now that your letter assures me on all these matters, I will gladly continue the Trust as heretofore⁴⁰.

These seem quite reasonable grounds for resignation. Gailey, who had conscientiously attended board meetings for six years, probably understood how badly the museum needed a change and even may have hoped for one. Politically Denham may not have wanted Gailey's resignation, possibly thinking it would draw unwelcome attention to the museum.

Then in April 1906, while Denham was still secretary for Agriculture, the *Brisbane Observer* published an article entitled 'The Queensland Museum—Its Success and Failure—A Critical Sketch'. In brief the article praised the quality of the collections, but criticized strongly the taxidermy of natural history specimens and their arrangement—or rather lack of it. The presence of many pictures was criticised and there was a suggestion that they should be in an art gallery rather than a museum. Some genera and artefacts were said to be poorly represented while others were over-emphasised. The article conceded that the trustees were handicapped by the building itself 'and possibly by shortage of funds' but the author considered they had 'evidently a good deal to learn'. The article was



Alderman J.W. Sutton, iron-master (photograph from Greenwood, G. and Laverty, J., 1959, *Brisbane 1859-1959*, Wald Zeigler Publications, Brisbane).

directed by Scriven to be placed with the department's museum papers on 17 April 1906⁴¹. This article may have caught the attention of William Kidston, premier, chief secretary and treasurer. In any case, his attention was certainly drawn to the museum later in the year when W.E. Roth, formerly chief protector of Aborigines, sold, to the Australian Museum, the valuable collection of artefacts that belonged to the Queensland government and should have been lodged in the museum (see Chapter 10). On 20 September 1907 Kidston took over control of the museum from the minister of Agriculture and Stock and the next day the chairman of the board was advised of the change. Four days later Scriven, under secretary in the Department of Agriculture and Stock, tendered his resignation as a trustee of the museum, but stated that if it should be desired that he continue to act in that capacity he would be pleased to do so. His resignation was accepted⁴². The last recorded meeting of the board was on 28 September 1907 — apparently it was a meeting convened to wind up its affairs, and it is a sketchy set of minutes that records it. Confirmation of the disbanding of the board of trustees is to be found in the *Annals of the Queensland Museum* — number 7 of June 1907 was published by the authority of the board, number 8 of March 1908 was published by the authority of the premier: W. Kidston M.L.A.

However, disbanding the board was not the whole solution. Three years later Kidston, who was still in office, decided that he needed advice. He wrote to the premier of New South Wales:

It being my intention to endeavour to place the Queensland Museum on a more satisfactory footing than at present it has occurred to me that as a preliminary step it would be advisable to secure a full report on the present condition of the Institution from a competent authority, and I am anxious to know whether you would allow Mr Robert Etheridge, Curator of the Sydney Museum, to undertake the duty⁴³.

Kidston wanted Etheridge to come urgently, within the next two weeks. The New South Wales premier was agreeable and so was Etheridge. Thus, on the 14 June, having obtained his own board's approval he left for Brisbane on 'Wednesday evening's train'⁴⁴.

To the beleaguered and forgotten staff Kidston's interest and Etheridge's arrival must both have been momentous events. There was C.J. Wild, formerly entomological collector, and now acting director since de Vis' retirement in 1905. Kendall Broadbent, once the museum's most able collector but, since 1893, one of only two attendants, was 73. The other attendant was 70. The attendants also did the cleaning. Two young men — J. Lamb in the industrial department and W.E. Weatherill assistant to the taxidermist — were both doing a wide variety of jobs. Then there was the taxidermist, A. Alder aged 61, and a librarian-clerk.

Kidston asked Etheridge to report on the purpose and functions of museums in general and whether the Queensland Museum fulfilled them; on the condition and appropriateness of the items in the museum; on the competence of the staff; and on any other items worth noting. He also asked him to produce a general report on the best means of making the institution what it should be.

Etheridge's handwritten, preliminary report was handed to Kidston before he left Brisbane about 27 June 1910 and the general report was posted on 1 July 1910 — less than one month after Kidston had written his initial request to the premier of New South Wales.

Etheridge's report was not complimentary to either the staff or the museum⁴⁵. The quality of some of the material in the collections



John Cameron JP, pastoralist, company director and politician (photograph from *Queensland 1900*, Alcazar Press, Brisbane).



W.O. Hodgkinson M.L.A. explorer, journalist, public servant and politician (photograph by courtesy Oxley Library)

impressed him—especially the fossils and the New Guinea collections. Weatherill and Lamb he thought were bright and promising young men. He found little else to praise, and, concluding his preliminary report, he said that ‘the Queensland Museum leaves on my mind a feeling of gloom, absence of taste and disjointed elements’⁴⁵. He emphasised the need for a professionally qualified director.

On 19 July 1910 Kidston sent his thanks—

for the care and trouble you have taken in connection with our museum. To quote Mr Wild’s words, which he used on the morning of our visit to the institution but which you may have either not noticed or forgotten “I am sure good will come of your visit”, for your very illuminative and exhaustive report makes the path of reform one very easy to travel⁴⁶.



Robert Etheridge jnr, director of the Australian Museum, Sydney.

Kidston did not table Etheridge's report in parliament—in reply to a question in the house asking if he would, he gave the unequivocal reply 'No'⁴⁷. His solutions to the museum problem were simple, direct and his own. He did not replace the board and he did appoint a well qualified director, R. Hamlyn-Harris. The museum was revitalised.

During the period from February 1876 to September 1907, 24 people had served as trustees of the museum. Of these 11 were politicians at the time of their appointment, five were public servants, one was an ex-politician, one an ex-public servant, and only six came from what would now be called the private sector. They all were influential members of the community, five even held ministerial office at the time they were museum trustees. Although, with the exception of Bancroft, Douglas and O'Doherty, they lacked evidence of formal education in the twentieth century sense—that is degrees and professional qualifications—they were products of the heyday of the 19th century liberal education.

However, the board was handicapped by lack of foresight and political neglect, of its own inexperience and of the economic depression. The lack of foresight lay in creating an *ad hoc* body with no legislative backing nor even a corporate entity. Although the trustees tried to persuade their political masters that the board needed these statutory powers, these efforts were to no avail. Politically the museum, including its board, was an orphan, tossed from department to department—first Works and Mines, then Public Instruction and finally Agriculture and Stock—and had not prospered with any one. While in the Department of Agriculture and Stock it had even had the under secretary—Scriven—as a trustee but no benefit to the museum had accrued. Primarily as a result of the depression, the institution the board was to manage had virtually no staff infra-structure. The trustees' own inexperience resulted in their approval of the plans for a building that was inadequate from the day it was occupied. It was Premier Kidston's interest in the institution, as a result of the mauling the museum had received in the press, and his view that all was not well that finally determined the fate of the board.

Nevertheless, the board had achieved a new building for the museum and, having watched and abetted the institution as it overflowed that building, had found it another home that sheltered it for the next 86 years. Most importantly, however, the board had preserved the scientific status of the institution by the appointment of qualified curators; by the publication of the *Annals of the Queensland Museum* and the establishment of a library; and, recognising the fundamental role of a museum, it had worked tirelessly to build up the collections and protect them from alienation and thus had formed the basis for a museum of stature. The museum benefits from its efforts to this day.

A Rebirth

During its first years without a board the museum went through a period of development promoted by Kidston. Later, government interest flagged once more and, without a board of trustees and without legislation or political influence, the efforts of successive directors were not successful in advancing the museum's cause. In 1929 there was a Public Service Commissioner's enquiry into the museum conducted by Inspectors Irwin and Page Hanify. Their report was faintly critical, and its recommendations, while largely devoted to administrative procedures, did include one that an advisory committee of interested scientists be set up⁴⁸. Longman's response was defensive, drawing attention to the very real improvements that had been effected in the 18 years since Etheridge



Ernest George Edward Scriven, public servant—under secretary for Agriculture and Stock (photograph by courtesy Oxley Library).



A. Jefferys Turner M.D. paediatrician and entomologist (photograph by courtesy Oxley Library).

had reported. He was cautious about the appointment of an advisory committee, but he did ask that 'serious consideration be given to the appointment of a board of trustees—as in most National Museums'⁴⁹. The government set up another enquiry into the museum in 1933, asking Professor Richards of the University of Queensland, and G.W. Watson, under secretary, Chief Secretary's Department, to report. Their recommendations, delayed by Richard's involvement with Markham's investigation for the Carnegie Corporation (see Chapter 2), also included one that trustees be appointed⁵⁰. Nevertheless the institution remained a sub-department of the Chief Secretary's Department for 45 years—through Hamlyn-Harris' and Longman's tenures—until 1947, when it was transferred back to the Department of Public Instruction—later to become the Department of Education.

In 1969, when Bartholomai had been director less than a year, the Queensland Hall of Science, Industry and Health Development Committee, which had been working for the development of a technology section in the museum, discovered that Queensland was the only state in Australia without appropriate legislation for its museum (see Chapter 11). The committee's representations received sympathetic consideration from the minister for Education, A.R. Fletcher MLA, the minister responsible for the museum. Fletcher realised that the first board, despite its success in re-siting the museum, had been hampered by lack of legislation to cover its powers and administrative functions. The council of the Hall of Science, Industry and Health Development Committee drafted museum legislation and this was subsequently introduced. It had the approbation of all political parties and passed through parliament smoothly. It was assented to on 13 April 1970. In its promulgation on 20 August 1970 the governor-in-council declared that the *Queensland Museum Act 1970* should come into force on 1 September 1970⁵¹.

Perhaps the most important aspects of the legislation were the provisions for a board of trustees to control and manage the museum; and the powers, given to the board, to open branches either alone or in conjunction with another body. In the latter case an agreement had to be entered into and approved by the governor-in-council⁵². Eight persons were to constitute the board, including the director-general of Education



The Queensland Museum Board of Trustees, 1978–84.
Back Row: D.J. Nicklin; chairman, J.C.H. Gill; R.I. Harrison; vice-chairman, I.G. Morris, J.M. Thomson.
Front Row: A. Bartholomai; D.M. Traves; J.T. Maher.

or his nominee and the director of the museum (*ex officio* and non-voting). The remaining six would be members of the public. Provision was made for the board to administer two separate funds: a general fund for moneys appropriated by parliament for the running of the museum and a trust fund for moneys received from donations and bequests or generated by activities promoted by use of funds from the trust fund source. The board would be accountable to the minister in money matters.

The members of the 1970 board were J.C.H. Gill (lawyer and historian, chairman), I.G. Morris (company director, vice-chairman), and S.A. Prentice (professor of electrical engineering), each for a period of four years; and J.M. Thomson (professor of biology), R.I. Harrison (chartered accountant) and D.M. Traves (petroleum geologist and company director) each for a period of two years. The nominee of the director-general of Education was William Wood. The order-in-council was made on 17 September 1970 and gazetted two days later⁵³. Subsequent changes in the membership of the board are recorded in the annual reports of the museum from 1971. There have been few changes—mostly they have resulted from changes in the department under which the museum



The table in the director's office where, from 1970, the Queensland Museum Board of Trustees met at 11.00am on the first Tuesday in each month.

operates. In 1978 the museum yet again was transferred to another department— from the Education Department to the Department of Culture, National Parks and Recreation— known since 1981 as the Department of The Arts, National Parks and Sport.

Administratively the Queensland Museum of 1970 presented, of course, a quite different operation from that which had confronted the first board of trustees which took office in February 1876. For one thing the staff establishment hardly bore comparison with that of 1876. Apart from the director and senior curator there were ten curators, four preparators, three art staff, one librarian, one artificer, ten assistants and cadets, four office staff and nine attendants—a total of 44. The total vote for 1970–1971 was \$175,000. The director, Alan Bartholomai, the non-voting *ex officio* member of the board, was a fit young man of 31 years of age.

The director of the museum and the chairman of the new board jointly drew up the agenda for its first meeting on 24 September 1970. After this meeting, the chairman was asked by media representatives what the board's first objective would be. 'A new building' was the immediate

response. It was a case of history repeating itself—the preoccupation of the 1876 board had been a new building; in fact the government of the day had directed that board to make it so. The chairman went on to say that the board would be deeply disappointed if within 10 years a new building, if not by then accomplished, was not on the way. Actually it was only four years before a new building was approved.

By November 1970 the board had approved a submission by the chairman for a new museum on a block of land at South Brisbane between Stanley, Glenelg, Grey, and Russell Streets. It was surrounded by parkland and had adequate off-street parking on the Grey Street side. This was envisaged as part of an overall development which would see a new state library in a similar setting and matching the proposed new art gallery in the same general area. The minister, Fletcher, supported the concept but Treasurer Gordon Chalk was of the opinion that the land acquisitions would be too costly and a decision was deferred.

It was clear from the outset that a new building would occupy a deal of the board's attention. Thus, in order to deal efficiently with other aspects of the museum's operation specialist committees were set up, each chaired by a board member, to deal with finance, site and buildings, staff planning and appointments and publications and services.

A Museum Building for the Next Half Century

The board's site and building committee co-opted Deputy Co-ordinator General S.S. Schubert, and State Librarian S.L. Ryan in 1971 and examined other possible sites for a new museum. The vice-chairman, I.G. Morris, convened a meeting with Premier J. Bjelke-Peterson and Treasurer Gordon Chalk which the chairman of the board and the director also attended. The premier agreed to fund a feasibility study to the extent of \$6,000 to determine the type of building that could be accommodated on the best of the sites examined and which would serve the museum for at least the next half century. Architect Stephen Trotter, of the firm Fulton, Collin, Boys, Gilmour, Trotter and Partners, was engaged as consultant and he prepared a comprehensive planning brief for a building either in Albert Park, or on an area in South Brisbane, or at the foot of Mt Coot-tha. A submission was made to the government in 1973, but there was no immediate response. The reason for this became obvious when, in October 1974, the treasurer produced a cabinet-approved scheme for a cultural centre at South Brisbane to accommodate the art gallery, a performing arts complex, the museum and the state library. The floor area of the new museum was to be 11,152 square metres. The board considered this was inadequate and representations by the chairman to the Cultural Centre Planning and Establishment Committee, of which he had been made a member, succeeded in having the area increased to a nominal 13,940 square metres.

These developments would have delighted Director Longman, who, in 1934, had greeted a government proposal for a new art gallery and state library building with the hope that—

The museum eventually would be included in a comprehensive cultural scheme for the housing of its contents⁵⁴

The board experienced some disappointment as the completion date for the building gradually receded from 1982 to 1985. However, construction finally had started in November 1982 and the building contract was completed in November 1985. The museum, in its old Exhibition building on Gregory Terrace, closed to the public on

3 November 1985 to enable the staff to prepare for the move—to pack and start the physical transfer of the more than two million collection items to South Brisbane as well as the prepared displays that had been stored at Montague Road, West End. The Department of Works, after some hesitation, decided to oversee the move with guidance from the museum—at an estimated cost of \$0.5M to the board. In 1899 four drays, costing 13 shillings each per day, had made 210 trips in 15 working days to move the museum from William Street to Gregory Terrace after the William Street building had closed to the public on 2 November. Packing had begun on 2 October and was completed by 18 December. Eighty-six years later, the quantity surveyor's estimate for the move from Gregory Terrace to South Brisbane was for 700 truck loads—three to eight tonne trucks and pantechinons and 40 tonne low loaders, cranes and fork lifts—to shift 3000 cubic metres of material and furniture in bubble wrap plastic sheeting, polystyrene, wood and cotton wool, tissue paper and timber crates, cardboard cartons, pallets and other containers, over a period of eight months⁵⁵.

The public's initial perception of the museum redevelopment in the Queensland Cultural Centre will depend on the new displays and exhibitions. Dame Margaret Weston, director of the Science Museum, London, was appointed consultant on planning aspects of the building and display programme. The board made representations to the government in support of the necessary new staff appointments and equipment (see Chapter 4). Despite staff freezes in many areas at this time these representations were successful and government funding was forthcoming.

Museum Services for Queensland

The building, new displays and the move were priority items for the board's attention from 1970. Nevertheless, recognition of the fact that the museum needed to be the *Queensland* Museum in fact as well as in name had led it, at an early stage, to consider ways of taking advantage of the powers given it in the legislation in regard to the establishment of branch museums. A decision was made that if opportunities arose to establish branches there would be no hesitation in seizing them.

The first such opportunity arose when the National Trust of Queensland decided it was unable to accept an offer of the Cobb and Co. collection of horse drawn vehicles of W.R.F. Bolton. The museum expressed its interest in the collection and subsequently the Bolton family and the Queensland government agreed to the proposal that the collection should form the basis of a specialised transport museum at Toowoomba on the eastern Darling Downs—an appropriate site for a collection with rural associations. After negotiations the Bolton collection was donated to the museum in July 1982. The government provided storage for the collection, which had become an urgent necessity following a fire at the Cobb & Co. museum in Toowoomba, and it is anticipated that the Floriculture building on the former Toowoomba showground will be converted into a suitable building to exhibit the collection.

Another opportunity for a branch museum arose as a result of the government's 1982 decision that all proposals for departmental museums should be considered by the museum with a view to the development of branches. The first proposal was one from the Forestry Department. Following discussions, an agreement was entered into whereby the department would provide a building at its complex just north of Gympie. Thus, the museum, in conjunction with the Forestry Department, opened its first branch, *WoodWorks*, in March 1984.

Meanwhile, there was pressure mounting for a branch of the museum in north Queensland and the government agreed to fund a feasibility study on its siting. The report, prepared by consultants Gutteridge, Haskins and Davey, became available in 1983, and it recommended Townsville as the preferred location. That city had also been selected as the site for the Great Barrier Reef Wonderland Project—a joint project of the state and federal governments to celebrate the bicentennial year 1988. The board indicated interest in participating in this project and in Townsville the Great Barrier Reef Wonderland Association Incorporated also favoured the idea of a branch of the museum in the Wonderland. The state government approved the museum's application to participate. The Wonderland association agreed that the first stage could be funded to the extent of \$1M from the joint federal/state grant of \$6M while the government indicated that funding for staff and operation would be provided. The branch museum, built on crown land, is an integral part of the Wonderland project. The second stage of the branch will be undertaken in the 1990s.

An opportunity for another branch, at Coomera in south-eastern Queensland, arose in September 1985, when the *Queensland Transport and Technology Centre Act 1984* was repealed and responsibility for this project was vested in the museum board (see Chapter 11).

In addition to branch museums other initiatives to provide support for Queensland-wide museum services were formulated in a plan prepared in 1978. These include the provision of advice and assistance to small local and regional museums, a museum education extension service for schools outside Brisbane, and a travelling exhibition programme. The last awaits development following the move to South Brisbane. The museum's education extension service became a fact in September 1978 when the Education Department seconded a teacher to the museum to carry it out (see Chapter 5).

The societies that operate local and regional museums always have sought advice from the museum on the care and display of articles in their collections—the state museum regarding this service as an extension of its statutory responsibility for historically significant items. In May 1978, responding to a suggestion made by its ornithologist, D.P. Vernon, the museum extended its advisory role by holding its first formal workshop for small museums. It was attended by 70 representatives of museum societies in south-east Queensland who participated in the two-day programme of lectures and demonstrations on every aspect of museum operation from registration and conservation of collections to display planning and production⁵⁶. Lecture room and common room facilities in the museum were stretched to the limit. Nevertheless, at the time it was



Participants in the seminar for small museums held in May 1978.

intended to repeat the programme for museum societies from more distant parts of the state. However, although the board could allocate trust fund monies for the operation of the workshops, the museum was not successful in raising funds for delegates' fares to Brisbane. As a temporary alternative several members of the staff travelled to Cairns and held a small workshop there. Plans for regular workshops were deferred until the museum had moved into its new building.

The museum's capacity to help small museum's throughout the state was given a boost by the government's decision to introduce a grants scheme. Funds are available, not only for collection maintenance and display projects, but also for attendance at workshops. The museum administers the scheme. The sum disbursed was \$50,000 in 1982-83 rising to \$100,000 in 1984-85. Seventy-one local historical and museum societies throughout the state have so far benefited from the scheme.

A Measure of Success

When it was first set up in 1970 the board's capacity to contribute to museum activities was restricted by the lack of funds in the trust account. An initial contribution of \$1,000 from the board, the proceeds of a musical event held at the home of the chairman, was a beginning. Through careful management the account has grown and has conferred flexibility and expanded the range of activities available to the institution. The fund has particularly benefited the museum's publication programme, book shop and field programme.

As regards government funding, the down-turn of the economy in recent years has inevitably been felt by the museum. However, the board has successfully sought sponsorship funding from the private sector, receiving generous support from Queensland and other enterprises such as Castlemaine Tooheys and Kelloggs (Australia) Pty Ltd. The public in general has also maintained a steady flow of donations in cash and in kind and the government has granted a subsidy of dollar-for-dollar on donations received from non-government sources to a limit of \$100,000 in any one year. An increasingly well qualified staff, measured by individual successes in applications for grants for field work and equipment from both government and non-government sources, has also taken some of the pressures off the board's funds. Further appreciable income has resulted from the museum's registration as a consultant for the provision of environmental impact studies and has produced reports on major projects including the Brisbane Airport redevelopment⁵⁷⁻⁹, and the National Estate in south-eastern Queensland⁶⁰.

The board has achieved much of what it set out to do in 1970 and subsequent years. Unlike its predecessor of the period 1876-1907 it has had the advantage of a statutory base for its operations, a more affluent economy, a well qualified and experienced museum staff, and a growing measure of community support. Guided by an institutional corporate plan covering all aspects of the museum's operation, the board's major policy objectives are now defined. The most important of these are the policies that will be developed to enhance the authority of the museum, provide support for a range of services appropriate to the institution's resources and role, and ensure the most effective and efficient use of public funds. The various ministers of government charged with the responsibility for the museum have been receptive to representations from the board. The result has been a resurgence in the growth of the museum and the improvement of its services to the general public both in Brisbane and throughout the state.





15

IN
PERPETUITY

The Museum's
Continuing
Role



From the days of King Solomon history has recorded great collections of objects—strange and unfamiliar as well as familiar ones, beautiful and useful objects, objects made by man and those of the natural world such as animals, plants, rocks and precious stones. These collections have reflected the taste, the wealth and power, or the skill and knowledge of those who have made them; and they have conveyed information to the studious and have stimulated the imagination of the idly curious. In all those periods of man's history marked by rapid advances in understanding there have been collections¹. Philip of Macedonia and Alexander the Great had collections that Aristotle used for his researches, as the great Swedish naturalist, Linnaeus, used the collections of the Kings and Queens of Sweden in the 18th century¹. Throughout the scientific revolution that followed the Renaissance in Western Europe, as ships sailed to new continents and as new instruments such as microscopes and telescopes revealed new structures and new dimensions, men turned to the study of collections of objects in order to satisfy their curiosity and to understand.

Great private collections were made by individuals and societies and these grew into museums accessible to others¹². The Royal Society established its museum in London in 1681, and two years later the Ashmolean was founded by private bequest in Oxford University¹. Then, in his will of 1753, Sir Hans Sloane, a London physician, offered his collection of nearly 80,000 objects to George II for the nation. The nation responded, the collection being purchased for £80,000, the sum raised by a lottery³. This was the collection that became the British Museum. The Prince of Wales had said of it 'how much it must conduce to the benefit of learning'³. It was probably with that end in view that one of the principles from which Sloane's trustees could not 'in honor or conscience depart' was—

that the collection be kept for the use and benefit of the publick, who may have free access to view and peruse the same³.

Thus, the British Museum was—

the first public museum of any size which.....had the temerity to aim at universality, belonged to the nation and, at least in theory, granted admission to all studious and curious persons³.

It was the first time that a museum's collections had been so readily accessible to the people and this policy profoundly affected the development of museums in the future.

When Queensland became a separate colony in 1859 the British Museum had been open to the public for just 100 years, for it was on 15 January 1759 that it had 'opened its doors to those "studious and curious persons" it was directed by act of parliament to admit'³. In the British Museum there were the objects and artefacts that were evidence of history as well as all manner of large and small animals and the remains of prehistoric ones. Although Sir Horace Walpole had made the caustic observation that 'Sir Hans Sloane valued his museum at four score thousand (pounds), and so would any body who loves hippopotamuses, sharks with one ear, and spiders as big as geese'³, clearly there were many who did not agree with him—nor, indeed, was his comment either fair or accurate. From the time the museum opened there was a clamour for admission⁴. It was said to be—

a palace full of all good things, the wonders of nature;..... and things of great value, both by reason of their being singular, there being no

Previous page: The Aboriginal Life diorama, created by Anthony Alder in 1914 and visited by generations of Queenslanders since then.

other like them, by reason of the costliness and beauty, or by artists, whose fame has gone forth through the world. There are they deposited and there are they to be met with in thousands and ten thousands, where they will be for ever a sign and wonder and spacious rooms full of books, both modern and ancient, printed and manuscripts, in innumerable languages the like was not seen, in all the earth since the foundation thereof, till now that the men of government expended abundance of money to purchase them, and to gather them within the great treasury, that it might be for the good of mankind, both the stranger, and for him that is born in the land.....⁵.

The British Museum afforded the nation a rich and tangible heritage and an archive of information wherein mysteries could be investigated and solved. This was the model that the settlers had known before they migrated to Australia. Far away in the colonies many immigrants were aware of the sense of identity, of continuity and of the knowledge of the new land that could be derived from a museum.

In 1845, just 17 years before the Queensland Philosophical Society had opened its museum, a group of like-minded men across the Pacific sought to persuade the American Congress that the establishment of a museum would fulfil the terms of James Smithson's bequest. Smithson was an Englishman, the illegitimate son of the Duke of Northumberland and man of the Enlightenment. His bequest to the United States of America was for 'an establishment for the increase and diffusion of Knowledge among men'⁶. In 1846 the ten year debate on what to do with the bequest concluded with legislation for, amongst other things, a museum, a study collection and a library in the Smithsonian Institution to be founded in Washington. It was not long before those who had interpreted Smithson's words in this way were vindicated. The institution flourished, executing the terms of the bequest right from the beginning when the research role of a museum was formalised by the pronouncement that 'the increase of knowledge by original research' was one of its essential functions⁶. It was to become, in due course, the great complex of U.S. national museums. In the early 1890s, one of the few men to have made a penetrating study



The museum collects, preserves and studies the material evidence of history and diversity (drawing reproduced with the permission of the artist, Clifford J. Morrow Jr, Carnegie Museum of Natural History, U.S.A., from Banks, R.C., ed., 1979, *Museums Studies and Wildlife Management* Smithsonian Institution, Washington D.C.).

of museums—George Brown Goode—had become director of the Smithsonian's first U.S. National Museum. He declared that the museum of the future must be 'a nursery of living thought and not a cemetery of "bric-a-brac"'⁶; and, while 'recognizing that a museum could be a powerful tool of scholarly research', he drew attention to its educational potential—'he was alert to the new democratic age and sought to tap "the possibilities of public enlightenment" implicit in his museum'⁶. In other words, the role of a museum in diffusing knowledge was being explored and developed.

At about the same time, there was also a growing recognition of their educational role in the older museums in England. As the industrial revolution progressed and scientific discoveries accelerated, people had begun to look to the museums for explanations—to understand the new science and technology that were changing their lives and their concepts of the universe so profoundly. Now almost universally state-supported, the magnitude of their operation being beyond the capacity of even the wealthiest individuals, the museums responded and they began to promote their education programmes to justify their increasing cost to the community⁷.

Thus did museums evolve in response to the needs of communities in the Age of Enlightenment. Their three functions—to hold safely collections of objects, to increase knowledge, and to educate and entertain the people—who shall have free access to them—are now embodied in the definition of the International Council of Museums (ICOM)—

A museum is a non-profit making, permanent institution, in the services of society and of its development, and open to the public, which acquires, conserves, researches, communicates and exhibits for the purposes of study, education and enjoyment, material evidence of man and his environment⁸.

In 1975 the Australian Committee of Inquiry on Museums and National Collections adopted the ICOM definition and explained it in the following words:

A nation gains in a variety of ways from the efficient preservation of objects in museums.....The collections are the heart of a museum.

A museum cannot live without scholarship.....any museum worth the name is engaged in the difficult search for new knowledge ... without scholarship to guide every stage from collecting to indexing, the museum collections could not have served as the foundations for the enormous platform of knowledge they now support.

As places of education museums have unusual advantages..... they are capable of instructing and entertaining people from every educational group and age group in the same gallery..... Secondly their collections of objects.....stimulate a sense of wonder and instil an understanding which makes the same message (communicated by other means) seem remote and second hand.....(and) a museum can often dispense with those layers of interpretation.....which..... separate an object or evidence from the audience⁹.

The Australian committee then proceeded to report on the restraints operating in Australian museums that prejudice their ability to fulfil their roles adequately⁸. In many cases conditions did not appear to have improved very much from those that existed in 1907 when Premier Kidston had assumed control of the Queensland Museum. Clearly puzzled as to the museum's function, Kidston had asked Robert Etheridge to report on the role of a museum; whether the Queensland Museum was fulfilling that role; and if not, why not—what was needed to enable it to

do so. Etheridge had replied in the words from George Brown Goode's *Principles of Museum Administration*:

- 1 A museum is an institution for the preservation of those objects which best illustrate the phenomena of nature and the works of man and the utilization of them for the increase of knowledge and for the culture and enlightenment of the people.
- 2 The Public museum is a necessity in every highly civilized community.
- 3 The Community should provide adequate means for the support of the museum.
- 4 A museum cannot be established and creditably maintained without adequate provision in five directions:
 - A A stable organisation and adequate means of support.
 - B A definite plan, wisely framed in accordance with the opportunities of the institution and the needs of the community for whose benefit it is to be maintained.
 - C Material to work upon — good collections or facilities for creating them.
 - D Men to do the work — a staff of competent curators.
 - E A place to work in — a suitable building.
 - F Appliances to work with — proper accessories, installation materials, tools and mechanical assistance.
- 5 A finished museum is a dead museum and a dead museum is a useless resource⁹.

Kidston used these recommendations as the basis of the reforms he sponsored in the museum 75 years ago, but it has taken a long time to realise the basic needs that Goode had defined. Only in 1986, for the first time in its history, and through a lineage of influences that can be traced to the great museum institutions of Britain and America, has the Queensland Museum had adequate accommodation and fine equipment in all its departments. It has a stable organisation, it is mature and confident, it has the support of a community which is increasingly using its services, and it has the support of the government. The Queensland parliament, in enacting the *Queensland Museum Act 1970-1985*, has acknowledged the museum's role. The Act recognises that the museum board holds the official collections of the state, and confers statutory protection on them for people and for scholarship. There has been a world-wide resurgence of interest in museums, for today, as never before, there is a concern for the natural environment and man's place in it; and a searching for expressions of national and individual identity. The Queensland Museum has its place in this world movement.

To ensure the institution's continuing ability to fulfil its role and its responsibilities under the Act, as well as satisfying the community's needs and earning its increasing support, the board has embodied the three functions of a museum in its major policy objectives:

to maintain the existing collections in such manner as to ensure their preservation in perpetuity, extend the systematic coverage of the Museum's collections by positive action to document the State's history and resources and ensure that storage systems and access to relevant information meet all existing and projected usages;

to ensure that the materials conservation programme of the Museum is fully supported and directed to identify and repair the existing damage or deterioration in the collections, monitor and advise on storage and display conditions which will safeguard the collections and provide the necessary research into particular problems;

to plan programmes of research which make realistic and economic use of the Museum's available expertise and facilities, towards the maintenance of a major source of authoritative knowledge in the State, available to all;

to prepare regularly changing exhibitions for the public which are object based but which incorporate the most appropriate techniques and display technology, supporting these with a temporary exhibition programme and other facilities which ensure full public satisfaction with the Museum and, at the same, provide travelling exhibitions to other parts of the State;

to communicate knowledge to the public generally and to develop an interest within the community in the Museum's fields of interest, using the full range of techniques and approaches available, ensuring that the Museum's educational activities are integrated with the requirements of the State Education Department and other organisations¹⁰.

Thus stated, the objectives of the museum are dynamic ones, flexible enough to accommodate the rapid change that is symptomatic of today's world—change in the needs and expectations of communities, change in social customs and values, and change in work patterns and leisure habits, as well as new technologies and an ever expanding body of knowledge.

The museum will record these changes and is ready to respond to them. It will preserve, in perpetuity, the authentic objects—the evidence of history that represent the truth—and, basing its studies on those objects, will contribute to the increase of knowledge and communicate it to the people. New materials and new techniques and philosophies of display



In 1985 the museum was looking forward to its move to South Brisbane.

and design are making it possible for museums to communicate information more readily than ever before—to entertain while they inform. In other words, to be more and more attractive and to be enjoyed. Thus the members of the community can aspire to understand and participate in decisions that affect them, and that will affect their children and their childrens' children in the future¹¹.







BIOGRAPHICAL
NOTES

Appendix 1

Charles Coxen

Coxen was one of those responsible for the interest that the early settlers took in natural history. He was one of the founders of the Philosophical Society, the principal founder of its museum and the man primarily responsible for persuading the Queensland government to take over the responsibility for the museum.

His interest in science and particularly in natural history may have been partly due to the influence of his sister Elizabeth's husband, the distinguished ornithologist, John Gould, who was curator of the Zoological Society, London. Coxen arrived in Australia in 1833 with a commission from the society to collect local fauna¹². Some of the first Australian birds Gould described before he visited Australia himself, in 1839, had been sent to him by Charles and his brother, Stephen Coxen. In 1839 the Goulds stayed for three months with Charles and Stephen at the latter's property, Yarrundi, on the Hunter River near Scone³. In 1851 Coxen was still collecting birds for his brother-in-law for the supplement to Gould's great work *Birds of Australia*⁴.

Charles Coxen came to Queensland, from Tamworth NSW in 1841, when he formed the third party to take sheep overland from the Hunter River to the Darling Downs⁵. He appears to have lived at Jondaryan Station near Dalby, although it was then registered in the name of Henry Dennis and was transferred to Coxen's name only in 1851. His other properties were Myall Creek (1841-4), Karugu (1846-7), Bimbian (1851) and Daandine (1855-61)⁶. In 1851, at Ryde NSW, he married Miss Elizabeth Isaac of Gloucestershire and took her to 'what were then the boundaries of civilisation, Bimbian, the furthest station on the Darling Downs'⁵. They later moved to Daandine, again near Dalby⁵.

Coxen was by no means isolated on the Darling Downs and there were others with whom he came into contact who shared and undoubtedly stimulated his interest in natural history. Possibly one of the most distinguished was explorer Leichhardt—who was 'interested in Nature as a whole, from the rocks on which we stand, to what we have made of ourselves in our environment'⁷. Leichhardt came to the Downs twice in 1844. The first time when he journeyed there from Newcastle and, on 30 March, collected fossil bones from Charles Coxen's property. Then, in October 1844 Leichhardt's party, including John Gilbert, collector for John Gould, set out from the Darling Downs on a 3000 mile journey that took them to Port Essendon, during which Gilbert was killed⁸. In 1846 Leichhardt was again on the Darling Downs preparing for his aborted east-west crossing; and yet again in 1848—departing on the ill-fated expedition that did not return. Leichhardt named a plant *Myal coxeni* after Coxen.

When Queensland became a separate colony there was a nucleus of people in Brisbane who shared Coxen's interest in natural history and who helped him found the Queensland Philosophical Society⁹. As chairman of the society, in 1861-2, he was instrumental in persuading the government to allocate accommodation in the Windmill for the museum. From December 1862, when the society first elected office-bearers, he was the first vice-president—the governor, Sir George Bowen being president⁹. In September 1871 it was Coxen who was delegated to discuss, with the minister, the geological collections that the society held in trust pending the setting up of a public museum. As a result of those discussions Coxen was made honorary curator of a museum that included the government's geological museum that C. D'Oyly Aplin, the former government geologist,



Previous page: From Longman's garden on the Brisbane River at Chelmer. Here he spent the last 14 years of his life, writing his natural history articles, tending his garden and cultivating its wildlife.

had set up in the Parliamentary building⁹ as well as the Philosophical Society's museum founded in the Windmill and now relocated in the Parliamentary building (see Chapters 2, 4). Coxen was now honorary curator of the Queensland Museum and he persistently urged the government to provide a building for it¹⁰. Coxen continued as honorary curator until he had persuaded the government to set up a board of trustees in 1876 (see Chapter 14).

Coxen represented the district of Northern Downs in the Queensland parliament and was subsequently chairman of committees (1863–67). He was also a vice-president and honorary secretary to the Acclimatisation Society (1862–73)⁵. However, his pastoral ventures did not prosper and he failed financially in 1850 and again in 1866. In 1867 he went to the Gympie Goldfields. 'On March, 1868, he began his career in connection with the Crown Lands Office, where his strict integrity and unremitting desire to assist and further the interests of settlers won for him the respect and esteem of all with whom, in his official capacity, he was brought in contact'⁵. He subsequently held the posts of Crown Lands commissioner, Moreton Bay, then East Moreton (1870–75); inspecting commissioner Settled Districts (1872); acting Crown Land commissioner, Darling Downs (1874–75); member of the Commission of Inquiry into condition of Aborigines in Queensland (1874)⁵. Coxen 'was known for his sympathetic and trusting treatment' of the Aborigines when he had been on the Downs and his 'understanding and compassion' for them is reflected in his paper to the Philosophical Society on 'The Komillaroy Tribe'⁹.

Charles Coxen 'found time to pursue his favourite study of natural history, as well as to promote a knowledge of other branches of science beneficial to the colony'⁵. He contributed papers to meetings of the Philosophical Society on a range of subjects. He supplied John Gould with a wealth of reliable information and specimens, including observations on the behaviour of the Bower Bird which he made at Stephen's property, Yarrundi⁴. He had a wide interest in developing technology and sent Gould a photograph of the Little Egret². Coxen wrote a section on dugong in Gould's *Mammals of Australia* and a long and authoritative article entitled 'The Yellow-winged Satin Bird' in the *Sydney Mail and New South Wales Advertiser* of 4 April 1874. He was a corresponding member of the Zoological Society.

We can be grateful to him for his untiring work for the Queensland Museum and for those collections of fossils, birds and shells he made with his wife Elizabeth, and which became the nucleus of the museum. However, one of his greatest achievements may have been the style of his leadership of a group of men who believed in and worked for the establishment of the museum — who, by 1871 had persuaded the government to assume responsibility for it so that by 1875 a staff and a board of trustees had been appointed and funds for a building were committed. As Mack remarked 'from the records available the impression is gained that at no time had the authorities been difficult in this matter; indeed they had been consistently helpful'¹¹. This may be a measure of the quality of the man, Charles Coxen.

Karl Theodor Staiger

Staiger was the first professional appointment to the museum. On 19 November 1872 he was appointed government analytical chemist and custodian. Staiger applied himself conscientiously to his dual role. Although his responsibilities for mineral assays were probably more

pressing at the time, he did not ignore the natural history and accepted the universal nature of the museum's responsibilities.

Staiger was born in 1833 at Kunzelsau, Wurttemberg, Germany, the son of Professor John James Staiger and Caroline Koch. He attended the polytechnical school in Stuttgart, and spent 3 years studying chemistry¹².

He came to Australia and worked on various mining fields. In July 1812 he was in Stanthorpe, then the centre of the mining in Queensland, when he applied for the job with the government as analytical chemist and custodian of the museum at an annual salary of £200, soon rising to £350.

He took up duties in January 1873. In his first reports to the minister, W.H. Walsh, on 2 June 1873 he indicated that in spite of lack of adequate facilities he had undertaken 64 assays, and 'I have been moreover daily visited since the office has been established by a number of strangers making voluminous inquiries on various topics of Mineralogy, Chemistry, Manufactures etc. all of which I have endeavoured to answer to the best of my judgement'¹³. He had secured one of the largest rooms in the old Post Office and arranged the named minerals according to the district found. Lack of a scientific library prevented work on the small zoological collection and he urged that this be remedied (see Chapter 13). Optimistically, he commented that he was waiting 'till decisive steps are taken as regards the new museum'¹⁴. He waited in vain.

The board of trustees was formed in 1876 and Staiger became its secretary. He kept meticulous and detailed minutes that reveal much of the museum's early operations. The minutes of the meeting of March 1876 relate that Staiger was doing the work of a curator in all but name and the trustees suggested that he should become the curator. However, the title was not given to him—it was kept for his successor, William Haswell, who took over responsibility for the museum from Staiger at the end of 1879.

Meanwhile, Staiger was attending to a range of activities in the museum. He was a commissioner for the Queensland government organising displays for the Vienna, London and Sydney Exhibitions in 1873, and in 1877 he selected items for prize winning displays in Sydney. He was working with F.M. Bailey, the keeper of the herbarium in the museum, on a monograph of Queensland grasses¹⁴.

In March 1878 the trustees acknowledged their regard for Staiger by asking the minister for Mines to place a sum of £100 on the estimates 'as special remuneration' for his services as chemist and museum custodian up to 31 December 1878; and in August 1878 they appointed a temporary secretary to relieve him of his secretarial duties to the board. He continued as custodian until Haswell's appointment in November 1879. Staiger's good relationship with at least one of the trustees is reflected in the fact that he named his son 'Miskin' after trustee W.H. Miskin. Eventually, toward the end of 1879, he fell out with Miskin when the board appointed Haswell rather than Staiger as curator (see Chapter 3). However, Dr Bancroft, another of the trustees, was to be his physician until his death¹⁵.

After he left the museum, Staiger is listed as analytical chemist in the government chemical laboratory until June 1880¹⁶ and it was during this period that he made one further contribution to international science. In May 1880 the celebrated Russian zoologist, humanitarian and anthropologist Nicolai Miklouho-Maclay came to Brisbane from New Guinea, and stayed with A.C. Gregory, then chairman of the museum board of trustees¹⁷. While in Brisbane, Miklouho-Maclay, an articulate opponent of the labour-trade and other racist policies and practices,

availed himself of an opportunity to further his own investigations on racial characteristics by taking measurements of the cranium and brain of executed criminals—a Malay, a Chinese, a Melanesian and an Aborigine. The Queensland government made laboratory accommodation available in the building just vacated by the museum—the old Post office building; supplied the services of its analytical chemist—Staiger—to assist in the investigations; and lent photographic equipment from the Survey Office. It is probable that Staiger's assistance was relevant to the development of the new preserving fluids that Maclay tested and used at this time^{17,18}.

Staiger's involvement with Miklouho-Maclay ended in August 1880 and he appears to have left the government service. He advertised as analytical chemist from his home 'Staigersleigh' in Edmonstone Street, South Brisbane, both before and after an appointment to the Municipality of Brisbane as public analyst under the *Food and Drugs Act*¹⁹. Through these years he continued to donate specimens to the museum²⁰.

In 1874 he had married Henrietta Pearce the 20 year old daughter of an English gentleman²¹. They had two sons, Rudolph Edward and Augustus William Miskin¹⁵.

The museum's first staff member died at the age of 55 at his home on 5 October 1888 after a two year battle with tuberculosis. In a brief obituary the *Brisbane Courier* stated that 'Mr Karl Theodor Staiger who formerly occupied the position of analyst to the Queensland Government, died yesterday morning at his residence Staigersleigh, Edmonstone Street South Brisbane'²². The article reflects the view of the time that Karl Staiger's work as an analyst of mineral specimens was more important than his work in the museum. Today's judgment might be different.

Charles Walter de Vis

de Vis was born in Birmingham, England, to James and Mary Devis on 9 May 1829²³. He was a distinguished scholar—an exhibitor of Kings College, London, and a scholar of Magdalen College, Cambridge where he took his BA in 1849. He became a deacon in 1852 and was rector of St John's, Breane, in Somerset in 1855. He eventually gave up the church for 'his beloved science'²⁴ becoming one of the hereditary governors of Manchester Natural History Society, at Salford, Manchester in 1862 and was later curator at the Queens Park Museum. In fact de Vis had had considerable experience both in developing and displaying collections before he came to Australia. During this period of his life he became vice-president of the (British) Anthropological Society and was a fellow of the Zoological Society²⁵.

He came to Queensland in June 1870 with the aim of studying its natural resources, especially geology and mineralogy, and of making his living by sending specimens to overseas museums. In November 1870 he arrived in Rockhampton and, with his son George, was collecting around Black Gin Creek, Clermont and Rockhampton. However, it was disappointing that the first lot of specimens he sent back to Europe were lost at sea. After a trip back to England for a visit he returned to Rockhampton where he became librarian at the School of Arts. From 1880 until February 1882, when he became curator of the Queensland Museum, he had been writing articles on geology and ornithology for the *Queenslander* under the pen-name of 'Thickthorn'—the name of his house in Rockhampton²⁴. de Vis was 53 when he became curator. Nevertheless he tackled his job with an energy and enthusiasm that never seemed to flag—he drove his staff but, indeed, he also drove himself—arranging displays, dealing with correspondence, monthly reports to the board,





writing papers and identifying the specimens that found their way into the museum. Mostly he worked on mammals, reptiles, birds and fishes²⁵. However, he also worked on other groups and anthropology. The museum still has a lengthy key he compiled to assist with the identification of spiders. The insects he probably left to the entomologist Tryon. de Vis was forced to retire from the position of curator on 31 March 1905 (see Chapter 3) at the age of 76. However, he remained on the staff as consulting scientist until 1912.

He certainly had had the confidence of the museum board of trustees which had tried very hard to avoid his retirement. In the end the government had ordered it. He also seems to have had the respect of his staff, especially the collectors, Broadbent, Wild and Hurst, who spent long periods in the field, collecting prodigious amounts of material and formally and regularly reporting back to de Vis²⁶. However, he did not get on well with his assistant curator Henry Tryon and at a board meeting on 7 December 1888 he said that he found Tryon 'insubordinate'. Nevertheless Tryon eventually wrote de Vis' biography²⁴. Certainly later on, after Tryon had left the museum, the lives of the two men must have crossed very often. It is probable that they had a mutual respect for one another's achievements.

As well as his work in the museum, de Vis took his part as a scientist in the community. He joined many of the budding societies, was a founder member and president (1888-9) of the Royal Society of Queensland; he was elected corresponding member of the Linnean Society of New South Wales in 1882; he helped in the organisation of the International Exhibition at Melbourne in 1888 and the Indian and Colonial Exhibition in London in 1886 and in the Australian Association for the Advancement of Science meetings at Sydney (first vice-president 1888) and Adelaide (president Biology section 1893). He was a member of the Vernacular Names for Australian Birds Committee, and on a committee to promote scientific exploration of the Great Barrier Reef. Other societies to which he belonged include the Royal Geographical Society of Australasia—Queensland Branch (hon. member 1900), vice-president of the Australian Ornithologists' Union (1910) and the British Ornithologists' Union. He was an 'indefatigable writer' and from 1865 to his death he published 130 scientific papers and articles²⁷. Apart from his numerous contributions to palaeontology and natural history he spent much time building up a comparative vocabulary of Aboriginal language.

While in Rockhampton, he appears to have used the name Devis, but changed it to De Vis or de Vis when he came to the museum. de Vis is the spelling most often used²⁸. The name appears to have been Norman, his parents using an anglicised version, while Charles Walter preferred the earlier style, possibly taking a quiet pride in the fact that his family can be traced through 700 years of English history²⁹. A De Vis was one of the 25 barons who witnessed King John's signing of the *Magna Charta* at Runnymede on 15 June 1215. Later King Charles II presented, to the De Vis of his day, a silver salver inscribed 'to Harry De Vis, the friend and servant of King Charles II, by his King'²⁷. It was a daughter of that same Sir Harry to whom Samuel Pepys referred in his diary:

To Whitehall, where the ball was to be crammed with fine ladies, the greatest of the Court.....By-and-by comes the King and Queene, the Duke and Duchess, and all the great ones.....Of the ladies that danced, the Duke of Monmouth's mistress and my lady Castlemaine and a daughter of Sir Harry de Vis were the best²⁹.

Charles Walter's great-grandfather was the last Devis of Thickthorne estate in Warwickshire where the family had lived for 400 years. Thickthorn was the name Charles Walter de Vis chose for his house in Rockhampton and for his pen-name²⁹.

de Vis had been married before he came to Australia. His wife, Julia née Holmes, and three sons—Edwin, Charles and Harry—stayed in England and completed their education, Charles and Harold becoming doctors. Edwin subsequently went to South Africa. Charles came to Charters Towers in 1881 where he practised medicine. Another two sons, George and Walter, who came to Australia with their father, never did complete their education. Walter is not heard of again. George became a merchant in Rockhampton but appears to have lost contact with his father after de Vis returned to England in the early 1870s²⁴. In 1898, in New Zealand, de Vis is said to have married a widow, Katherine Elizabeth Luckie^{23,28}. The board minutes of 27 August 1898 record that he was granted leave for '3 to 4 weeks'. There was no board meeting in January 1899 and he probably went to New Zealand during that December–January.

de Vis was living at Gaythorn House, Enoggera, when he died on 30 April 1915 at the age of 86, having devoted 30 years to the service of science and the Queensland Museum. He is buried in the Church of England section of the Toowong Cemetery. de Vis' great grand-children by his sons Charles and George now live in Queensland and Western Australia.

Kendall Broadbent

Broadbent was the doyen of the Queensland Museum's collectors at a time when natural history collectors were sought after and collecting was a rigorous and exacting occupation, requiring skill, ingenuity and tenacity. Comparatively short of stature, he was very hard working, a thorough field naturalist and a 'most discerning zoological collector'³⁰. Despite privations he loved the wilderness areas where he worked assiduously in seeking natural history specimens. He was not well educated, but through his observations in the field and from the literature that was available he developed a particular knowledge of Australian birds and their movements and, assisted by Henry Tryon, a good deal of his ornithological knowledge was published during his life. He collected fossils extensively during many trips to different parts of the Darling Downs, but he also collected mammals, reptiles, amphibians, fish, molluscs, crustaceans, insects and other invertebrates and anthropological material.

He was born at Horsforth, near Leeds in Yorkshire on 26 August 1837. His father was a stone mason and his mother before marriage was Elizabeth Bentley. With his parents he arrived in Victoria in 1852 and was engaged in contracting work with his father. After a while, he began to collect zoological specimens. In December 1858 he collected the type specimen of the Rufous Bristlebird and it was named after him—*Dasyornis broadbenti*². The personal achievement of having discovered a new species of Australian bird must have stimulated the young man for it was the beginning of a lifetime of natural history collecting that included the finding of many new species. He collected in every Australian state except the Northern Territory, but mainly in eastern Australia, and he participated in two expeditions to New Guinea. However, the great part of his work was done in Queensland between 1880 and 1900 while collecting for the museum.

He was en route to New Guinea as a collector in 1872 when he was one of the survivors from the wreck of the *Maria* which grounded on

a reef off Cardwell. Aboard were 64 gold prospectors, an engineer—Lawrence Hargrave, Broadbent and a crew, making a total complement of 75 men. The ship sank and two of the ship's boats took 28 men including Broadbent to the mainland. Less than half of those aboard survived, the remainder drowned or were killed by Aborigines³¹. Later Broadbent met Hargrave and taught him to make study skins—a skill that the latter subsequently put to good use when he collected in New Guinea³².

In 1873 he was engaged to collect for Count de Castenau in Cape York and around the Gulf of Carpentaria. However, while there he also collected for himself and in 1876 sold, for £18,17.0, 79 bird specimens from that region to the National Museum of Victoria. In 1875 Broadbent was engaged with others to collect around Port Moresby for specimens that were later sent to the British Museum. It was on this trip that he contracted malaria which recurred at intervals during the remainder of his life. E.P. Ramsay of the Australian Museum employed him to collect specimens for that museum from 1877 to 1879. During 1879 there were 686 bird skins or eggs registered as having been collected by Broadbent in Tasmania and in addition he made collections in South and Western Australia. Ramsay's other contracts with, and purchases from Broadbent had yielded 258 specimens from Port Moresby and 387 specimens from north Queensland between 1876 and 1878 and a collection of birds from the Darling Downs in 1881.

Broadbent's first contact with the Queensland Museum occurred in 1880 when W. Haswell was director. On 28 May 1880 the board minutes record that collector Broadbent was in the Enoggera area and had sold mammals and birds to the museum. Haswell further proposed an arrangement with Broadbent whereby, in return for his steamer passage-money and £12 a month he would give the museum his entire collections. Trustee Miskin thought 'the arrangement would prove a very advantageous one for the museum'—and so it was to be. For several months thereafter consignments of specimens from 'collector Broadbent' were reported. On 20 August 1880 Haswell reports '214 bird skins, many of them rare, besides mammals, fishes etc. from Collector Broadbent at Cardwell', on 20 September 'another consignment'. On 8 April 1881 Broadbent consigned a supply of formalin, a bundle of cotton and a jar of arsenical soap to the museum by steamer, probably indicating that his contract with it had ended.

He used various methods for collecting his specimens. His Hollis double-barrel shot-gun is now in the technological collection. He was using traps when he obtained the carnivorous marsupial known to the north Queensland Aborigines as the 'Yarrie', as he related to de Vis on 8 February 1889—

I have the honour to report. Caught the Yarrie at last, just a common tiger cat, after all the trouble. Caught it in a gully in the mountains 6 miles out of Cardwell. had 7 traps (s)et the last fortnight, got some fine lizards caught in the traps.

He also used snares for wallabies. Nets, and apparently on occasion, dynamite was used for procuring fish specimens. For instance Broadbent in a letter to de Vis which he wrote at 'Somerset', Cape York on 14 February 1884:

I could not get dynamite at Thursday Island, would you please send me some whay. I shall want it more on the reefs than I do here.

Early collectors including Broadbent used many methods to transport material back to the museums. They used pack-horses, wagons and carts,

especially for short distances. Ships were used as a means of transport for Broadbent to places in the north such as Port Douglas, Thursday Island, Karumba, and New Guinea. He used the Queensland railways where possible, as for example in the Stanthorpe district in December 1884 to January 1885 and, while collecting in the Charleville area later in 1885, boxes of specimens were railed back to Brisbane. Unfortunately, sometimes boxes were lost in transit; for example, Broadbent in a letter to de Vis from Cardwell of 8 February 1889 wrote:

..... The missing box not come yet, it must have lost the address. Those tickets come off without being nailed. Hope you received the last consignment in good order, 5 boxes, altogether, Steamer Palmer shipped them 26th Jan 89.

On 26 April 1893 the intrepid collector, showing a little pride, wrote to de Vis from the Darling Downs:

I got a pretty good find this month. head and splendid lower jaws of Dipro(to)don. about 9 miles up Kings Creek from Clifton. had to engage a man and spring cart to fetch it home, could not get the cart within a half mile of it, and the fossil across the creek, had it to carry in a box and the(n) wade the creek with it, a bad time of it we had.

During the course of the fieldwork there were periods when the collector employed Aborigines to assist him to procure specimens, especially mammals. For example he paid an Aborigine 15 shillings per week to help him in the mountains behind Cardwell to collect specimens of Lumholtz's Tree-kangaroo, *Dendrolagus lumholtzi*, known to the natives as 'boongarry'. Broadbent wrote in his diary for 25 September 1886 'The natives said it was impossible to carry anything up where Boongarry lives. Pitched camp again and started with 3 natives up to Boongarry ground'. Again, in October 1887, he wrote from Springsure:

I have got the specimens (*Petrogale penicillata*) of the wallaby you require. It is nearly impossible to get them without Blacks. We hunted them in true blackfellow fasion. They inhabit small stoney Volcanic mountains covered with scrub. They clime trees. I shot one on top of a fig tree..... There are no Blacks camped near the Station I engaged four from spring Creek.

Although he used their skills to help him collect specimens he was fully aware of the dangers he faced in the bush alone for Aborigines were not always kindly disposed to white men. Tough and resolute, Broadbent wrote in his diary for 2 January 1886, 'I shall get to Dalrymple Gap niggers or no niggers'. He was worried about the possibility of their attacking him for, on 23 January 1886, he notes in the diary that he —

Shifted camp a few miles down the Gap nothing to get here, not a safe place for a man to camp by himself.

Two days later he wrote:

A good job for me I did clear out of the top of the Gap a mob of Blacks came there Sunday to kill me for flour tobacco etc. about 40 of their Hinchinbrook blacks.

It was not a new experience—on 29 July 1882 Broadbent had written to de Vis:

Blacks are bad. I want a revolver and 100 cartridges. not safe anywhere now out of Cardwell.

Broadbent paid in trade for specimens that the Aborigines brought in to him. From 'Somerset' in 1884 he informed de Vis 'I shall require trade amongst the natives, get nothing from them without paying for it'.

Broadbent faced many other difficulties and privations, often alone,



during his long periods in the field. In a letter from Cardwell on 27 January 1889 he wrote:

.....I have spent a good deal of time after it (yarrie or tiger cat) and gone over some rough country, in fact, I have walked nearly all the flesh off my bones, what with scrambling over stones in rough gullies, through scrubs, and over mountains, there is not much of me left

In another letter of 22 October 1890 from Gowrie on the Darling Downs he wrote:

I beg permission to come down for a short spell. I require a new tent, mine torn all to pieces with the great winds here.

Prior to this, in the same year on the 13 March 1890 he had said:

.....Last monday we had a sort of Cyclone, with torrents of rain. The Condamine River is within 15 feet of the bank where I am camped, and still rising. We have here also a plague of mosquitoes and sandflies

A couple of weeks later on the same theme he wrote to de Vis about the Condamine River flood and particularly the mosquitoes '.....gets under the blankets, up the legs of your trowsers, bites night and day. I have to eat, sleep and work in smoke'. When Broadbent was collecting in the mountains behind Cardwell, in July 1886, he recorded in his diary that—

travelling is a terror in this country, the grass in the open places in the mountain is 6 feet high broad blady grass cuts like a knife, all the mountain creeks are nearly a swim and then to clime those mountains.....great masses of of lawyer palm tear flesh and cloths all to pieces.

A little later, on 27 September of the same year—

.....The natives pointed out a great conical peak of the mountain and said Boongarry (tree kangaroo) walk about all right I said upp you go, such a journey I never had the first mile up the centre of the gorge through water and over great boulders as big as a house. I could carry nothing, crawling and on hands and knees, and wading until we got to the first spur and then straight up or nearly perpendicular pulling ourselves up by the trees, all dense scrub we climed right to the top.....

Two days later he recorded in his diary—

used up all my trade food

Was four days this last trip living on sugar and bread could not get any game

except one white cockatoo the whole trip.....

Money was very short at all times and shortage of funds produced extra problems. On 9 August 1887, from Rockhampton, Broadbent wrote to de Vis '.....I have only a few shillings left of that £5 you gave me'. His grand-daughter, Mrs Margaret Thurgood, when discussing privations he had endured, remembered that he hated to see food wasted and he deplored the way many people ate only the centre of lamb chops and left the remainder.

Some idea of Broadbent's engaging personality comes through his letters to de Vis. It is reflected in this account of his visit to Pilton Station where he met the 15 year-old Arthur Davis—later to become Australian author Steele Rudd:

Mr Broadbent, a distinguished geologist from the Queensland museum in Brisbane, arrived at 'Pilton'. He came because of fossilised bones of extinct giant marsupial—the dinosaur— had been found on occasions along the banks of King's Creek and his



mission was to professionally investigate these areas. He was placed in Arthur's care by "the boss" with strict instructions that the visitor was always to be given the quietest horse on the station and he was to accompany Mr Broadbent everywhere he went. "The geologist's" ultimate departure created a void in his life, for he had enjoyed the company of this interesting and educated man, always so ready to impart to his youthful listener some of his profound knowledge on many subjects quite apart from the odd fossils they had dug out of the banks of King's Creek³³.

There were others who helped him in the field. Frank L. Jardine of Somerset, Cape York, was generous and very hospitable towards him as he had been to other early collectors in the region. On one occasion it took the squatter three days to get Broadbent across from Thursday Island to Somerset in his cutter, as the weather conditions made the 45 km crossing a hazardous trip. Jardine assisted Broadbent in field-work around the Cape's northern tip. On 1 May 1884, he organised five men including himself to help Broadbent to collect bowerbird species of the area. The party had the use of nine horses for the project. With long years of observations behind him at Somerset, Jardine discussed bird migrations with Broadbent. Knowledge gained from field-work and no doubt information from Jardine was the basis of his paper 'On the Migration of Birds at the Cape York Peninsula'³⁴.

Broadbent was also associated with Archibald Meston, newspaper editor and writer of the time. Meston was commissioned by the Queensland government to lead a scientific expedition to Bellenden Ker Range, northern Queensland during June-July 1889. Broadbent was collecting for the museum at Herberton at the time and he returned to Cairns where he joined Meston's party. He was to collect natural history specimens while the colonial botanist F.M. Bailey collected plants. Meston described Broadbent as 'a hardworking, contented companion' despite the very wet conditions which made it difficult for all concerned³⁵.

Broadbent also went collecting with Henry Tryon, the assistant curator of the museum. He also acknowledged an indebtedness to Tryon for his help in preparing manuscripts and communicating them to the Queensland Royal Society. After 1893, when he had to give up the field work that he loved to return to Brisbane as an attendant in the museum, his work with the specimens that he had collected was probably his one consolation.

He married Maria Boreham at the Oval, Kelvin Grove, Brisbane on 11 February 1880. He had met her while collecting specimens at the old gold diggings near Enoggera Reservoir, formerly known as the 'waterworks' on the western side of Brisbane. The Broadbents had five children, four of whom survived, one son and three daughters. Broadbent and his family lived at Ashgrove, then Red Hill in the 1890s. In 1903 they moved to 128 Stonesleigh Street, Albion, where he died on 16 January 1911 at the age of 73 years while still on the staff of the museum.

In an obituary, probably written by Hamlyn-Harris, de Vis who with Broadbent had spent the past 30 years in the service of the museum, is quoted as having said:

It would be difficult to find Mr Broadbent's superior, even at 60 years of age. He had every qualification for the work, was only happy exercising it, he was thoroughly honourable and intensely loyal to his friends. I shall miss him very much and shall always hold his memory in deep respect and with affection³⁶.

Ronald Hamlyn-Harris

He is said to have been of 'irreproachable character, a man of the highest integrity, blameless reputation, amiable disposition, rather reserved, quiet..... more of a theorist than a practical man. Could talk for two hours on the structure of the bee but could not tell you how to preserve the honey.....a splendid scientist with a strong leaning to natural history and entomology.....'³⁷.

His achievements while director of the Queensland Museum certainly establish that assessment to have been wrong in one respect only — he was, indeed, a practical man. After years of neglect he established the museum's operations on a firm basis.

He was borne in Eastbourne, Sussex, in 1874. His father was Hamlyn Huntingdon Harris of the 18th Hussars. He was educated in Germany and England and trained in estate management. He became an expert apiarist while managing his father's estate. His DSc was from Eberhard-Karls University, Tübingen, Germany, in 1902, for his investigations on *The Statocysts of Cephalopoda* which he had done at the Stazione Zoologica — the famous Naples marine laboratory. He came to Australia in 1903. Between 1903 and 1910 he was a science master at Toowoomba Grammar School where he had reorganised science teaching. He became director of the museum on 1 October 1910³⁸.

Hamlyn-Harris was the first director to be appointed to the museum as a well-established zoologist. Certainly, William Haswell had been trained as such but his MA from Oxford was positively elementary in comparison with Hamlyn-Harris' DSc, FRMS, FZS, FES. His predecessor, de Vis, had not had any training specifically in science — although he was a keen naturalist and during his life made up through experience what he lacked in formal training. However, it was Hamlyn-Harris who understood more of the back-up services needed in a museum — or indeed in any scientific establishment and he made a particularly significant contribution in that area. In the library he rearranged the volumes and introduced appropriate registration and cataloguing techniques and, having assessed its contents, he made good the obvious gaps in the holdings. He also introduced and rationalised specimen registers. He reorganised the staff and honorary associates were appointed to make up for the lack of a professionally qualified staff establishment. For the first time there was an anthropologist appointed — Douglas Rannie — as well as appropriately qualified support staff — a librarian and a stenographer. Hamlyn-Harris was proud of his scientific qualifications, and protective of the museum's scientific stature. It was probably this concern that caused his exasperation with Wild, resulting in the insect collector's harsh dismissal (see Chapter 9).

Hamlyn-Harris gave the first lectures in biology at the newly founded Queensland University in 1911. However, although he hoped to return to his biological research on cephalopods, he was not able to do that. He published, instead, on anthropological subjects. He was foundation president of the Toowoomba Field Naturalists' Club, 1908 and president of the Royal Society of Queensland, 1916 and of the Queensland Entomological Society.

His other contribution was the result of a personal quality — the long period that many of those he appointed stayed on the staff. He was, in fact, a compassionate man, as evidenced in his treatment of J.D. Ogilby — he managed his salary, bought his clothes, and paid his rent³⁹.

His stay at the museum was relatively short but his contribution was

great and lasting. He resigned after eight years—toward the end of World War I—disappointed that he had not been able to persuade the government to a greater degree of support for the museum. After his resignation he went to Stanthorpe to manage his brother's fruit farm for several years. While there he started a short-lived entomological society whose main function was the co-ordination of pest control in the orchards. From 1922 to 1924 he was in charge of the Australian Hookworm Campaign—doing malaria and filaria surveys throughout Queensland. Then he taught school at Southport. At least one student from that time remembers how stimulating he was as an English teacher—particularly, recalling his dissertation on witches and witchcraft during the class' study of *Macbeth*. These years at Southport could not have been unhappy. He was in the company of classically educated, scholarly and entirely compatible colleagues, one of whom was a Queensland Rhodes scholar⁴⁰. Nevertheless, he was not teaching science and wanted to return to it. He was again involved with filaria when he was city entomologist, Brisbane City Council from 1928 to 1933—the first entomologist to be employed by an Australian municipality—and was one of those who were instrumental in finding a solution to Brisbane's endemic filariasis problem. During this period he had an exchange of letters in the *Brisbane Courier* with Tom Marshall over his—Hamlyn-Harris'—recommendations for introduction of mosquito-eating fish—*Gambusia assinis* and *Poecilia reticulata* (guppies). He was a lecturer in zoology at the university from 1936 to 1943.

He died in Brisbane on 26 June 1953, survived by his wife, Bertha and their three sons and three daughters.



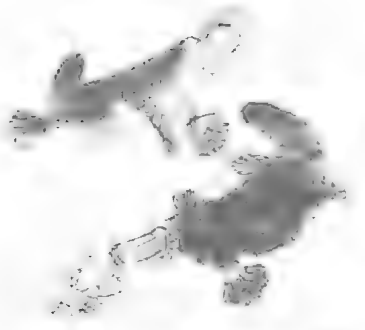
Heber Albert Longman

Longman was one of Australia's strongest exponents of vertebrate palaeontology and evolutionary theory between the wars. His scientific calibre was recognized in 1946 when he was awarded the Australian Natural History Medallion and later, in 1952, the award of the ANZAAS Mueller Medal for distinguished services to natural sciences in Australia⁴¹.

Born on 24 June 1880 at Heytesbury, Wiltshire, England, his father was a Congregational minister of liberal views who possessed a good library, with the help of which Longman developed an early interest in natural history and archaeology. He went to school at Emwell House in Warminster. In his early years he became much attracted to T.H. Huxley's tradition of rational scientific observation and he was to maintain this trait through life. He came to Australia in 1902, apparently for health reasons. Living first at Toowoomba, he revitalized a small weekly newspaper, the *Downs Post*, and worked as its journalist. This paper evolved into the *Rag* and later the *Citizen* with Longman as editor⁴¹. He met his wife, Irene, in 1902 when he called on her father, the local Congregational minister. She became the first woman to be elected to the Queensland parliament.

While in Toowoomba Longman quickly gained a reputation as a natural historian, developing an important plant collection which he sent to government botanist F.M. Bailey in 1903 (he was noted among local people for his field equipment which included a vasculum and a milk churn). Bailey stimulated his scientific pursuits and ultimately part of Longman's herbarium was sent to Kew. The remainder is now in the Queensland Herbarium.

He joined the museum in 1911, recruited by Hamlyn-Harris who was a fellow member of the Toowoomba Field Naturalists' Club which Longman had initiated. When Hamlyn-Harris resigned in 1917 Longman became



acting director, the position being made permanent the following year. During his 34 years at the museum he published over 70 scientific papers, notably on fossil vertebrates, contributed articles to local papers and spoke to many societies on a multitude of subjects from evolution to Egyptology. After his retirement in 1945 he continued to contribute his column 'Nature's Way' to the *Courier Mail* and through it encouraged a wide audience to be interested in the ecology and conservation of Queensland's wildlife. His love and enthusiasm for every aspect of natural history was apparent to all who read his articles and heard him speak. His lifelong habit of unceasing observation led him on occasion to pursue a spider at night by torchlight and to keep different animals at home to study their life histories.

Longman's warmth and humanity can be seen in the diary that the young Ivor Filmer kept during his years at the museum. He had been on the staff only two days when:

Monday 13 December 1944: Great excitement at the museum this morning—three eggs in one of the live lizard cages were identified as being the product of a male and female Striped-headed Goanna *Varanus gouldii* Mr Longman was quite excited, as were all of us....⁴³

The 16 year-old Filmer had just left school, and was enthusiastic about the museum and natural history. Daily, his diary records the tasks he completed and the conversations Longman had with him—encouraging the young naturalist and discussing distribution, nomenclature, biology:

5 February 1944: All the staff seem to be very interested to hear of our hike on Saturday but of course it was Mr Longman to whom I told most of it⁴³.

Filmer recalls that Longman travelled by train from Chelmer:

apparently there was a little clique of back carriage travellers that delighted in conversation of a cultural nature. A good friend and fellow traveller was Sydney May of the University Music department. (He) travelled up Brunswick St. by tram. He habitually wore a long white coat on tram and tram. His thinning white hair was long; in those days it was redolent of academia to witness a head of long white hair....

24 December 1947: It was not only my first Xmas party, but I think it was the first time the staff of the Museum had ever celebrated Xmas. The latter was probably discouraged by Mr Longman because of his philosophical beliefs⁴⁴.

Longman liked nothing better than a good, sound, rational argument, but in private. He was not aggressive—he was too much a gentleman; and despite his good relations with, and ready access to the local press, he never used the newspapers to campaign for the museum (see Chapter 3). Commenting on a letter to the *Courier Mail*, over the signature 'Disgusted visitor', complaining of the lack of lighting in the museum, Longman said—

that the visitors were unfortunate that they visited the museum on one of those dark days, which are rare in Brisbane. He wished that the museum had sufficient lighting for emergency occasions, but adequate installation would be difficult in such a building. The museum always remained open until 5 p.m., whereas other institutions of the same nature closed at 4 p.m. on dark days⁴⁴.

In his career he was president of the Royal Society of Queensland twice—in 1919 and 1939. He played an important role on the Great Barrier Reef Committee, of which he was to be a vice-chairman. He was also a member of the Australian National Research Council. He was a fellow of

the Linnean Society of London, of the Royal Anthropological Institute, and corresponding member of the Zoological Society and he belonged to many societies including the Queensland Naturalists' Club of which he was president, and the international Rationalist Society — being very active in the Queensland branch.

He died on 16 February 1954, age 73, and was buried at Chelmer. His friend, naturalist Alec Chisholm presented the farewell.

George Mack

Mack was director of the Queensland Museum from 1946 to 1963. He was born at Killearn, Scotland on 2 October 1899. Mack was a museum man — he had assisted in the Hunterian Museum, University of Glasgow and had come to Queensland from the National Museum of Victoria where he had been from 1923. He doubled the staff establishment of the museum and improved both the storage conditions for the collection and the standards of display. He was not able to do very much about the research role of the institution — that was a matter addressed by his successors. Nevertheless, Mack created a basis on which they could build — an institution with a commitment to curation and care of collections and service to the community.

Mack had arrived in Western Australia after World War I in which he had served with the Argyll and Sutherland Highlanders 1914–1919, seeing active service in France and Belgium. He joined the staff of the National Museum of Victoria, Melbourne in 1923.

In 1935 he was promoted to the post of ornithologist and while in this position he undertook a part-time science course at the University of Melbourne. He graduated BSc majoring in zoology and geology. In October 1945 he was appointed senior scientific assistant to the director of the museum, H.A. Longman, and was appointed acting director in February 1946, becoming director shortly after. In fact he had come to Queensland as Longman's probable successor⁴⁵⁻⁹.

Although he knew the other Australian museums, he never was able to travel overseas as he wanted to. In 1956 he applied to the Queensland government for permission to apply for a Carnegie Foundation travel grant in order to study museums in the USA, Canada and Europe. It was considered an inopportune time and he was asked to apply at a later date, but he never did so.

He published a number of papers on ornithological and other subjects. He was a president of the Royal Society of Queensland, the Anthropological Society of Queensland and the Queensland Naturalists' Club and an executive member of the Great Barrier Reef Committee.

He was a quiet, frugal man, living a very private life at Enoggera — in the house he moved into when he first came to Queensland. In the late 1950s, after his two daughters, Margaret (McLeod) and Jean (Fearnside) had grown up and left home, he and his wife Mary moved to a smaller house at Aspley. George Mack died, at the Royal Brisbane Hospital, on the 24 October 1963.

Robert Burns, the Scottish poet, whose verse Mack admired and whose sentiments he shared, once wrote 'something in us never dies' and this indeed applied to Mack's life work in the Queensland Museum, for on his labours others have built, and on the steps he made, others have made further progress.





THE STAFF
1862-1970¹
Appendix 2

This list is drawn from the *Blue Books* in *Votes and Proceedings of the Queensland Parliament 1873–1915, 1924–30, 1946–9, 1951, 1953*; Minute books and annual reports of the Queensland Museum Board of Trustees in the Queensland Museum library; Queensland Museum Staff Attendance Books 1911–69; and Queensland Museum correspondence and personal files¹.

Until the first board of trustees was disbanded in 1907 some members of staff, such as clerical assistants and often attendants and collectors, were board appointees paid by the board from contingencies and were not listed in the *Blue Book*.

The list is chronological rather than alphabetical and names are classified according to the person's occupation in the museum. Where several different positions were held the information is replicated under each relevant heading.

Doorkeepers, Messengers, Attendants

R. TAYLOR (1876 messenger); G. WALKER (1876–80 porter); P. MURPHY (1877–8 night watchman); J. CORMACK (1879–83 messenger); J. LANE (1880–93 assistant messenger); A. MacPHERSON (1883–91 attendant); J.H. SPILLER (1891–3 and 1897–1902 doorkeeper); K. BROADBENT (zoological collector 1882–1893; 1893–1911 attendant); C.J. WILD (entomological collector 1889–93 and 1911, 1893–1897 messenger, entomologist 1897–1905, acting director 1905–10); J. DICKSON (1899–1900 extra hand/night watchman); W. HEDGES (1899–1901 gardener²); F.G. SMEDLEY (1901–2 night watchman); E. LOWER (1899–1900 packer/label writer); J. LAMB (1899–1902 packer/painter/assistant messenger); B. McCLELLAND (1905–6 doorkeeper); B. HARRISON (1906–11 doorkeeper, 1911–8 senior attendant); W.E. GREENSILL (1911–14 attendant and carpenter); J. BAILLIE (1911–27); I. ANDERSON (1911); E. VAREY (1912–30); T. WILLIS (1914); R.V. SMITH (1917–25 and 1925–31); A. GORMAN (1919–32); M. BEIRNE (1925–59 senior attendant); E. TURNER (1930–2 relieving); W. MITCHELL (1932–4); A. MILLER (1932 relieving); C. BOONE (1933 relieving); W. SULLIVAN (1933 relieving); W. CAMPBELL (1933 relieving); S. UPRICHARD (1934); A. SWAN (1934–44); B. BOWEN (1934–54); V. ARKELL (1943–8); C. YORKE (1945–58); W. TURNBULL (1947–8); J. HAWKINS (1948–51); J. COTTAM (1948); J. WALKER (1948–59); E. ROWELL (1949); C. BOWMAN (1951–9; 1959–64 senior attendant); J. JONES (1953–63); A. WATSON (1954–5); L. PLATT (1955–62); E. BAIN (1958); L. TAYLOR (1958–64, 1964– senior attendant); J. THOMSON (1959–65); C. MORTON (1959–73); F. CORRIE (1959–60); R. BELL (1959–73); R. HARDLEY (1960–8 assistant anthropology from 1968, curator from 1975); D. BLACK (1960–1); L. CORT (1961–72); R. BRUCE (1963–76); W. SCHUELER (1966–73); S. MATHIESON (1967–79); A. SOMMERFELDT (1968–77).

Administrative and Secretarial

C. CHESTER (1878 temporary clerical assistant); R. NEWTON (1878–80 secretary); H. TRYON (1883–4 clerical assistant, assistant curator from 1885); H. HURST (1887 clerk/librarian, also geology collector); A. PRESTON (1891–6 clerk/librarian); A.J. NORRIS (1896–8 clerical assistant); G.H. HAWKINS (1898–1902 clerical assistant); H.B. TAYLOR (1906–8 office boy); V.H. CHAMBERS (1908–11 cadet clerk); E.G. MURPHY (1911–53 stenographer); E.J. BINGHAM (1948–51 clerk-typist); S. LANDY (1952–64); E. GREIG (1958–9 clerk-typist); D. CHORLEY (1959–

Previous page: On 3 November 1985 the museum closed to the public to prepare for its move to the new building. The occasion was celebrated by a party attended by present and past staff and board members, and their families.

66 stenographer); C. LAING (1960-1); R.E. JONES (1962-5); L. HEALEY (1964-5 clerk-typist); M. STEGEMAN (1965-6 clerk-typist); C. CORRIE (1965-6 clerk-typist); J. MAGEE (1966-9 stenographer); C. SANDS (1966 clerk-typist); J. UTZ (1966-76 stenographer); R. WHITBY (1966-70 clerk-typist); J. WRIGHT (1970 clerk-typist).

Museum Assistants and Cadets (Scientific)

J.A. SMITH (1900-2 mineralogy); J. LAMB (1902-10 industrial department); W.M. COLCLOUGH (1911-12 mechanical, assistant preparator from 1913, taxidermist from 1919); R. ILLIDGE (1919 registration of MacGregor collection); G. JACKSON (1937-9 ethnology; killed in action); I. FILMER (1944-52 general); S.B. GUNN (1950-5 zoology); T. KIRKPATRICK (1953 entomology); M. CALLEY (1953 ethnology); M. WILSON (1954-6 entomology); S. DELLER *m.* BILLING (1956-60 zoology); W. BUTT (1956-60 zoology); S. RHODES (1958-9 zoology); E. SNOWDEN (1960-1 zoology); I. McCOSKER (1960-1 and 1962-3 zoology); B. SMITH (1960-4 ethnology); S. KENDALL (1962-5 zoology); V. WILLS (1962); L. HAREN (1963-6 zoology); B. GAYDON (1963-5 zoology); G. GEHRMANN (1963-4 molluscs); L. HARRIS (1964-5 zoology); P. WIPPELL (1964-6 entomology, 1966-8 anthropology); L. ELDER *m.* WEDGEWOOD (1965-7 and 1980-3 ornithology); M. McEWAN (1966-7 zoology); J. WILSON (1966-80 entomology); B. McKEON (1967 zoology); H. JOHNSON (1967 vertebrate zoology); K. WRIGHT (1967-8 general); K. CAMPBELL (1967-8 history and technology); J. ARMSTRONG (1968-9 zoology); R. MONROE (1968-72 entomology, curator arachnology from 1972, curator crustaceans from 1974); K. RABIG (1968 zoology); R. HARDLEY (attendant from 1960, 1968-75 anthropology, curator from 1975); B. DICKSON (1970 zoology); P. DAVIE (1970-77 crustaceans, curator from 1978).



Assistants (Art)

C. SANDERCOCK *m.* FEARNLEY (1947-50, 1952-3 and 1972); V. SMEED (1950-6); J. TRACEY (1953); L. EVANS (1956-9); J. TRIVETT (1957); R.K. JONES (1958-62); M. GALLAWAY (1960-5); D.A. WILSON (1962-7); M.(Mary) McKENZIE (1965-70); M.(Margaret) McKENZIE (1970-2); R. COOK (1967-8); S. HILEY (1968-74); E. GEHRMANN (1969).

Collectors

A. MacPHERSON (1881-3 geology, attendant from 1883); K. BROADBENT (1882-93 zoology, attendant from 1893); H.F. WALLMAN (1884-5 geology); E.B. LINDON (1886-7 geology); H. HURST (1887-91 geology); H.G. STOKES (1892-3 geology); C.J. WILD (1889-93 and 1911 entomology, messenger from 1893, entomologist from 1897, acting director from 1905); D. RANNIE (1912 ethnology, librarian 1913-4); H.L. MAYNARD (1913-5 honorary).

Photographers

R.V. OLDHAM (1955-6 temporary assistant); S. BREEDEN (1957-65); A. EASTON (1965-84).

Carpenters, Artificers

T. SKINNER (1880 and 1884-93); J. GILBERT (1880 assistant); J. WILSON (1881-4); A.S. RUSSELL (1899-1900), A. NORRIS (1899-1900); J. BERRY (1899-1902 and 1902-10 part-time); W.E. GREENSILL (1911-14 attendant and carpenter); T.C. MARSHALL (cadet from 1912, assistant preparator from 1914, 1925-42 artificer and modeller, seconded to Department of Harbours and Marine from 1942); W. BALAAM (1966-74 artificer).

Librarians and Assistants (see also clerical assistants 1878–1910).

E. LOWER (1900–2 librarian/label writer); C.G.F. SINNAMON (1911–16 assistant); D. RANNIE (ethnology collector 1912, 1913–14); R.J. CUTHBERT BUTLER (1915–17); A. FENWICK (1918–30); N. HOLDSWORTH (1931–3); K. WATSON (1933–42); D. TABRETT (1940–2 assistant); I. GRICHTING (1943–6 assistant); B. BAIRD (1946–7 assistant); V. MacDONALD (1948–50 assistant); N. TURNBULL (1950–5 assistant); J. USCINSKI (1955 assistant); K. CARTER *m* BREEDEN (1955–62 assistant); W. WELLS (1956–7 assistant); C. FORDE (1957–62); E. WIXTED (1961–); F. MATHERS (1967–8 assistant); D. CRONIN (1969–70 assistant).

Education Officers

N. NOWLAND (1939 temporary—to write a handbook); J. HODGE (1967–75).

Taxidermists, Preparators

E. CURTIS (1876–8 assistant); E. SPALDING (1880–93 taxidermist); A. ALDER (1907–15 taxidermist); W.E. WEATHERILL (1907–11 assistant); M.J. COLCLOUGH (1913–9 assistant, 1919–31, 1933–47 taxidermist); T.C. MARSHALL (1912–13 cadet, 1914–25 assistant, 1925–42 artificer and modeller, 1942–3 seconded to Department Harbours and Marine as ichthyologist); D.P. VERNON (1946–60 preparator, 1960–71 senior preparator, 1971–81 ornithologist); M.E. McANNA (1947–71 preparator); K. KEITH (1948–54 assistant); G. AYRE (1954–5 temporary cadet); T. TEBBLE (1960–71 preparator, 1971– senior preparator); V. KEIGHT (1962–5 assistant); W. FREELAND (1966 assistant); A.J. HILLER (1969–73 assistant).

Curators and Other Technical and Scientific Staff

C. D'OYLY APLIN (1871 honorary—cataloguing and arranging mineral and fossil collections); F.M. BAILEY (1874–80 keeper of the herbarium); E. COXEN (1876–82 part time conchologist); H. TRYON (clerical assistant from 1883, 1885–93 assistant curator invertebrates); C. HEDLEY (1888–9 'supernumerary' assistant curator molluscs); C.J. WILD (entomological collector 1889–93 and 1911, messenger 1893–7, 1897–1905 entomologist, acting director 1905–10); C. de VIS (curator from 1882, director from 1902, 1905–10 consulting scientist); H.A. LONGMAN (1911–8, assistant curator); H. HACKER (1911–29 entomologist, 1929–43 part-time); T.H. JOHNSTON (1912–5 honorary zoologist); J.D. OGILBY (1901 assistant curator, 1912–20 part-time ichthyologist); J. SHIRLEY (1912–5 honorary conchologist, 1920–1 conchologist); D.R. BUCKLEY (1913–4 part-time osteologist); A.B. WALKOM (1915–7 honorary palaeontologist); H.C. RICHARDS (1917 honorary petrologist and mineralogist); F.W. WHITEHOUSE (1927–37 honorary palaeontologist); A.J. TURNER (1931 honorary entomologist); H. JARVIS (1944–8 entomologist seconded from Department of Agriculture and Stock for one day per fortnight); G. MACK (1945 senior scientific assistant, director from 1946); J.T. WOODS (1948–51 assistant geologist, 1952–59 curator geology, director from 1963); A. BARTHOLOMAI (1960–8 curator geology, director from 1969); E.C. DAHMS (1962– curator entomology); E. CROSBY (1965 curator anthropology); B. CAMPBELL (1964–70 curator zoology, 1970–76 curator crustaceans, 1977– deputy director); H.A. SWEETSER (1966–74 technologist); J. COVACEVICH (1966– curator reptiles); P. JELL (1969 curator geology); M. QUINNELL (1968– curator anthropology); S. HOARE (1968–70 curator ichthyology); H. KING (1969–73 curator molluscs);

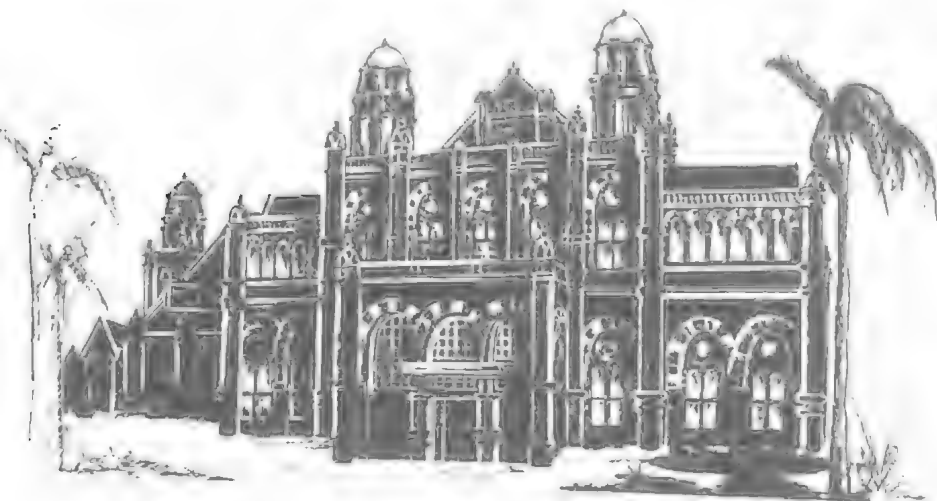
C. WALLACE (1970-7 curator lower invertebrates); D. VERNON (1946-71 preparator, 1971-81 ornithologist).

Directors and Others in Charge

C. COXEN (1862-73 honorary curator); K. STAIGER (1873-80 custodian and government analyst); W.A. HASWELL (1880 curator); F.M. BAILEY (keeper of the herbarium from 1874, 1880-2 temporary curator); C. de VIS (1882-1901 curator, 1902-5 director, consulting scientist 1905-10); C.J. WILD (entomological collector 1889-93 and 1911, messenger 1893-7, entomologist 1897-1904, 1905-10 acting director); R. HAMLYN-HARRIS (1910-17 director); H.A. LONGMAN (assistant curator from 1911, 1918-45 director); G. MACK (senior scientific assistant 1945, 1946-63 director); J.T. WOODS (assistant geologist from 1948, curator geology 1952-9, 1963-8 director); A. BARTHOLOMAI (curator geology from 1960, 1969- director).

Trustees 1876-1907

C. COXEN—squatter, public servant, politician, naturalist (1876); J. BANCROFT—medical practitioner, natural scientist (1876-94); J. DOUGLAS—squatter, public servant, politician (1876-99); J. FENWICK—stock and station agent (1876-99); A.C. GREGORY—explorer, public servant, politician (1876-99); G. (GRESLEY) LUKIN—public servant, newspaper editor (1876-80); J.M. MACROSSAN—miner, politician (1879-91); W.H. MISKIN—public servant, politician, lawyer, naturalist (1876-91); G. ROFF—sugar grower, merchant, politician (1876-89); L.A. BERNAYS—public servant (1878-79); K.I. O'DOHERTY—medical practitioner, politician (1878-85); C.H. BUZACOTT—newspaper editor and proprietor, politician (1880-1); A.H. PALMER—pastoralist, politician (1882-98); B.M. MORETON—pastoralist, politician (1885-99); A. NORTON—pastoralist, politician (1888-1907); F.A. BLACKMAN—grazier (1892-3); R. GAILEY—architect (1892-07); W.O. HODGKINSON—explorer, journalist, public servant, politician (1892-3); J. CAMERON—pastoralist company director, politician (1899-1907); J.V. CHATAWAY—newspaper proprietor, politician (1899-1901); C.F. MARKS—medical practitioner, politician (1899-1907); J.W. SUTTON—ironmaster, local government alderman (1899-1907); E.G.E. SCRIVEN—public servant (1905-7); A.J. TURNER—medical practitioner, entomologist (1905-7).







REFERENCES
AND
FOOTNOTES
Appendix 3

Abbreviations: ADB, *Australian Dictionary of Biography*; QMA, *Queensland Museum Archives*; QSA, *Queensland State Archives*; UQA, *University of Queensland Archives*; VP, *Votes and Proceedings of the Queensland Parliament* (Queensland Government Printer, Brisbane); others as in the *World List of Scientific Periodicals*.

The *Queensland Museum Board Minutes* for 1876–1907 are held in the Queensland Museum library. A bound volume of the *Annual Reports of the Queensland Museum* held in the museum library (Cat. No. 14/1841) contains the reports for the years 1877–8 and 1882–1907. For reports for the year 1878–9 see VP 1879 vol. 2: p. 1293; for 1879–80 see VP 1880 vol. 2: p. 1505; for 1881–82 see VP 1882 vol. 2: p. 1199. There is no report for 1880–81, although that for 1881–82 reports on the whole calendar year of 1881. Annual Reports 1902–1907 are in the *Queensland Parliamentary Papers* as part of the *Reports of the Department of Agriculture and Stock* for those years.

1 THE STAGE IS SET

- 1 *Queensland Government Gazette* No.1, Saturday 10 December 1859, pp.1–4.
- 2 Knight, J.J., 1895. *In the Early Days* (Sapsford and Co., Brisbane).
- 3 Morrison, V.F., 1888. *The Aldine History of Queensland* vol.1, pp.1–384 (The Aldine Publishing Company, Sydney).
One of the ships chartered by Lang was the *Fortitude*, after which Fortitude Valley, a suburb of Brisbane, was named; and it was in the *Fortitude* that W. Pettigrew, later a prominent member of the Philosophical Society immigrated.
- 4 Cannon, M., 1975. Life in the Cities. In *Australia in the Victorian Age* vol.3, p.14 (T. Nelson Australia Pty. Ltd., Melbourne).
- 5 Lawson, R., 1973. *Brisbane in the 1890s* pp.3–4 (University of Queensland Press, Brisbane).
- 6 *Second Census of the Colony of Queensland 1864 taken on the 1st January 1864* 1864 (Registrar General's Report, Queensland Government Printer).
- 7 O'Donohue, W. 1981–82. First Agent General. Development of the Office in London 1860–1876. *J. R. Hist. Soc. Qd* 11(3): 59–74.
- 8 Johnson, W.R., 1982. *The Call of the Land, a History of Queensland to the Present Day* p.84 (Jacaranda Press, Brisbane).
- 9 Schindler, C., 1916. Non-British settlement in Queensland. *J. R. Hist. Soc. Qd* 1(2): 64–75.
- 10 Bowen to Newcastle, August 1861. *Governor's Dispatches to Secretary of State* 1, p.474 (QSA Gov/22).
- 11 Bowen to Newcastle, 7 April 1860. *Governor's Dispatches to Secretary of State* 1, p.194 (QSA Gov/22).
- 12 Morrison, A.A., 1966. Colonial Society 1860–1890. *Qd Heritage* 1(5): 21–30.
- 13 Holthouse, H., 1982. *Illustrated History of Brisbane* p.27 (A.H. & A.W. Reed Pty Ltd, Frenchs Forest)
- 14 Bowen to Newcastle, 18 May 1860. *Governor's Dispatches to Secretary of State* 1, p.219 (QSA Gov/22).
- 15 *Our First Half Century, a review of Queensland Progress*, 1909, pp.11–13 (Government of Queensland, Brisbane).
- 16 *With Hope and Courage*, undated (Division of Migrant Services, Brisbane)
- 17 Bowen to Newcastle, 25 May 1860. *Governor's Dispatches to Secretary of State* 1, p.240 (QSA Gov/22).
- 18 Colliver, F.S. and Woolston, F.P., 1978. Aboriginals in the Brisbane Area, pp.58–88. In *Brisbane Retrospect. Eight Aspects of Brisbane History* (Library Board of Queensland, Brisbane).
- 19 Holthouse, H., 1975. *Looking Back, The first 150 years of Queensland Schools* p.15 (Department of Education, Brisbane).
- 20 Hawkins, T.M., 1965. *The Queensland Great Public Schools, a History* pp.327 (Jacaranda Press, Brisbane).
- 21 Birman, W., 1979. *Gregory of Rainworth a Man in his Time* p.98 (University of W.A. Press, Perth).
- 22 Whittell, H.M., 1954. *The Literature of Australian Birds* pp.174–5 (Paterson Brockensha, Perth).
- 23 Bowen to Newcastle, Feb. 1860. *Governor's Dispatches to Secretary of State* 1, p.61 (QSA Gov/22).
- 24 Marks, E.M., 1960. A History of the Queensland Philosophical Society and the Royal Society of Queensland from 1859 to 1911. *Proc. R. Soc. Qd* 71(2): 17–42.
- 25 General Report of Proceedings, 2 December 1862. *Trans Phil. Soc. Qd* 1.

- 26 *Moreton Bay Courier* 21 and 25 January 1862; *The Queensland Times* 28 January 1862.
- 27 In the annual report of the museum's trustees for 1899, signed by Chairman A. Norton on behalf of the board, the founding of the museum is described: The Queensland Museum began its existence in the year 1855. Its birth was due to the gifts and exertions of a little knot of earnest naturalists, whose first contributions were deposited in a room in the so-called Conservatory on Wickham Terrace. Foremost among his friends in self denying enthusiasm was the late Charles Coxen, who for years was Honorary Curator, and whose talent and unselfish perseverance we hold in honour. (VP 1900, vol.2, p.143).
- Many of the programmes for the museum's public lectures 1911-16 similarly describe the museum as having been founded in 1855. Very likely Hamlyn-Harris' authority for this date was the annual report of 1899. Later Mack (1956: *The Queensland Museum 1855-1955. Mem. Qd Mus.* 13(2): 106-24) also accepted this date, as did Marks (23). Nevertheless it is in its report of December 1862 that the Philosophical Society states that 'the Society has during the past year specially directed its attention to the formation of a nucleus of the museum of natural science'. Undoubtedly the collections given to that museum - by Coxen, Rawnsley and Waller - had started before 1862, but the museum had not.
- 28 VP 1872: Formation of Public Museum, p.589.
- 29 Morrison, A.A., 1962-63. Brisbane one hundred years ago. *J. R. Hist. Soc. Qd* 7(1): 72-92.
- 30 *Brisbane Courier* 28 July 1924. A vision of 70 years ago.
- 31 Strahan, R., 1980. *Rare and Curious Specimens. An Illustrated History of the Australian Museum 1827-1979* (Australian Museum, Sydney).
- 32 Steele, J.G., 1975. *Brisbane Town in Convict Days 1824-1842* pp.154-5 (University of Queensland Press, Brisbane).
- 33 Hindwood, K.A., 1938. John Gould in Australia. *Emu* 38: 95-118.
- 34 Marks, E.N., 1963. Silvester Diggles - a Queensland naturalist one hundred years ago. *Qd Nat.* 17: 15-25.
- 35 Anon, vide Carter, J., 1981. *Nothing to Spare* (Penguin Books, Australia).
- 36 *Brisbane Courier* 17 May 1864.
- 37 *Brisbane Courier* 29 September 1864.
- 38 Cilento, R., 1962. Medicine in Queensland. *J. R. Hist. Soc. Qd* 6(4): 866-907.
- 39 Barclay, E., 1971. Fevers and Stinks: some problems of Public Health in the 1870s and the 1880s. *Qd Heritage* 2(4): 3-12.



2 SHEER WANT OF SPACE

- 1 *Moreton Bay Courier* 25 January 1862.
- 2 Steele, J.G., 1975. *Brisbane Town in Convict Days* (University of Queensland Press, Brisbane).
- 3 Hogan, J., 1978. *A Study of Brisbane's Historic Windmill* (unpublished manuscript, Brisbane City Council, Brisbane)
- 4 Marks, E.N., 1960. A history of the Queensland Philosophical Society and the Royal Society of Queensland from 1859 to 1911. *Proc. R. Soc. Qd* 71(2): 17-42, 2pls.
- 5 VP 1870: pp.117,142,167,168.
- 6 Aplin to Minister for Public Works, 1 June 1871. VP 1872: p.589.
- 7 Staiger to Hon W.H. Walsh, 2 June 1873 (QSA Department of Public Works inward correspondence 2168, 2169).
- 8 Hogan, J., 1982. *Living History of Brisbane* (Boolarong Publications, Brisbane).
- 9 *Queensland Post Office Directory* 1878-9.
- 10 Coxen to Hon. Secretary for Public Works, 26 July 1872 (QSA).
- 11 Stanley to the Under Secretary, Department for Public Works, 12 August 1872 (QSA).
- 12 Staiger to Hon. J.M. Thompson, 21 July 1873, 2 August 1873 (QSA).
- 13 Gregory to the Secretary for Public Works, 28 April 1875 (QSA PRE A 337 6144 19.10).
- 14 *Queensland Museum Board Minutes* 6 February 1877, 29 May 1877.
- 15 *Queensland Museum Board Minutes* 18 July 1877.
- 16 *Queensland Parliamentary Debates* 1884: vol.44, p.1611.
- 17 Royal National Agricultural and Industrial Association (RNA) records, John Oxley Library.
- 18 Wadley, D., 1973. Address by the President of the RNA to Brisbane North Rotary Club, 12 June 1973.
- 19 *The Brisbane Courier* 15 August 1891.

- 20 Personal reminiscence of J.B. Chapel, former Graded Foreman, State Works Department.
- 21 Watson, D. and McKay, J., 1984. A directory of Queensland Architects to 1940. *Occasional papers of the Fryer Library, University of Queensland* 5; 1-236.
- 22 Addison, G.H.M., 1899. Architecture as a necessary branch of education. *Queensland Art Society Annual Review and Exhibition Catalogue* (Oxley Library RBJ 709.943 ANN).
- 23 Bannister-Fletcher, 1961. *A History of Architecture* (Athlone Press, London).
- 24 Exhibition Building, National Trust citation (National Trust, Queensland).
- 25 Rogers, F., 1985. Organs call the time again. *Sunday Mail* 24 March 1985, pp8-10.
- 26 Thomis, M.I., 1985. *A Place of Light and Learning* (University of Queensland Press, Brisbane).
- 27 WOR series (QSA).
- 28 Etheridge, R. jnr, 1910. Manuscript report to the Premier of Queensland (QSA PRE A337 6144 19.10).
- 29 *Queensland Museum Board Minutes* 30 September 1900.
- 30 *Annual Report Queensland Museum* 1899. VP 1900: vol.2, p.143.
- 31 *Daily Mail* 13 February 1933 (Brisbane).
- 32 *Standard* 12 January 1934. *Courier Mail* 13 January 1934; 15 January 1934: editorial; 20 January 1934; 22 January 1934. *Sunday Mail* 14 January 1934. *Queensland Museum Cutting Book* Vol.3, p.146-S.
- 33 Department of Works records.

3 LOYAL AND ZEALOUS SERVICE

- 1 Marks, E.N., 1960. A history of the Queensland Philosophical Society and the Royal Society from 1859 to 1911. *Proc. R. Soc. Qd* 71(2): 17-42.
- 2 *Government Gazette* 7 October 1871: vol.12(99), p.1455; 6 January 1872: vol.13(1), p.1872; 4 January 1873: vol.14(2), p.47.
- 3 Aplin to Minister for Public Works, 6 September 1871. VP 1872, p.582.
- 4 Staiger to the Hon. W.H. Walsh, 2 June 1873 (QSA).
- 5 Coxen to the Hon. the Secretary for Lands, 18 July 1874 (QSA G149/3).
- 6 *Annual Report Queensland Museum* 1876. VP 1877.
- 7 Bernays to Secretary for Public Works and Mines, 14 October 1873; Coxen to Secretary for Public Works and Mines. VP 1875: pp.1189-93.
- 8 *Queensland Museum Board Minutes* 21 March 1876; 21 July 1876.
- 9 Bailey to the Minister for Lands, Report on the Herbarium, Queensland Museum. VP 1879: vol.2, p.98.
- 10 *Brisbane Courier* 22 November 1879.
- 11 Lukin, Under Secretary for Mines to the Board of Trustees, Queensland Museum 29 December 1879 (QMA correspondence).
- 12 Under Secretary for Mines to Staiger, 30 December 1879; Staiger to Under Secretary for Mines, 21 January 1880; Miskin to the Hon. the Minister for Mines, 7 February 1880 (copies in QMA correspondence inward, before 1880).
- 13 Strahan, R., 1975. *Rare and Curious Specimens. An Illustrated History of the Australian Museum 1827-1979* (Australian Museum, Sydney).
- 14 Anon, 1925. Death of Professor Haswell. *Australian Museum Magazine* 2(6): 194.
- 15 Mack, G., 1956. The Queensland Museum 1855-1955. *Mem. Qd Mus.* 13(2): 106-124.
- 16 Johnston, T.H., 1916. Presidential address. *Proc. R. Soc. Qd* 28: 1-17.
- 17 White, C.T., 1949. F.M. Bailey, his life and work. *Proc. R. Soc. Qd* 61: 105-114.
- 18 Bernays to Perkins, Under Secretary for Public Lands, Memorandum, 19 October 1883 (QSA G149/3).
- 19 *Queensland Museum Board Minutes* 1 June 1880.
- 20 *Queensland Parliamentary Debates* 1880: vol.33, p.961.
- 21 de Vis to the Hon. the Minister for Works, 12 November 1881 (QSA 2209D).
- 22 Tenison-Woods to the Hon. Commissioner for Public Works, 24 November 1881 (QSA).
- 23 White, C.T., 1945. Henry Tryon - First Hon. Secretary, Royal Society of Queensland, and his place in Queensland Science. *Proc. R. Soc. Qd* 56(9): 77-80.
- 24 Broadbent to de Vis, 23 May 1889 (QMA).
- 25 Hurst to de Vis, 26 November 1887 (QMA).
- 26 Hurst to de Vis, 5 November 1887 (QMA).
- 27 Hurst to de Vis, 20 November 1887 (QMA).
- 28 *Queensland Museum Board Minutes* 4 December 1891.
- 29 Stirling, E.C. and Zietz, A.H.C., 1899. Fossil remains of Lake Callabonna. *Mem. R. Soc. S.A.* 1: 40.
- 30 *Queensland Museum Board Minutes* 1 July 1892.
- 31 *Queensland Museum Board Minutes* 24 February 1893.
- 32 *Queensland Museum Board Minutes* 7 July 1893

- 32 *Queensland Museum Board Minutes* 1 September 1893; 2 March 1894.
- 33 J. Jordan to Under Secretary, Dept. Agriculture, 21 July 1900 (QMA correspondence inward 1900).
- 34 *Brisbane Telegraph* 5 October 1929. Veteran Gardener Retirement. *Brisbane Courier* 8 October 1929.
J. Jordan held the position of curator of the museum gardens from 1897 to 1929. From his appointment until the move to South Brisbane in 1986, gardeners were employees of the Department of Agriculture — subsequently the Department of Primary Industries. On 31 March 1934 a trust, consisting of the directors-general of Primary Industries and Education, and the museum's director, was gazetted to administer the museum and art gallery garden as a public reserve.
- 35 Anon. 23 April 1915. A. Alder obituary. *Brisbane Courier*.
- 36 J.V. McCarthy to P.J. MacDermott, Chief Secretary's Office, 21 March 1910 (QSA PRE A337 6144 19.10).
- 37 Etheridge, R. jnr, 1910. Manuscript report to the Premier of Queensland (QSA PRE A337 6144 19.10).
- 38 Hamlyn-Harris to Under Secretary, Chief Secretary's Department, 22 March 1917 (QMA correspondence outward 17/159).
- 39 Under Secretary to Hamlyn-Harris, 30 January 1911 (QMA correspondence inward 11/45).
- 40 Finney Isles and Company to Director, June 1911 (QMA correspondence inward 11/351).
- 41 C.J. Wild, accepting appointment 13 January 1911 (QMA correspondence inward 11/50).
- 42 C.J. Wild to Hamlyn-Harris, 8 June 1911, 12 June 1911 (QMA correspondence inward 11/338, 11/346). Chief Secretary's Office to Director, 26 June 1911 (QMA correspondence inward 11/374).
- 43 Longman, Acting Director to Under Secretary, Chief Secretary's Office, 12 December 1917 (QMA correspondence inward 17/553).
- 44 Marks, E.N. and Dahms, E., 1974. Henry Hacker, obituary. *Mem. Qd Mus.* 17(1): 191-4.
- 45 Longman to Chief Secretary's Office, 23 October 1918 (QMA correspondence inward and outward 18/403).
- 46 Filmer, I., 1944-48. Manuscript diary (QMA).
- 47 Colclough to the Hon. the Premier, 21 September 1931 (QSA).
- 48 Longman to Under Secretary, Chief Secretary's Department, 18 November 1931 (QMA correspondence 1931).
- 49 *Telegraph* 12 March 1932; *Standard* 12 March 1932; 14 March 1932. *Museum Cutting Book* Vol.3, pp.102-3 (QMA).
- 50 *The Sunday Mail* 18 December 1932.
- 51 Under Secretary, Chief Secretary's Department to Longman, 26 April 1929, with enclosed report of Public Service Commissioners on the museum (QMA correspondence inward and outward 1929/217)
- 52 Mack to Director General of Education, 25 May 1956 (QMA G. Mack File).
- 53 Mack to the Chairman, Public Service Board, August 1963 (QMA G. Mack file).

4 SHOW AND TELL

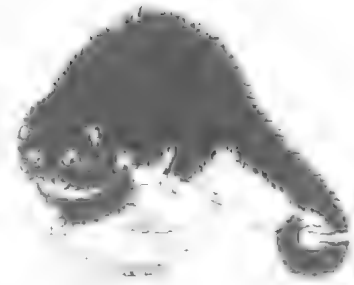
- 1 Marks, E.N., 1960. A History of the Queensland Philosophical Society and the Royal Society of Queensland *Proc. R. Soc. Qd* 71: 23.
- 2 *Annual Report Queensland Museum* 1899. VP 1900: vol.2, p.143.
- 3 Aplin to Minister for Public Works, 1 June 1871; 6 September 1871. VP 1872: p.589.
- 4 Woods, J.T., 1964. C. D'Oyly Aplin, first government geologist for the southern district of Queensland. *Mem. Qd Mus.* 14(4): 112.
- 5 *Queensland Government Gazette* 24 June 1871: vol.12(64), p.928; 7 October 1871: vol.2(99), p.1455; 6 January 1872: vol.13(1); 4 January 1873: vol.14(2), p.47.
- 6 *Queensland Government Gazette* 11 January 1873: vol.14(3), p.66.
- 7 Staiger to the Hon W.H. Walsh, Minister for Works, 2 June 1873 (QSA G149/3).
- 8 Daintree to Staiger, 16 May 1873 (QSA G149/3).
- 9 Staiger to the Hon. J.M. Thompson Minister for Works, 21 July 1873 (QSA G149/3).
- 10 *Queensland Museum Numismatic Register* Accession numbers N165, N166, N190.
- 11 *Queensland Museum Board Minutes* 18 July 1877.
- 12 First Inventory Queensland Museum 1875-6. Signed by A.C. Gregory and W.H. Miskin (QMA).
- 13 Spencer-Browne, 1926. *Queensland Courier* various dates in August. *Queensland Museum Cutting Book* 1.

- The Mr Dignan referred to may have been an employee of the Post Office—
an H.E. Dignan is listed as a telegraph operator in the *Blue Book* of 1878.
- 14 Spalding had previously worked for Ramsay, curator of the Australian Museum, Sydney, who had named a bird after him—the Northern Logrunner, *Orthonyx spaldingi*, formerly known as Spalding's Orthonyx.
 - 15 Palmer, A.H., 1884. Report on the Sufficiency or Otherwise of the Present Building. *Queensland Museum Board Minutes* 16th October 1884.
 - 16 *Queensland Museum Numismatic Register*, N32.
 - 17 Norton, A.H., 1901. *Queensland Museum Board Minutes* 26 January 1901.
 - 18 Etheridge, R. jnr, 1910. Manuscript report to the Premier of Queensland (QSA PRE A337 6144 19.10).
 - 19 Anon, 1915. Obituary A. Alder. *The Brisbane Courier* 23 April 1914.
 - 20 Anon, 1914. At the Brisbane Museum. *The Queenslander* 31 January 1914.
 - 21 Anon, *Aboriginal Exhibit* (undated, 1914 almost certainly as newspaper report associated with 15 above) *Queensland Museum Cutting Book* 1.
 - 22 Vernon, D.P., 1977. Obituary Thomas Claude Marshall. *Mem. Qd Mus.* 18(1): 124–6.
 - 23 Marshall, T.C., 1964. *Fishes of the Great Barrier Reef* (Angus and Robertson, Sydney).
 - 24 Wixted, E.P., 1969. *Mephisto*, the Tale of a Tank. *History and Technology Leaflet* No. 2 (Queensland Museum, Brisbane).
 - 25 Filmer, I., 1944–48. Manuscript diary (QMA).
 - 26 Mack, G., 1953. New Displays in the Queensland Museum, Brisbane. *Museum* 6: 178–183.
 - 27 In the board's annual report for 1899 the Philosophical Society and the museum are said to have been founded in 1855 and Mack accepted this date. Although some of the specimens that later were to be displayed in the Windmill were undoubtedly in private hands by 1855, the Philosophical Society was not formed until 1859 and the museum began three years later, on the 20th January 1862 (See Chapter 1²⁶).
 - 28 Mack, G., 1959. *Centenary of Queensland Historical Exhibition* (S.G. Reid Government Printer, Brisbane).
 - 29 Evans, S., 1982. *Historic Brisbane and its Early Artists* p.68 (Boolarong Publications, Brisbane).
 - 30 Sanker, I., 1977. Queensland in the 1860's. The photography of Richard Daintree. *Queensland Museum Booklet* no.10.
 - 31 Wixted, E.P., 1970. Aviation Activities. *Kalori* 39: 13–14.
 - 32 Covacevich, J., 1977. *Visitors to the Queensland Museum, A Survey of Attitudes to the Museum and its Displays* (M.Sc. dissertation Griffith University, Brisbane).
 - 33 Lack, C., 1939. Diary of Death. *The Sunday Mail* 19 March 1939.
 - 34 Vernon, D.P., 1964. Some aspects of bird and mammal mounting. *Kalori* 31: 69–73.
 - 35 Shapcott, T.W., 1960. Finches. In *Time on Fire* (Jacaranda Press, Brisbane).
 - 36 Cannon, L., 1978. Humour in Museums. *Kalori* 55: 12–13.
 - 37 Mather, P. (ed.), 1975. *The National Estate, Moreton and Wide Bay-Burnett Regions* (Queensland Museum, Brisbane).
 - 38 Wixted, E.P., 1980. Southern Cross Minor. *History and Technology Leaflet* no.8 (Queensland Museum, Brisbane).
 - 39 Welcome Swallows. *Queensland Museum Information Leaflet* 83/15.

5 DIAGOLUE

- 1 Marks, E.N., 1960. A history of the Queensland Philosophical Society and the Royal Society from 1859 to 1911. *Proc. R. Soc. Qd* 71(2) pp.17–42.
- 2 *Government Gazette* 7 October 1871: vol.12(99), p.1455; 6 January 1872: vol.13(1); 4 January 1873: vol.14(2).
- 3 Secretary, Department of Public Health to Under Secretary Chief Secretary's Department, 15 May 1919 (QMA correspondence).
- 4 Queensland Museum Attendance Books.
- 5 *Annual Report Queensland Museum* 1876. VP 1877: vol.3, pp.1167.
- 6 *The Brisbane Courier* 2, 3, 4 and 18 March 1876.
- 7 *Annual Report Queensland Museum* 1886. VP 1887.
- 8 *Queensland Museum Board Minutes* 22 December 1900.
- 9 Longman to Under Secretary, 2 January 1918 (QMA correspondence inward and outward 1918 18/003).
- 10 *The Brisbane Courier* Friday 8 September 1871.
- 11 *The Brisbane Courier* Saturday 9 September 1871.
- 12 K.T. Staiger to Secretary for Public Works, 2 June 1873 (QSA NOR/A66, 68 & 69).
- 13 E.L. Anthony to Hamlyn-Harris, 24 February 1911 (QMA correspondence inward 1911 11/121).
- 14 Manager Prince Alfred Mine Sunnybank to Hamlyn-Harris, 7 June 1912 (QMA 12/1217).

- 15 The Town Clerk, City of Brisbane to Director, Queensland Museum, 16 February 1915 (QMA correspondence inward 00137/15).
- 16 Mack, G., 1950. *Corals and the Great Barrier Reef* (The Queensland Museum, Brisbane) 12pp.
- Mack, G., 1959. *Centenary of Queensland Historical Exhibition* (S.G. Reid Government Printer, Brisbane).
- 17 Pearn, J., 1981. *Animal Toxins and Man* (Division of Health, Education and Information, Brisbane).
- 18 Bevington to H.C. Butler, 23 September 1939 (QMA).
- 19 Longman to E.G. Roper, Deputy Director, Young Australia League, 4 July 1939 (QMA).
- 20 Bevington's Annual Report, 19 December 1939 (QMA).
- 21 Minden School Committee to Bevington, 13 July 1940; Director to R. Wheatley, 18 March 1941; Director to Cameron's Pocket School, 1 April 1941 (QMA correspondence).
- 22 Hodge to S.W. Ryan, 25 September 1970 (QMA Ed24/2644/70).
- 23 Hodge to A.E. Grandson, 5 July 1974 (QMA Ed24/3/34).
- 24 Dale to J. Allen, 20 June 1975 (QMA Ed24/4/6).



6 ALL THAT GLITTERS

- 1 Woods, J.T., 1964. C. D'Oyly H. Aplin, first government geologist for the southern district of Queensland. *Mem. Qd Mus.* 14(4): 107-114.
- 2 *Queensland Parliamentary Debates* 1869: Series 3, p.354-70.
- 3 Sanker, I.S., 1977. Queensland in the 1860's. The photography of Richard Daintree. *Queensland Museum Booklet* No.10.
- 4 VP 1870: Legislative Assembly, p.167.
- 5 VP 1872: Legislative Assembly, p.587-91.
- 6 *Blue Book* 1873. In VP: p.44.
- 7 Staiger to Hon. W.H. Walsh, 2 June 1873 (QSA).
- 8 Daintree to Staiger, 16 May 1873 (QSA).
- 9 Bartley to Colonial Secretary, 21 June 1874 (QSA COL/A191).
- 10 *Queensland Museum Board Minutes* 18 July 1877, 9 August 1877
- 11 *Queensland Museum Board Minutes* 3 December 1872.
- 12 *Queensland Museum Board Minutes* 7 November 1882, 12 November 1883.
- 13 *Queensland Museum Board Minutes* 6 May 1884.
- 14 *Queensland Museum Board Minutes* 22 January 1885.
- 15 *Queensland Museum Board Minutes* 7 April 1885.
- 16 *Queensland Museum Board Minutes* 10 July 1885.
- 17 *Queensland Museum Board Minutes* 4 June 1886.
- 18 *Queensland Museum Board Minutes* 2 September 1887.
- 19 *Queensland Museum Board Minutes* 5 October 1888.
- 20 *Queensland Museum Board Minutes* 3 February 1888.
- 21 *Queensland Museum Board Minutes* 4 January 1889.
- 22 *Queensland Museum Board Minutes* 1 February 1889.
- 23 *Queensland Museum Board Minutes* 4 December 1891.
- 24 *Queensland Museum Board Minutes* 4 March 1892.
- 25 *Queensland Museum Board Minutes* 19 June 1893.
- 26 *Queensland Museum Board Minutes* 6 July 1894.
- 27 *Queensland Museum Board Minutes* 5 April 1897.
- 28 *Queensland Museum Board Minutes* 9 December 1899.
- 29 *Queensland Museum Board Minutes* 26 July 1902.
- 30 Etheridge, R. jnr, 1910. Manuscript report to the Premier of Queensland (QSA PRE A337 6144 19.10).
- 31 *Queensland Museum Board Minutes* 28 February 1903.
- 32 Registrar, University of Queensland to Hamlyn-Harris, 24 April 1911 (QMA correspondence inward 11/242).
- 33 Longman to Dr H.C. Richards, 7 May 1918 (QMA correspondence inward and outward 18/164).

7 THE RECORD IN THE ROCKS

- 1 Moyal, A.M., 1976. *Scientists in nineteenth century Australia; a documentary history* (Cassell Australia Ltd, North Melbourne) 280pp.
- 2 Rich, P.V. et al., 1982. An all too brief and superficial history of Australian vertebrate palaeontology. In P. Rich and E.M. Thompson (eds) *Fossil Vertebrate Record of Australasia*, pp. 2-26. (Monash Offset Printing, Melbourne).
- 3 Bennett, G., 1872. A trip to Queensland in search of fossils. *Ann. Mag. nat. Hist.*(4)9(52): 314.
- 4 *Transactions of the Philosophical Society of Queensland.*
- 5 Anon, 1888. *Public Men and Industries* (Brisbane).

- 6 Chisholm, A., 1944. *The Story of Elizabeth Gould* (The Hawthorne Press, Melbourne) 74pp.
- 7 Ciento, R. and Lack, C., 1959. *Triumph in the Tropics* (Historical Committee Centenary Celebrations Council of Queensland, Smith & Paterson Pty. Ltd., Brisbane).
- 8 Nicholson, C., 1842. On a fossil tree imbedded in the banks of the Brisbane River, NSW. *Proc. geol. Soc.* 4: 23.
- 9 Branagan, D., 1975. Samuel Stutchbury and Reverend W.B. Clarke. Not Quite Equal and Opposite. In P. Stanbury (ed.) *100 Years of Australian Scientific Exploration* pp.89-98 (Holt, Reinhart and Winston, Sydney).
- 10 *Annual Report of the Philosophical Society of Queensland* 1862.
- 11 Wilson, J.S., 1856. *Quart. J. geol. Soc.* 12: 283-288.
- 12 Birman, W., 1979. *Gregory of Rainworth* (University of Western Australia Press, Nedlands).
- 13 Wight, G., 1867. On the appointment of a government geologist for Queensland. *Trans. Phil. Soc. Qd* and *Queensland Daily Guardian*.
- 14 Mozeley, A., 1965. Richard Daintree (1831-1878), first government geologist of Northern Queensland. *Queensland Heritage* 1(2): 11-16.
- 15 Marks, E.N., 1960. Presidential Address. A History of the Queensland Philosophical Society and the Royal Society of Queensland from 1859 to 1911. *Proc. R. Soc. Qd* 71(2): 17-42.
- 16 Palmer, A., 1885. In *Annual Report Queensland Museum* 1884. VP 1885.
- 17 Woods, J.T., 1956. The skull of *Thylacoleo carnifex*. *Mem. Qd Mus.* 13(2): 125-141.
- 18 Woods, J.T., 1960. A million years on the Darling Downs. *Australian Museum Magazine* 13(7): 232-234.
- 19 Woods, J.T., 1964. C. D'Oyly H. Aplin, first government geologist for the southern district of Queensland. *Mem. Qd Mus.* 14(4): 107-114 + pl.xiv.
- 20 Turner, S., 1982a. British fossils at the Queensland Museum. *The Geological Curator* 4(3): 227-231.
- 21 Turner, S., 1985 in prep. Nineteenth century donors to the Queensland Museum. *Geological Curators Group*.
- 22 Rozefelds, A., 1982. *A catalogue of ichthyosaur material in the Queensland Museum* (manuscript, Geology Section, Queensland Museum) 17pp.
- 23 Jack, R.L., 1922. *Northmost Australia* (George Robertson & Co., Melbourne), 2 vols. 768pp.
- 24 Hann, W., 1873. Report from Mr W. Hann, leader of the northern expedition party. VP 1873: 1031-1070.
- 25 Hann, W., 1874. Hann's Expedition in Northern Queensland. *Proc. R. Geogr. Soc. Lond.* 18(1), pt 4: 87-107.
- 26 Gaffney, E.S. and Bartholomai, A., 1979. Fossil trionychids of Australia. *J. Palaeont.* 53: 1354-1360.
- 27 Strahan, R., 1979. *Rare and Curious Specimens. An Illustrated History of the Australian Museum 1827-1979* (Australian Museum, Sydney) 173pp.
- 28 Bennett, G.F., 1876. Notes of rambles in search of fossil remains on the Darling Downs. *Trans Qd Phil. Soc.*: 1-10
- 29 Gregory, A.C., 1875. On the geology of part of the district of Wide Bay and Burnett. *Queensland Parliamentary Papers*, p.8. VP 1875.
- 30 Hill, D., 1947. Robert Logan Jack: a memorial address. *Proc. R. Soc. Qd* 58: 113-124.
- 31 de Vis, C.W., 1885. In *Annual Report Queensland Museum* 1884. VP 1885.
- 32 de Vis, C.W., 1897. The extinct freshwater turtles of Queensland. *Ann. Qd Mus.* 3: 3-7.
- 33 Boyd, A.J., 1889. *The Earth's History for Boys; or, Geology in Verse* (Watson Ferguson Co., Brisbane).
- 34 Corfield, W.H., 1921. *Reminiscences of Queensland 1862-1899* (A.H. Frater, Brisbane).
- 35 Shirley, J., 1898. Additions to the fossil flora of Queensland, mainly from Ipswich Trias-Jura System. *Bull. Geol. Surv. Qd* 7: i-v, 1-25. (Also *Geol. Surv. Qd Pub.* 128).
- 36 McKellar, R.G., 1966. A revision of the blastoids '*Meoblatus ? australis*', '*Granabocrinus ? wachsmuthii*', and '*Tricodocrinus ? carpenteri*', described by Etheridge (1892) from the Carboniferous of Queensland. *Mem. Qd Mus.* 14(5): 191-198.
- 37 Johnston, T.H., 1916. Presidential address. Obituary C.W. De Vis. M.A. *Proc. R. Soc. Qd* 28: 10-17.
- 38 Jack, R.L. and Etheridge, R. jnr, 1892. The geology and palaeontology of Queensland and New Guinea. *Geol. Surv. Qd Pub.* 92: xxxi + 768pp.
- 39 Etheridge, R. jnr, and Woodward, A.S., 1892. On the occurrence of the genus *Belonostomus* in the Rolling Downs Formation of Central Queensland. *Trans. R. Soc. Vict.* 2(2): 1-7.

- 40 de Vis, C.W., 1911. On some Mesozoic fossils. *Ann. Qd Mus.* 10: 1-18.
- 41 de Vis to Bell, J.T., 21 September 1909 (QMA).
- 42 Herbert, D.A., 1954. Memorial Lecture. Heber Albert Longman. *Proc. R. Soc. Qd* 66(7): 83-88.
- 43 Longman, H.A., 1913. Note on *Portheus australis* A.S. Woodward. *Mem. Qd Mus.* 2: 94-95.
- 44 Longman, H.A., 1932. A new Cretaceous fish. *Mem. Qd Mus.* 10(2): 89-97.
- 45 Schevill, W.R. to Longman, H.A., 4 August 1932 (QMA).
- 46 Longman, H.A., 1915. On a giant turtle from the Queensland Lower Cretaceous. *Mem. Qd Mus.* 3: 24-29.
- 47 Longman, H.A., 1924. Some Queensland fossil vertebrates. *Mem. Qd Mus.* 8: 16-28.
- 48 Longman, H.A., 1927. The giant dinosaur: *Rhoetosaurus browni*. *Mem. Qd Mus.* 9(1): 1-18.
- 49 Longman, H.A., 1933. A new dinosaur from the Queensland Cretaceous. *Mem. Qd Mus.* 10(3): 131-144.
- 50 Longman, H.A., 1928. A large jaw of *Pallimnarchus pollens*. *Mem. Qd Mus.* 9(2): 158-159.
- 51 Longman, H.A., 1924. Some Queensland fossil vertebrates. *Mem. Qd Mus.* 7(1): 16-28.
- 52 Longman, H.A., 1921. A new genus of fossil marsupials. *Mem. Qd Mus.* 7(2): 65-80.
- 53 Woodward to Longman, 20 October 1934 (Australian Academy of Sciences Basser Library Archives).
- 54 Longman, H.A., 1929. Palaeontological notes. *Mem. Qd Mus.* 9(3): 247-251.
- 55 Longman, H.A., 1912. The Queensland Museum. An historical sketch. *The Queenslander* 25 May 1912, p.17.
- 56 Lack, C., 1936. Musing Round the Museum — Mr Longman is Proud of the Skeletons in His Cupboard. *Courier Mail* 10 October 1936.
- 57 Hill, D., 1981. The first fifty years of the Department of Geology of the University of Queensland. *Pap. Univ. Qd Geol. Dept* 10(1): 1-68.
- 58 Turner, S., 1985 in press. Vertebrate palaeontology in Queensland. *Earth Sciences History Journal*.
- 59 Hills, E.S., 1934. Tertiary freshwater fishes from Southern Queensland. *Mem. Qd Mus.* 10: 157-174.
- 60 Hills, E.S., 1943. Tertiary freshwater fishes and crocodylian remains from Gladstone and Duinga, Queensland. *Mem. Qd Mus.* 12: 95-100.
- 61 Walkom, A.B., 1916. Note on *Nilssonia mucronatum* (de Vis). *Mem. Qd Mus.* 5: 231-232.
- 62 Walkom, A.B., 1924. On fossil plants from Bellevue, near Esk. *Mem. Qd Mus.* 8(1): 77-92.
- 63 Whitehouse, F.W., 1927. Additions to the Cretaceous ammonite fauna of eastern Australia. Part I. Simbirskitidae, Aconeceratidae, and Parahoplitidae. *Mem. Qd Mus.* 9(1): 109-120.
- 64 Wilkins, G.H., 1926. *Undiscovered Australia, being an account of an expedition to tropical Australia to collect specimens of the rare native fauna for the British Museum, 1923-1925* (Ernest Benn Ltd., London).
- 65 Fletcher, H.O., 1959. A Giant Marine Reptile from the Cretaceous Rocks of Queensland. *Australian Museum Magazine* 12: 47-49.
- 66 Longman, H.A. to W.R. Schevill, 15 March 1940 (QMA).
- 67 Schevill, W.R., 1983. *pers. comm.*
- 68 Romer, A.S. and Lewis, A.D., 1959. A mounted skeleton of the giant plesiosaur *Kronosaurus breviora* 112: 1-14.
- 69 Vernon, D.P., 1977. Obituary — Thomas Claude Marshall. *Mem. Qd Mus.* 18(1): 125-126.
- 70 Schevill, W.R. to Longman, H.A., 1939 various dates (QMA).
- 71 Woods, J.T., 1958. The extinct marsupial genus *Palorchestes* Owen. *Mem. Qd Mus.* 13(4): 177-194.
- 72 Quirk, S. and Archer, M., 1983. *Prehistoric Animals of Australia* (Australian Museum, Sydney).
- 73 Woods, J.T., 1953. Brachyura from the Cretaceous of central Queensland. *Mem. Qd Mus.* 13(1): 50-56.
- 74 Woods, J.T., 1957. Macrurous decapods from the Cretaceous of Queensland. *Mem. Qd Mus.* 13(3): 155-175.
- 75 Evans, J.W., 1961. Some Upper Triassic Hemiptera from Queensland. *Mem. Qd Mus.* 14: 13-23.
- 76 Evans, J.W., 1971. Some Upper Triassic Hemiptera from Mount Crosby, Queensland. *Mem. Qd Mus.* 16(1): 145-151.
- 77 Woods, J.T., undated. manuscript location of types (QMA).
- 78 Turner, S., 1982. A catalogue of fossil fish in Queensland. *Mem. Qd Mus.* 20: 599-611.

- 78 Molnar, R., 1982. A catalogue of fossil amphibians and reptiles in Queensland. *Mem. Qd Mus.* 20: 613-633.
- 79 Bartholomai, A., 1969. The Lower Cretaceous elopoid Fish *Pachyrhizodus marathonsensis* (Etheridge Jnr). In K.S.W. Campbell (ed.) *Stratigraphy and Palaeontology*, pp.249-263. *Essays in honour of Dorothy Hill* (Australian National University Press, Canberra).
- 80 Wade, M., 1984. *Platypterygius australis*, an Australian Cretaceous ichthyosaur. *Lethaia* 17: 99-113.
- 81 Thulborn, R.A. and Wade, M., 1984. Dinosaur trackways in the Winton Formation (mid-Cretaceous) of Queensland. *Mem. Qd Mus.* 21: 413-517.
- 82 Daintree, R., 1872. Notes on the geology of the colony of Queensland with an appendix, containing descriptions of fossils by R. Etheridge Esq. and W. Carruthers. *Quart. J. geol. Soc. Lond.* 28: 271-360.
- 83 Warren, A.A., and Hutchinson, M.N., 1983. The last labyrinthodont? A new brachyopoid (Amphibia, Temnospondyli) from the early Jurassic Evergreen formation of Queensland, Australia. *Phil. Trans R. Soc. Lond.* FT02 B303 (1113): 1-62.
- 84 Australia's fantastic time tunnel where the great mammals graze. *The Bulletin* (Australia) 28 May 1985, pp.70-9.

8 SCALES, FEATHERS AND FUR

- 1 Barber, L., 1980. *The Heyday of Natural History 1820-1870* (Jonathon Cape, London).
- 2 Sparks, J., 1982. *The Discovery of Animal Behaviour* (Collins, London).
- 3 Sharpe, R.B., 1906. Birds. In *The History of the Collections contained in the Natural History Departments of the British Museum*. II (British Museum of Natural History, London).
- 4 'Queensland Philosophical Society. The following paper was read by Mr Diggles.....' *Brisbane Courier* 2 December 1873, p.3. Later reprinted in Volume 2 of the *Trans Qd Phil. Soc.* 1877.
- 5 Anon, 1875. Birds and other Reptiles. *Brisbane Courier* 3 April 1875, p.3.
- 6 Rothschild, M., 1983. *Dear Lord Rothschild: Birds, Butterflies and History* (Balaban, Philadelphia).
- 7 Whittell, H.M., 1954. *The Literature of Australian Birds: a History and a Bibliography of Australian Ornithology* (Paterson Brokensha, Perth).
- 8 Chisholm, A.H., 1922. Bird seeking in Queensland. *Qd Nat.* 3: 66-79, 115-124.
- 9 Marks, E.N., 1960. A history of the Queensland Philosophical Society and the Royal Society of Queensland from 1859-1911. *Proc. R. Soc. Qd* 71: 17-41, pls 1-2.
- 10 Mack, G., 1956. The Queensland Museum, 1855-1955. *Mem. Qd Mus.* 13: 107-124, pl.3.
- 11 Marks, E.N., 1963. Silvester Diggles—a Queensland naturalist one hundred years ago. *Qd Nat.* 17: 15-25.
- 12 Diggles, S., 1866-1870. *Ornithology of Australia* (The Author, Brisbane).
- 13 *Annual Report Queensland Museum 1877-8*. VP 1878.
- 14 Gould, J., 1875. *The Birds of New Guinea and adjacent Papuan Islands, including any new species that may be discovered in Australia*. Part 1 (The Author, London).
- 15 Gould, J., 1875. Letter concerning the existence of a new parrot in Queensland. *Proc. Zool. Soc. Lond.* 1874: 499-500.
- 16 Gould, J., 1875. Descriptions of three new species of birds. *Proc. Zool. Soc. Lond.* 1875: 314-315.
- 17 'Queensland Philosophical Society.....Mr S. Diggles read the following notes on some new and rare specimens of Australian birds.....' *Brisbane Courier* 5 August 1876, p.3. Later reprinted in Volume 2 of the *Trans Qd Phil. Soc.*, 1877.
- 18 Diggles, S., 1874. Habits of *Menura Alberti* and a description of four new Australian birds. *Telegraph* 2 February 1874, p.3. Later reprinted in volume 2 of the *Trans Qd Phil. Soc.* 1877.
- 19 Gregory, A.C., 1877. In *Annual Report Queensland Museum 1876*.
- 20 Anon, 1880. The Queensland Museum. *The Telegraph* May 29 1880.
- 21 *Queensland Museum Board Minutes* 1 June 1880.
- 22 Forshaw, J.M., Fullagar, P.J., and Harris, J.I., 1976. Specimens of the Night Parrot in museums throughout the world. *Emu* 76: 120-126.
- 23 Thickthorn, 1880. The Wonga Wonga. *Queenslander* 7 August 1880, p.172.
- 24 de Vis, C.W., 1894. *Life. Rep. Aust. Assoc. Adv. Sci.* 5: 104-118.
- 25 de Vis, C.W., 1883. Description of two new birds of Queensland. *Proc. Linn. Soc. NSW.* (1)7: 561-563.
- 26 de Vis, C.W., 1889. Annual report of the Curator to the Trustees of the Queensland Museum. *Queensland Parliamentary Papers* C.A. 17-1889: pp.1-2.
- 27 *The Naturalist*, 1889. A new bird. *Queenslander* 30 March 1889, p.600.

- 28 Strahan, R., 1979. *Rare and Curious Specimens. An Illustrated History of the Australian Museum 1827-1979* (Australian Museum, Sydney).
- 29 Anon, Ogilby, J.D. obituaries. *Brisbane Courier* 14 August 1925; *Daily Mail* 14 August 1925.
- 30 Ogilby, J.D., 1907. Catalogue of the emydosaurian and testudinian reptiles of New Guinea. *Proc. R. Soc. Qd* 19: 1-31.
- 31 Loveridge, A., and Shreve, B., 1947. The 'New Guinea' Snapping Turtle (*Chelydra serpentina*). *Copeia* 1947: 120-3.
- 32 Troughton to Longman, 21 March 1937 (QMA extract of letter in Neuhäuser-Scott file).
- 33 Brass, L.J., 1953. Results of the Archbold Expeditions. No.68. Summary of the 1948 Cape York (Australia) Expedition. *Bull. Amer. Mus. Nat. Hist.* 102: 135-206.
- 34 Troughton to Longman, 13 August 1937 (QMA extract of letter in Neuhäuser-Scott file).
Eventually, in 1973, as Regulations 13A under the *Australian Customs Act 1901-1971*, the provisions that the Australian Museum and Longman had sought to ensure the return of type specimens of the Australian fauna to Australia were introduced in respect of insects, spiders and ticks. In 1982 the regulation was repealed and its powers were extended to all groups of the Australian biota under the *Wildlife Protection (Regulation of Exports and Imports) Act 1982*.
- 35 Mathews to Longman, 19 March 1937 (QMA Neuhäuser-Scott file).
- 36 Under Secretary, Department of Agriculture and Stock to Neuhäuser, 30 August 1937 (QMA copy of letter in Neuhäuser-Scott file).
- 37 Neuhäuser to Longman, 4 December 1937 (QMA Neuhäuser-Scott file).
- 38 Longman to Under Secretary, Department of Agriculture on Stock, 23 August 1937 (QMA copy of letter in Neuhäuser-Scott file).
- 39 Longman to Tate, 14 September 1937 (QMA copy of letter in Neuhäuser-Scott file).
- 40 Tate to Longman, 11 October 1937 (QMA extract in Neuhäuser-Scott file).
- 41 Longman to Troughton, 14 September 1937 (QMA copy of letter in Neuhäuser-Scott file).
- 42 Neuhäuser to Longman, 23 February 1938 (QMA Neuhäuser-Scott file).
- 43 Under Secretary, Department of Agriculture and Stock to Neuhäuser, 29 April 1938 (QMA copy of letter in Neuhäuser-Scott file).
- 44 Longman to Neuhäuser, 10 June 1938 (QMA copy of letter in Neuhäuser-Scott file).
- 45 Neuhäuser to Longman, 18 June 1938 (QMA Neuhäuser-Scott file).
The specimen—QM J6357—that Neuhäuser sent to Longman from Mt. Spurgeon, believing it to be *Pseudocheirus peregrinus*, was, indeed, a different species. It is a specimen of *P. herbertensis cinereus* Tate, 1952—a new subspecies that Tate described from specimens that he collected in 1948. *Pseudocheirus laniginosus* is now known to be a synonym of *P. peregrinus*. Perhaps they did fly—Tree Kangaroos never have been recorded from Cape York north of the Laura Basin.
- 46 Longman to Neuhäuser, 16 July 1938 (QMA copy of letter in Neuhäuser-Scott file).
- 47 Neuhäuser to Longman, 22 July 1938 (QMA Neuhäuser-Scott file).
The Cuscus that puzzled Neuhäuser was *Phalanger orientalis*, previously collected from Cape York by Darlington.
- 48 Mathews, G.M. and Neumann, O., 1939. Six new races of Australian birds from north Queensland. *Bull. Brit. Orn. Cl.* 59: 153-155.
- 49 Mathews, G.M., 1941. Two new subspecies of birds collected by Dr. Scott at Cape York. *Emu* 40(4): 384.
- 50 Mack, G., 1953. Birds from Cape York Peninsula, Queensland. *Mem. Qd Mus.* 131: 1-39.
- 51 Filmer, I., 1944-8. Manuscript diary (QMA).
- 52 Covacevich, J., 1971. Amphibian and reptile type specimens in the Queensland Museum. *Mem. Qd Mus.* 16: 49-67.
- 53 Ingram, G.J. and Covacevich, J., 1981. Frog and reptile type specimens in the Queensland Museum, with a checklist of frogs and reptiles in Queensland. *Mem. Qd Mus.* 20: 291-306.
- 54 *Annual Reports Queensland Museum 1974-86.*



9 SINGLE CELLS TO SPINY SHELLS

- 1 Staiger to Minister for Public Works, 2 June 1873 (QSA Department of Public Works inward correspondence 2168, 2169).
- 2 Marks, E.N., 1963. Silvester Diggles—a Queensland naturalist one hundred years ago. *Qd Nat.* 17: 15-25.
- 3 Marks, E.N., 1960. A history of the Queensland Philosophical Society and the Royal Society of Queensland from 1859 to 1911. *Proc. R. Soc. Qd* 71: 17-42.

- 4 *Queensland Museum Board Minutes* 16 April 1877.
- 5 *Queensland Museum Board Minutes* 20 August 1880.
- 6 Musgrave, A., 1932. *Bibliography of Australian Entomology 1775-1930* (Royal Zool. Soc., NSW) 380pp.
- 7 Miskin, W.H., 1876. On a new and remarkable species of *Attacus*. *Trans. ent. Soc. Lond.* 1876(1): 7-9.
- 8 Miskin, W.H., 1891. Synonymical catalogue of the Lepidoptera Rhopalocera (Butterflies) of Australia with full bibliographic reference; including descriptions of some new species. *Ann. Qd Mus.* 1: 1-93.
- 9 *Queensland Museum Board Minutes* 7 December 1888.
- 10 *Queensland Museum Board Minutes* 2 August 1889.
- 11 *Queensland Museum Board Minutes* 11 April 1890.
- 12 *Queensland Museum Board Minutes* 2 May 1890.
- 13 *Queensland Museum Board Minutes* 8 March 1892.
- 14 *Queensland Museum Board Minutes* 1 May 1883.
- 15 *Queensland Museum Board Minutes* 7 November 1882.
- 16 *Queensland Museum Board Minutes* 1 July 1884.
- 17 Meston, A., 1889. Report on the government scientific expedition to the Bellenden Ker Range (Wooroomoran), North Queensland. *Queensland Parliamentary Papers* CA 95.
- 18 Mackerras, I.M. and Marks, E.N., 1974. In retrospect: the insects and the entomologists. In *Changing Patterns in Entomology* pp.3-10 (Jubilee Publication of the Entomological Society of Queensland, Brisbane).
- 19 White, C.T., 1945. Henry Tryon - First Honorary Secretary, Royal Society of Queensland, and his place in Queensland Science. *Proc. R. Soc. Qd* 56: 77-80.
- 20 *Queensland Museum Board Minutes* 5 September 1882.
- 21 Tryon to de Vis, 21 November 1882 (QMA correspondence inward 1882).
- 22 *Queensland Museum Board Minutes* 1 May 1883.
- 23 Tryon, H., 1889. *Report on insect and fungus pests* No.1, pp.1-238 (Department of Agriculture, Brisbane).
- 24 Tryon to de Vis, 16 November 1888 (QMA correspondence 1888).
- 25 *Queensland Museum Board Minutes* 29 July 1899.
- 26 *Queensland Museum Board Minutes* 4 January 1889.
- 27 *Queensland Museum Board Minutes* 3 March 1888.
- 28 *Queensland Museum Board Minutes* 1 February 1889.
- 29 *Queensland Museum Board Minutes* 6 March 1889.
- 30 *Queensland Museum Board Minutes* 5 April 1889.
- 31 *Queensland Museum Board Minutes* 2 August 1889.
- 32 Natural History Society of Queensland, Report of Council and President's Address for the year 1892 (issued 19 January 1893).
- 33 *Queensland Museum Board Minutes* 3 July 1891.
- 34 *Queensland Museum Board Minutes* 1 October 1891.
- 35 *Queensland Museum Board Minutes* 5 October 1899.
- 36 *Queensland Museum Board Minutes* 6 May 1899.
- 37 *Queensland Museum Board Minutes* 28 March 1903.
- 38 Etheridge, R. jnr, 1910. Manuscript report to the Premier of Queensland (QSA PRE A337 6144 19.10).
- 39 Hamlyn-Harris to Wild, 30 March 1911 (QMA correspondence inward 1911 11/192).
- 40 Wild to Hamlyn-Harris, letters dated 1 April, 10 April, 15 May, 26 May, 30 May of 1911 (QMA correspondence inward 1911 11/184, 11/207, 11/291, 11/308, 11/313).
- 41 Woodford Police to Hamlyn-Harris, 14 June 1911 (QMA correspondence inward 1911).
- 42 Hamlyn-Harris to Under Secretary, 14 June 1911 (QMA correspondence outward 1911 11/345).
- 43 Hamlyn-Harris to T.L. Bancroft (QMA correspondence outward 1911).
- 44 Bancroft, T.L., 1908. List of the mosquitoes of Queensland, with the original descriptions and notes on the life history of a number. *Ann. Qd Mus.* 8: 1-64.
- 45 Carter to Hamlyn-Harris, 16 May 1911 (QMA correspondence inward, 1911 11/295).
- 46 Hamlyn-Harris to Carter (QMA correspondence outward 1911 11/298).
- 47 Carter to Hamlyn-Harris, 17 October 1911 (QMA correspondence inward 1911 11/629).
- 48 Tillyard to Hamlyn-Harris, 14 November 1911 (QMA correspondence inward 1911 11/695).
- 49 Girault to Hamlyn-Harris (QMA correspondence inward 1911, various letters).
- 50 Girault, A.A., 1912. Australian Hymenoptera Chalcidoidea, Parts I-III. *Mem. Qd Mus.* 1: 66-189.

- 51 Turner to Hamlyn-Harris, 2 December 1912 (QMA correspondence inward).
- 52 Froggatt to Hamlyn-Harris, 8 March 1915 (QMA correspondence inward).
- 53 Dahms, E.C., 1978. A checklist of the types of Australian Hymenoptera described by Alexandre Arsene Girault: I. Introduction, acknowledgements, biography, bibliography and localities. *Mem. Qd Mus.* 19: 127-190.
- 54 Marks, E.N., 1973. Henry Hacker (1876-1973). *Ent. Soc. Qd News Bull.* 100: 13-16.
- 55 Hacker, H., 1907. An entomologist's cycling trip to Cloncurry (Queensland). *Tasmanian Nat.* 1: 12-13.
- 56 Marks, E.N., 1974. Obituary—Henry Hacker 1876-1973. *Mem. Qd Mus.* 17: 191-194.
- 57 Hamlyn-Harris to Under Secretary, 13 February 1911 (QMA correspondence outwards 1911).
- 58 Hacker, H., 1932. A new species of Feloriidiidae from Queensland. *Qd agric. J.* 37: 262-263.
- 59 Hacker, H., 1921. Catalogue of Australian bees. *Mem. Qd Mus.* 7: 99-163.
- 60 Mackerras, I.M., 1949. Alfred Jefferies Turner and amateur entomology in Australia. *Proc. R. Soc. Qd* 60: 69-87.
- 61 Dahms, E.C., 1983, 1984, 1986. A checklist of the types of Australian Hymenoptera described by Alexandre Arsene Girault: II-IV. *Mem. Qd Mus.* 21: 1-255, 579-842, 22(3):
- 62 Osborn, F.G.B., 1931. Obituary—Alfred Eland Shaw. *Proc. Linn. Soc. NSW.* 57: 4.
- 63 Dahms, E.C., 1972. Type-specimens of cockroaches (Blattodea) in the Queensland Museum. *Mem. Qd Mus.* 16: 273-289.
- 64 Tryon, H., 1929. Rowland Illidge. *Qd Nat.* 7: 13-19.
- 65 Queensland Museum Board Minutes 19 January 1877.
- 66 Anon, 1936. Obituary—Charles Hedley. *Proc. Linn. Soc. NSW* 61: 209-220.
- 67 Queensland Museum Board Minutes 2 August 1889; 6 December 1889.
- 68 Queensland Museum Board Minutes 7 February 1890.
- 69 Queensland Museum Board Minutes 11 April 1890.
- 70 Queensland Museum Board Minutes 4 July 1890.
- 71 Banfield to Hamlyn-Harris, 25 September 1911 (QMA correspondence inward 1911 11/590).
- 72 Bertha Banfield to Charles Hedley, 17 September 1923 (copy in QMA).
- 73 Hedley to Longman, 7 October 1923 (QMA correspondence inward 1923).
- 74 Shirley to Hamlyn-Harris, 20 August 1915 (QMA correspondence inward 1915).
- 75 Brisbane Telegraph 5 April 1922. Obituary of John Shirley.
- 76 Filmer, L., 1944-47. Manuscript diary (QMA).
- 77 Sprent, J., 1972. Josephine Mackerras obituary. *International Journal of Parasitology* 2: 181-185.
- 78 Townsville Daily Bulletin: Beachcomber, 30 May 1914; editorial, 9 June 1914; Brisbane Daily Standard 29 June 1914.
- 79 Great Barrier Reef Committee Minutes of first meeting, 15 September 1922 (UQA S/226).
- 80 Hill, D., 1985. The Great Barrier Reef Committee: the first thirty years. *Hist. Rec. Aust. Sci.* 6(1): 18pp.
- 81 Stephenson, W. and Wells, J.W., 1955. The corals of Low Isles, Queensland. *Pap. Dep. Zool. Univ. Qd* 1(4): 1-59.
- 82 Wallace, C., 1978. The coral genus *Acropora* (Scleractinia : Astrocoeniina : Acroporidae) in the central and southern Great Barrier Reef Province. *Mem. Qd Mus.* 8(2): 273-319.
- 83 Vernon, J.E.N. and Wallace, C., 1984. Scleractinia of eastern Australia Part V, Family Acroporidae. *Australian Institute of Marine Science Monograph Series G:* 1-446 + 24 pls.
- 84 Edean, R., Stephenson, W. and Kenny, R., 1956. The ecology and distribution of intertidal organisms on certain islands off the Queensland coast. *Aust. J. mar. Freshw. Res.* 7(3): 317-342.
- 85 Annual Reports of the Queensland Museum 1974-86.
- 86 Kott, P., 1985. The Australian Ascidiacea part 1, Phlebobranchia and Stolidobranchia. *Mem. Qd Mus.* 23: 1-440.
- 87 Edean, R., 1953-65. Queensland faunistic records III, IV, VII, VIII. *Pap. Dep. Zool. Univ. Qd* 1: 53-60, 121-40, 289-98; 2: 224-38.
- 88 Rentz, D.L.F., 1980. A new family of ersitiferous Orthoptera from the coastal sands of south east Queensland. *Mem. Qd Mus.* 20: 49-63.

10 PEOPLES AND LIFESTYLES

- 1 Piggot, P.H., Blainey, G.N., Boswell, R.W., Clayton, A., Mulvaney, D.J., Talbot, F.H., Waterhouse, D.F., Waters, F.J., Payne, E.E., 1975. *Museums in Australia, Report of the Committee of Inquiry on museums and national collections including the Report of the Planning Committee on the Gallery of Aboriginal Australia* p.16 (Australian Government Publishing Service, Canberra).

- 2 Rannie, D., undated. Ethnological appendix. In *By Surf-Beat Rocks and Coral Strands* p.1. (manuscript, Anthropology Museum, University of Queensland).
- 3 Douglas to de Vis, 29 May 1887 (QMA).
- 4 Musgrave to de Vis, 28 May 1888 (QMA).
- 5 Douglas to de Vis, 29 May 1888 (QMA).
- 6 Joyce, R.B., 1971. *Sir William MacGregor* (Oxford University Press, Melbourne). William MacGregor was a crofter's son born in 1846 in Aberdeenshire, Scotland. MacGregor studied medicine at Aberdeen, Glasgow and Edinburgh Universities graduating in 1872. He joined the colonial service and was posted to the Seychelles and Mauritius where he undertook administrative as well as medical duties. Transferred to Fiji in 1875 he became increasingly a colonial administrator rather than a doctor during the next 13 years. He became administrator of British New Guinea in September 1888, an appointment in part due to the support of Sir Samuel Griffith, premier of Queensland. He was knighted in 1889 and he served in New Guinea until 1898. He was governor of Queensland (1909-1914), an appointment he took up after being successively governor of Lagos, and Newfoundland. He had presented his private anthropological collection (including 2065 items from Papua) to the Anthropological Museum at Marischal College, University of Aberdeen. A printed catalogue of this collection was published in 1912. He died in 1919.
- 7 MacGregor to the Governor, Sir Henry Norman, 14 August 1889. Despatch No.53 (QSA).
- 8 MacGregor to the Governor, Sir Henry Norman, 28 October 1895. Despatch No.55 (QSA).
- 9 MacGregor, W., 1897. *British New Guinea* p.88 (John Murray, London).
- 10 Franks to Ripon, 15 June 1893. Letter enclosed in Despatch No.13, 23 June 1893 (QSA).
- 11 de Vis to Colonial Secretary, 28 August 1893 (QMA).
- 12 MacGregor to the Governor, Sir Henry Norman, 12 October 1895. Despatch No.55 (QSA).
- 13 Chief Secretary to the Governor, Lord Lamington, 5 November 1896 (QSA).
- 14 Chief Secretary to Governor, Lord Lamington, 24 November 1895: pp.443-9 (QSA Gov/A31).
- 15 MacGregor to the Governor, Lord Lamington, 4 January 1897. Despatch No.2 (QSA).
- 16 Meston, A., 12 July 1919 *Brisbane Mail*.
- 17 Roth to de Vis, 15 April 1900 (QMA).
- 18 *Hansard* 16 October 1903: p.777; 10 October 1905: pp.1070, 1188; 17 November 1905: p.1671; 13 December 1905: p.2116; 14 December 1905: p.2154; 28 August 1906: pp.432-4; 13 November 1906: pp.1653-72.
- 19 Specht, R., 1975. In Strahan, R. (ed.) *Rare and Curious Specimens. An Illustrated History of the Australian Museum 1827-1979* p.144 (The Australian Museum, Sydney).
- 20 H. Malone, Townsville to Hamlyn-Harris, 17 February 1911 (QMA 11/84).
- 21 G. McGrath, Longreach to Hamlyn-Harris, 21 February 1911 (QMA 11/93).
- 22 Hamlyn-Harris to J.H.P. Murray, 18 September 1913 (QMA 13/727).
- 23 Etheridge, R. jnr, 1910. Manuscript report to the Chief Secretary on the state of the Queensland Museum, p.6 (QSA PRE A337 6144 19.10).
- 24 Hamlyn-Harris, R. and Smith, F., 1916. On the fish poisoning and poisons employed among the Aborigines of Queensland. *Mem. Qd Mus.* 5: 1-22.
- 25 Longman to A.C. Haddon, 3 December 1919 (QMA 19/00351).
- 26 Longman to Secretary, Home and Territories Department, 9 July 1918 (QMA 18/00272).
- 27 Illidge to Longman, 9 July 1918 (QMA 00325).
- 28 Longman to Secretary, Home and Territories Department, 3 December 1918 (QMA 18/00441).
- 29 Longman to Secretary, Home and Territories Department, 26 July 1919 (QMA 19/00227).
- 30 Acting Secretary, Home and Territories Department to Longman, 1 August 1919 (QMA 00273).
- 31 The British structural functional school, which emphasized the study of the structure and function of the social organisation of any particular group rather than the material evidence of its lifestyle, dominated Australian anthropology. Museum anthropology was left stranded, isolated from the mainstream of anthropological thought for the next fifty years.
- 32 Malinowski, B., 1935. *Coral Gardens and their Magic* p.460 (American Book Company, New York).
- 33 Longman to Chaseling, 2 September 1940 (QMA outward correspondence).
- 34 Longman to J.K. Murray, 20 March 1945 (QMA outward correspondence).
- 35 Hale to Longman, 19 May 1944 (QMA inward correspondence 204).

- 36 Mack to Reynolds, 6 December 1956 (QMA inward correspondence 883).
- 37 Woods to Wright, 11 December 1965 (QMA).
- 38 *Queensland Museum Annual Report 1972*: p.10.
- 39 Morwood, M.J., 1984. The Prehistory of the Central Queensland Highlands. *Advances in World Archaeology* 3: 338.
- 40 Robins, R.P., 1980. Wood Identification of Spearthrowers in the Queensland Museum Ethnographic Collection: An Evaluation. *University of Queensland Occasional Papers in Anthropology* 10: 61.

11 MAN AND MACHINES

- 1 *Transactions Philosophical Society of Queensland*, 1, 1859-1872.
- 2 Etheridge, R. jnr, 1910. Manuscript report to Premier of Queensland (QSA PRE A 337 6144 19.10).
- 3 *Queensland Museum Board Minutes* 17 October 1884, Special Meeting.
- 4 Daintree to Staiger, June 1873 (QSA WOR Δ66 68 and 69).
- 5 First Inventory, Queensland Museum 1875-6. Signed by A.C. Gregory and W.H. Mislin (QMA).
- 6 *Queensland Museum Board Minutes* 4 September 1883.
- 7 *Queensland Museum Board Minutes* 30 April 1904.
- 8 *Queensland Museum Board Minutes* 18 November 1880.
- 9 de Vis to the Hon. the Minister for Works, 3 November 1881 (QMA).
- 10 *Queensland Museum Board Minutes* 10 July 1885.
- 11 *Queensland Museum Board Minutes* 3 June 1887.
- 12 *Queensland Museum Board Minutes* 4 June 1886.
- 13 *Queensland Museum Board Minutes* 5 May 1888.
- 14 *Queensland Museum Board Minutes* 7 December 1888.
- 15 *Queensland Museum Board Minutes* 7 December 1894.
- 16 *Queensland Museum Board Minutes* 9 April 1895.
- 17 Thomas, L., 1966. Bought Jones, \$4.15s. *The Bulletin* 9 April 1966.
- 18 *Queensland Museum Board Minutes* 29 August 1903.
- 19 *Queensland Museum Board Minutes* 26 September 1903.
- 20 *Queensland Museum Board Minutes* 7 August 1885.
- 21 *Australian Museums Directory* 1972, pp.49, 104 (Australian National Committee for the International Council of Museums, Canberra).
- 22 Lloyd C.J. and Sekules P., 1980. *Australia's National Collections* pp.141-2 (Cassell Australia, N.S.W).
- 23 Allwood, J., 1977. *The Great Exhibitions* p.71 (Studio Vista, London).
- 24 Longman to Cumbræ Stewart, 3 June 1918 (QMA correspondence outward 18/00237).
- 25 Longman to Registrar, 3 June 1918 (QMA correspondence outward 18/00239).
- 26 Jack, R.L., 1922. *Northmost Australia* Vol.1. Chapter 30 (George Robertson and Co., Melbourne).
- 27 Meldrum to the Secretary, National Museum Brisbane, 5 May 1937 (QMA 199A).
- 28 Longman to Meldrum, 13 May 1937 (QMA).
- 29 Longman to Meldrum, 24 June 1937 (QMA).
- 30 Roberts to Richards, 4 September 1937 (QMA 457).
- 31 Longman to D. O'Shea, 7 September 1937 (QMA).
- 32 Organisations supporting the development of a technological museum included: The Chamber of Commerce, Chamber of Manufacturers, Australasian Institute of Mining and Metallurgy (Inc.), Institution of Engineers Australia, Master Builders' Association, Illuminating Engineering Society, Royal Australian Chemical Institute, Electrical and Radio Federation (Queensland), Queensland Electrical Institute, Institute of Optometrists, Electrical Contractors' Association, Royal Australian Institute of Architects, Motor Mechanics' Institute of Queensland, Institute of Radio Engineers, Australian Welding Institute, Refrigeration Engineering Society, and Model Engineers' Society.
- 33 *Handbook* 1967-8 (Queensland Hall of Science Industry and Health Development Committee, Brisbane).
- 34 *Annual Reports Queensland Museum* 1972-85.

12 PANDORA'S BOX

- 1 McIntyre, K.G., 1977. *The Secret Discovery of Australia* (Souvenir Press, Australia).
- 2 Beaglehole, J.C., 1934. *The Exploration of the Pacific* (A. and C. Black, London).
- 3 Marden, L., 1985. Wreck of HMS Pandora. *National Geographic* 168(4): 425-451.
- 4 Self Contained Underwater Diving Apparatus (SCUBA)
- 5 List of donors for maritime archaeology projects. *Annual Report of the Queensland Museum* 1984, p.29.



- 6 Costin, Office of the Chief Protector of Aboriginals, Thursday Island to Director, Queensland Museum, 1 May 1906 and 28 June 1906 (QMA inward correspondence 1906).

13 THE NECESSARY SCIENTIFIC WORKS

- 1 Staiger to Hon. W.H. Walsh, 2 June 1873 (QSA, copy QM).
- 2 Staiger to Hon. W.H. Walsh, 2 August 1873 (QSA, copy QM).
- 3 Bailey, F.M., 1 September 1879. *Annual Report Queensland Museum*. VP 1880.
- 4 *Annual Report Queensland Museum* 1876. VP 1877.
- 5 *Queensland Museum Board Minutes* 20 September 1877.
- 6 *Queensland Museum Board Minutes* 19 February 1877.
- 7 *Queensland Museum Board Minutes* 19 February 1878.
- 8 Colonial Secretary to Director, Queensland Museum, 7 August 1879 (QMA).
- 9 Letter, 9 March 1878. In *Annual Report Queensland Museum 1877-8*. VP 1878.
- 10 *Annual Report Queensland Museum 1878-1879*. VP 1879.
- 11 *Annual Report Queensland Museum 1877-1878*, Appendix 5. VP 1878.
- 12 Published references, as for instance *Brisbane Courier* 10 January 1884, p 5.
- 13 Williams and Norgate to Queensland Museum, 28 May 1880 (QMA correspondence inward 1880).
- 14 *Annual Report Queensland Museum 1879-80*. VP 1880.
- 15 *Queensland Museum Board Minutes* 20 January 1879.
- 16 D, O'Donovan to the Curator, 7 September 1880 (QMA correspondence inward 1880).
- 17 *Queensland Museum Board Minutes* 19 October 1881.
- 18 *Queensland Museum Board Minutes* 28 October 1881.
- 19 *Annual Report Queensland Museum 1881-1882*. VP 1882.
- 20 *Queensland Museum Board Minutes* 7 November 1882.
- 21 *Queensland Museum Board Minutes* 23 May 1882.
- 22 *Queensland Museum Board Minutes* 5 November 1882.
- 23 *Annual Report Queensland Museum 1882*. VP 1883.
- 24 *Annual Report Queensland Museum 1883*. VP 1884.
- 25 *Queensland Museum Board Minutes* 4 December 1883.
- 26 Marks, E.N., 1960. A history of the Queensland Philosophical Society and the Royal Society of Queensland from 1859 to 1911. *Proc. R. Soc. Qd* 71(2): 17-42, 2pls.
- 27 *Queensland Museum Board Minutes* 7 March 1884, 5 September 1884.
- 28 *Queensland Museum Board Minutes* 16 October 1884.
- 29 *Queensland Museum Board Minutes* 5 December 1884.
- 30 *Annual Report Queensland Museum 1886*. VP 1887.
- 31 *Annual Report Queensland Museum 1884*. VP 1885.
- 32 *Annual Report Queensland Museum 1887*. VP 1888. *Queensland Museum Board Minutes* 3 March 1887.
- 33 *Queensland Museum Board Minutes* April 1886: Wm Dymock of Sydney; 1 July 1887: Angus & Robertson; 3 February 1888: J.H. Thompson.
- 34 *Annual Report Queensland Museum 1889*. VP 1890.
- 35 *Queensland Museum Board Minutes* 4 January 1889.
- 36 *Pugh's Almanac* (John Oxley Library).
- 37 *Queensland Museum Board Minutes* 5 December 1890.
- 38 *Queensland Museum Board Minutes* 4 September 1883.
- 39 *Brisbane Courier* 8 January 1884.
- 40 *Queensland Museum Board Minutes* 2 September 1887.
- 41 *Queensland Museum Board Minutes* 4 November 1892.
- 42 *Annual Report Queensland Museum 1891*. VP 1892.
- 43 *Queensland Museum Board Minutes* 6 September 1889.
- 44 Exercise book containing notations, not otherwise described. In Queensland Museum history box (QMA).
- 45 *Queensland Museum Board Minutes* 2 September 1895.
- 46 *Queensland Museum Board Minutes* 2 December 1895.
- 47 *Queensland Museum Board Minutes* 19 June 1893.
- 48 *Queensland Museum Board Minutes* 4 August 1883.
- 49 *Queensland Museum Board Minutes* 3 November 1893, 13 April 1896.
- 50 *Queensland Museum Board Minutes* 9 June 1893.
- 51 *Queensland Museum Board Minutes* 7 April 1893.
- 52 *Queensland Museum Board Minutes* 9 April 1895, 5 July 1897.
- 53 *Queensland Museum Board Minutes* 6 January 1896, 4 November 1895.
- 54 *Queensland Museum Board Minutes* 28 July 1900.
- 55 *Queensland Museum Board Minutes* 30 September 1899.



- 56 E.A. Lower to Trustees, Brisbane Museum, 30 September 1899 (QMA Applications for Employment 1899 no.5908).
- 57 *Queensland Museum Board Minutes* 30 October 1899.
- 58 Under Secretary Dept. Public Instruction to C.W. de Vis, curator, 18 February 1901 (QMA correspondence inward 1901).
- 59 Under Secretary, Dept. Public Instruction to C.W. de Vis, Director, 27 June 1902, 1 July 1902 (QMA correspondence inward 1902).
- 60 *Queenslander* 10 May 1902.
- 61 E. Lower, Chatswood to H. Longman, Director, 11 January 1918 (QMA correspondence inward 1918).
- 62 *Queensland Museum Board Minutes* 29 July 1901.
- 63 *Queensland Museum Board Minutes* 30 April 1904.
- 64 *Queensland Museum Board Minutes* 25 June 1904.
- 65 Last trace of *Queensland Museum Board Minutes*—loose sheets.
- 66 *Queensland Museum Board Minutes* 27 April 1907.
- 67 Hamlyn-Harris to C. Wild, 6 October 1910 (QMA correspondence inward 1910).
- 68 V. Chambers, Clerk to C.J. Wild, Acting Director, 11 May 1910 (QMA correspondence inward 1910).
- 69 de Vis' mother's maiden name was Chambers. This may have given rise to the rumour of a relationship that was current in the museum at this time.
- 70 Etheridge, R. jnr, 1910. Manuscript report to the Queensland premier on the museum (QSA PRE A 337 6144 19.10).
- 71 C.J. Wild to Director, 10 April 1911 (QMA correspondence inward 1911).
- 72 Hamlyn-Harris to Under Secretary, Chief Secretary's Office, 31 January 1911 (QMA correspondence outwards 1911).
- 73 Under Secretary, Chief Secretary's Office to the Director, 20 October 1911 (QMA correspondence inward 1911).
- 74 Douglas Rannie to Premier, 30 July 1913 (QMA correspondence inward 1913).
- 75 Robert John Cuthbert Butler MLA for Lockyer 16 March 1918 to 9 October 1920. *Queensland Parliamentary Handbook*.
- 76 Newspaper report in Queensland Museum Cutting Book 2.
- 77 Longman to Under Secretary, Chief Secretary's Department, 26 September 1929 (QMA correspondence outward 1931).
- 78 Staff file K.K. Watson (QMA).

14 MEN OF GOODWILL

- 1 Marks, E.N., 1960. A history of the Philosophical Society and the Royal Society of Queensland from 1859 to 1911. *Proc. R. Soc. Qd* 71(2): 17–42, 2 pls.
- 2 Coxen to the Hon. the Secretary of Lands, 18 February 1874 (QSA G149/3).
- 3 Mines Dept. Memoranda 76.152M and 76.159M (QSA AGS/N342).
- 4 Executive Council Minute 76/9 on 76.213M (QSA AGS/N342).
- 5 Letterbook Mines Dept., Outward Letters 76.22 in MIN/G2, p.325 (QSA).
- 6 Further details of their careers in the indicated publications:
 COXEN: 3ADB; *Waterson Biographical Register*.
 DOUGLAS: 4ADB; *Waterson Biographical Register*.
 FENWICK: *Queenslander* 21 July 1900; Johnston, R., 1970, 'John Fenwick' in *Queensland Heritage* 2(3): 21.
 GREGORY: 4ADB; *Waterson Biographical Register*.
 LUKIN: 5ADB.
 RAFF: 6ADB; *Waterson Biographical Register*.
 MISKIN: reference 32 below.
- 7 76.805M of 7 June 1876 with Executive Council Minute 76/32 endorsed (QSA AGS/N342).
- 8 For further details of his career in: 3ADB; *Medical Journal of Australia* 4 February 1961; Sprent, J., 1972, Obituary of Dr Josephine Mackerras in *The International Journal of Parasitology* 2: 181–185.
- 9 The whole matter of noxious gases emanating from the museum may have originated from Staiger himself—who, in a letter to the minister for Public Works 2 August 1873, wrote:
 I have to draw your attention to the fact that the present locality and state of the laboratory will not allow me to carry out assays or experiments which can only be done by aid of furnaces or machine power, or which would involve danger of fire or create obnoxious gases.
 (QSA G149/3).
- 10 *Queensland Museum Board Minutes* 17 June 1881.
- 11 Strahan, R., 1975. *Rare and Curious Specimens. An Illustrated History of the Australian Museum 1827–1979* (Australian Museum, Sydney).
- 12 Bennett to Sir Richard Owen. *Vide Strahan, R., 1975: reference 11, above.*

- 13 Moyal, A.M., 1976. Sir Richard Owen and his influence on Australian zoological and palaeontological science. *Rec. Austral. Acad. Sci.* 3 (2): 41-56.
- 14 Krefft to L.A. Bernays, Queensland Museum Board of Trustees, 11 March 1879 (QMA inward correspondence before 1880).
- 15 Marks, E.N., 1963. Silvester Diggles—a Queensland Naturalist one hundred years old. *Qd Nat.* 17(1, 2): 15-25.
- 16 Further details of their careers in the indicated publications:
O'DOHERTY: 5ADB; *Waterson Biographical Register*.
BERNAYS: 3ADB; *Queensland 1900* (Alcazar Press, Brisbane).
- 17 with Executive Council minute 78/8 endorsed 6 February 1878, 78.39OM (QSA AGS/N342).
- 18 *Brisbane Courier*, 7 March 1879. *Queensland Museum Board Minutes* 6 March 1879 (QMA).
- 19 with Executive Council minute 79/49 endorsed, 79.766M and 79.766B (QSA).
- 20 Bernays to the Secretary, the Queensland Museum, 20 May 1879 (QMA inward correspondence before 1880).
- 21 5ADB; *Waterson Biographical Register*.
- 22 3ADB; *Waterson Biographical Register*.
- 23 80.274L of 27 February 1880 with Executive Council minute 80/16 endorsed (QSA AGS/N342).
- 24 80.1206M of 18 August 1880 with Executive Council minute 80/52 endorsed (QSA AGS/N342).
- 25 81.2151B of 31 October 1881 with Executive Council minute 82/62 endorsed (QSA AGS/N342).
- 26 5ADB; *Waterson Biographical Register*.
- 27 VP 7 October 1880: p.203; 5 November: p.301.
- 28 2717 PI of 6.5.85 (QSA AGS/N342).
- 29 4726 PI of 11.8.85 (QSA AGS/N342).
- 30 5ADB, *Waterson Biographical Register*.
- 31 5ADB; *Waterson Biographical Register*; *Annual Review of Qld 1902*; *Brisbane Courier* 12 March 1914.
- 32 He had left the Public Service in 1878 and taken articles of clerkship on 13 November 1878 with Peter MacPherson, a well known Brisbane solicitor, and having passed his examinations Miskin was admitted as a solicitor on 4 December 1883. He practised in Brisbane in partnership with MacPherson but in 1892 he began practice in Rockhampton (QSA SCT/CK12 and *Queensland Law Almanac* 1913).
- 33 Further details of their careers in the indicated publications:
BLACKMAN: Est. File 370/1906 (QSA); Clarke, C.G.Drury, 1986, F.A. Blackman (1835-1906), in *J.R. Hist. Soc. Qd* 12(2).
GAILEY: Watson, D. and McKay, J., *Queensland Architects to 1940*, in *Occasional papers of the Fryer Library, University of Queensland* 5: 1-236; Est. File No.403/1924 (QSA).
HODGKINSON: 4ADB; *Waterson Biographical Register*.
- 34 Letters and memoranda (QSA AGS/N342).
- 35 *Queensland Museum Board Minutes*.
- 36 Covacevich, J., 1971. Amphibian and reptile type specimens in the Queensland Museum. *Mem Qd Mus.* 16: 49-67.
- 37 *Queensland Museum Board Minutes*.
- 38 Memorandum (QSA AGS/N342).
Further details of their careers in the indicated publications:
CAMERON: *Waterson Biographical Register*.
CHATAWAY: *Waterson Biographical Register*.
MARKS: *Waterson Biographical Register*.
SUTTON: Marks, E.N., 1960, A history of the Queensland Philosophical Society and the Royal Society of Queensland from 1859 to 1911, in *Proc. R. Soc. Qd.* 71(2): 17-42.
- 39 Further details of their careers in the indicated publications:
TURNER: 05.12291 O.D. of 14 November 1905 (QSA AGS/N342); Marks, E.N. and Mackerras, L.M., 1974, The insects and the entomologists, in *Changing Patterns in Entomology* (The Entomological Society of Queensland, Brisbane).
SCRIVEN: PSB File No.505 Unprocessed Material Repository 2-H32 (QSA).
- 40 0.5.13531 G of 15.11.1905 and 05.13744 of 16.11.1905 (QSA AGS/N342).
- 41 QSA AGS/N342.
- 42 07.2438 CS of 20.9.1907, 05.12291 OD of 24.9.1907 and 07.5038 Agric. of 26.9.1907 (QSA AGS/N342).
- 43 Chief Secretary to Premier of New South Wales, 2 June 1910 (QSA PRE A 337 6144 19.10).
- 44 Secretary Australian Museum to Under Secretary, Chief Secretary's Office, 14 June 1910, telegram (QSA PRE A337/G144, 19.10)

- 45 Etheridge, R. jnr, 1910. Manuscript reports to the Premier of Queensland (QSA PRE A337 6144 19.10)
- 46 Kidston to Etheridge, 19 July 1910 (QSA PRE A337 6144 19.10).
- 47 *Queensland Parliamentary Debates* 1910: vol.106, p.1407.
- 48 Under Secretary, Chief Secretary's Department to Longman, 26 April 1929, with enclosed Report of the Public Service Commissioners on the museum (QMA correspondence inward and outward 1929/217).
- 49 Longman to the Under Secretary, Chief Secretary's Department, 13 June 1929 (QMA correspondence inward and outward 1929).
- 50 *Courier Mail* 20 January 1934.
- 51 *Queensland Government Gazette* 22 August 1970: vol.234, p.2109.
- 52 *Queensland Parliamentary Debates* 1970: vol.253, pp.2515-2530, 2967-2973.
- 53 *Queensland Government Gazette* 1970: vol.235, p.217.
- 54 *The Telegraph* 13 November, 1934.
- 55 Director General of Works to Director, Queensland Museum, 23 April 1985; Department of Works, Quantity Surveying Branch memorandum 22 April 1985, relocation of Queensland Museum (QMA G445/15).
- 56 Mather, P. (ed) 1978. *The Small Museum—a collection of papers relative to the establishment, housing and operation of local and regional museums* (Queensland Museum, Brisbane).
- 57 Campbell, B., Wallace, C. and King, H., 1974. *Field Study of Marine littoral invertebrate macrofauna from the proposed Brisbane Airport Extension area. Report to the Co-ordinator General* (Queensland Museum, Brisbane).
- 58 Campbell, B., Wallace, C., King, H., and Mather, P., 1974. *The sublittoral macrobenthos of the proposed Brisbane Airport Extension area. Report to the Co-ordinator General* (Queensland Museum, Brisbane).
- 59 Campbell, B., Monroe, R., Mather, P. and Wallace, C., 1974. *The estuarine sublittoral macrobenthos of south-eastern Queensland: A Preliminary Survey. Report to the coastal management Investigation* (Queensland Museum, Brisbane).
- 60 Mather, P., 1975. *The National Estate, Moreton, Wide-Bay Burnett Regions. A report to the Co-ordinator General* (Queensland Museum, Brisbane).

15 IN PERPETUITY

- 1 Flower, W.H. 1898. Museums organisation. Presidential address to the British Association for the Advancement of Science. In *Essays on Museums and other subjects connected with Natural History* pp.1-29 (Macmillan & Co., London).
- 2 Wittlin, A. S., 1949. *The Museum, its History and its Task in Education* (Kegan Paul, Trench, Trubner and Co., London) 297 pp.
- 3 Caygill, M., 1981. *The Story of the British Museum* (British Museum Publications, London).
- 4 Hodson, K., 1975. *A Social History of Museums* (Macmillan Press, London).
- 5 Solomon Da Costa, donor of a collection of Hebrew manuscripts to the British Museum, to 'the honourable personages appointed and made overseers of the great and noted treasury called the British Museum' 1876. *Vide Caygill M., 1981. The Story of the British Museum* pp.14-5 (British Museum Publications Ltd., London).
- 6 Karp, W., 1965. *The Smithsonian Institution* (Smithsonian Institution with Editor of *American Heritage Magazine*, Washington D.C.).
- 7 Mather, P., 1976. *Museums, Natural History and Queensland, An account of the development of the modern museum concept and its application in the field of natural science, especially in Queensland* (manuscript, Queensland Museum, Brisbane).
- 8 Piggott, P.H., Blainey, G.N., Boswell, R.W., Clayton, A., Mulvaney, U.J., Talbot, F.H., Waterhouse, D.F., Waters, F.J., Payne, E.E., 1975. *Museums in Australia. Report of the Inquiry on Museums and National Collections* (Australian Government Publishing Service, Canberra), 124 pp.
- 9 Etheridge, R. jnr, 1910. Manuscript report to the Premier of Queensland (QSA PRE A337 6144 19.10).
- 10 *Annual Report Queensland Museum* 1983, pp.4, 5.
- 11 Parr, A.E., 1959. *Mostly about Museums* (The American Museum of Natural History, New York).

APPENDIX 1

BIOGRAPHICAL NOTES

- 1 Whitley, G., 1938. John Gould's Associates. *Emu* 38: 141-167.
- 2 Whittell, H.M., 1954. *The literature of Australian Birds: a History and a Bibliography of Australian Ornithology* (Paterson Brockensha, Perth).
- 3 Hindwood, K.A., 1938. Gould in Australia. *Emu* 38: 95-118.
- 4 Dickson, J., 1938. Gould's major works. *Emu* 38: 118-131.



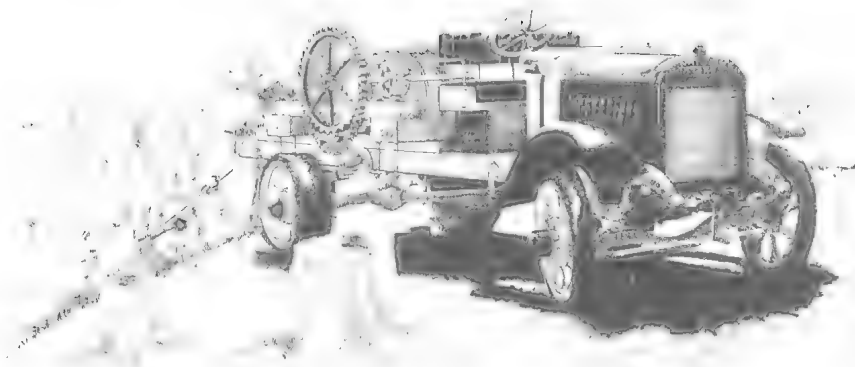
- 5 Anon, 1888 *Public Men and Industries* (Brisbane): ABD; *Waterson Biographical Register*.
- 6 Cüento, R. and Lack, C., 1959. *Triumph in the Tropics* (Historical Committee Centenary Celebrations Council of Queensland, Smith Paterson and Co., Brisbane).
- 7 Arousseau, M. (ed.), 1968. *The Letters of F.W. Ludwig Leichhardt* 3 vols (Cambridge University Press, U.K.).
- 8 Leichhardt, L., 1847. *Journal of an overland expedition in Australia, from Moreton Bay to Port Essington, a distance of upward of 3,000 miles, during the years 1844-1845* (London).
- 9 Marks, E.N., 1960. A history of the Queensland Philosophical Society and the Royal Society of Queensland from 1859 to 1911. *Proc. R. Soc. Qd* 71(2): 17-42, 2pls.
- 10 Coxen to Hon. Secretary for Public Works, 26 July 1872 (QSA).
- 11 Mack, G., 1956. The Queensland Museum 1855-1955. *Mem. Qd Mus.* 13(2): 106-124.
- 12 Karl Theodor Staiger (grandson of Karl Theodor Staiger, custodian 1873-9) to Queensland Museum, personal communication 1985.
- 13 Staiger to W.H. Walsh, Secretary for Public Works, 2 June 1873 (QSA).
- 14 Bailey, F.M. and Staiger, K.T., 1879. *An Illustrated Monograph of Queensland Grasses* (Brisbane).
- 15 Staiger, Death Certificate No.21256, 5 October 1888 (Registrar General, Queensland).
- 16 *Blue Book*, various years 1873-1880. In VP.
- 17 Webster, E.M., 1984. *The Moon Man* (Melbourne University Press, Melbourne). The Queensland Museum had just moved to its new building in William Street at the time of Miklouho-Maclay's visit, not to the Gregory Terrace building as Webster implies; and the investigations were conducted in the building just vacated by the museum — not in the museum.
- 18 Greenop, F.S., 1944. *Who Travels Alone* (K.G. Murray Publishing Company, Sydney).
- 19 *Queensland Post Office Directories*, various years 1880-1889.
- 20 *Queensland Museum Board Minutes*, various entires 1876-1888.
- 21 Staiger-Pearce, Marriage Certificate No.4591, 19 December 1874 (Registrar General, Queensland)
- 22 *Brisbane Courier*. Saturday 6 October 1888: p.6.
- 23 Pike, D. (ed.), 1972. 4 ADB 1851-90, D-J (Melbourne University Press). Family documents, de Vis family, held by Dorothea Melloy of Brisbane, great grand-daughter of Charles Walter de Vis, grand-daughter of Charles James de Vis of Charters Towers.
- 24 Tryon, H. Manuscript *On the life and ancestors of Charles Walter de Vis*; G.H. de Vis to Tryon, 20 September 1915 (University of Queensland, Fryer Library, St Lucia, D. 1915 Try. F228).
- 25 Charles Walter de Vis to the Hon. Minister for Works, 3 November 1881. Application for curatorship of the museum (QMA).
- 26 *Queensland Museum Correspondence files* 1882-93.
- 27 Johnston, T.H., 1916. Obituary C.W. de Vis. *Proc. R. Soc. Qd* 28: 1-17.
- 28 Charles Walter de Vis, Death Certificate 30 April 1915 (Registrar General, Queensland).
- 29 Anon, 1904. Mr Charles Syson Devis. *Edgbastonia* 24(280): 180-9 (Edgbaston, Birmingham).
- 30 Marshall, A.J., 1954. *Bower Birds* p.135 (Clarendon Press, Oxford).
- 31 Jones, D., 1961. *Cardwell Shire Story* pp.164-178 (Jacaranda Press, Brisbane).
- 32 Goode, J., 1977. *Rape of the Fly* p.123 (Thomas Nelson Australia Ltd., Melbourne).
- 33 Davis, E.D., 1976. *The Life and Times of Steele Rudd* (Lansdowne Press, Melbourne).
- 34 Broadbent, K., 1885. On the migration of birds at the Cape York Peninsula. *Proc. R. Soc. Qd* 1884 1: 93-96.
- 35 Meston, A., 1889. *Report of the Government Scientific Expedition to Bellenden-Ker Range* (Government Printer, Brisbane).
- 36 Anon, 1911. Obituary, Kendall Broadbent. *Emu* 11: 62.
- 37 McCarthy, J.V. to P.J. McDermott, Under Secretary, Premier's Office, 21 March 1910 (QSA PRE A337 6144 19.50).
- 38 Marks, E.N., 1983. Hamlyn-Harris, Ronald. ADB 1891-1939, vol.9, p.177.
- 39 Hamlyn-Harris to Ogilby and Ogilby to Hamlyn-Harris, various letters 1915 (QMA correspondence inward and outward 1915).
- 40 Clarke, C.G. Drury, 1986. *pers. comm.*
- 41 Anon, 1954. Obituary, H.A. Longman. *Qd Nat.* 15 (1-2): 38-40.
- 42 Herbert, D.A., 1955. Memorial Lecture, Heber Albert Longman. *Proc. R. Soc. Qd* 66(7): 83-89.
- 43 Filmer, I., 1944-48. Manuscript diary (QMA).

- 44 *Courier Mail* 21 July 1936.
- 45 Anon, 1963. Death of G. Mack, museum director. *Telegraph* 24 October 1963.
- 46 Anon, 1964. Was World Authority on Birds of Australia. *Courier Mail* 25 October 1963.
- 47 Anon, 1964. Obituary, G. Mack. *Qd Nat.* 17(3,4): 75.
- 48 Jack, N., 1964. Obituary Mr George Mack. *Emu* 63(4): 343-44.
- 49 Vernon, D.P., 1964. Vale. *Kalori* 28 April 1964: 19.

APPENDIX 2

THE QUEENSLAND MUSEUM STAFF 1862-1970

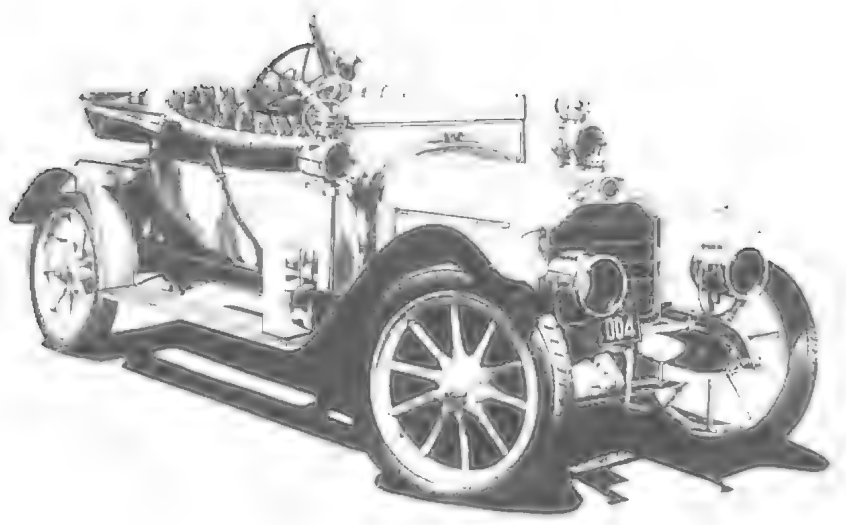
- 1 Staff and trustees from 1971 are published in the Annual Reports of the Queensland Museum 1971-1986.
- 2 Hedges was the only gardener not employed by the Department of Agriculture, which was responsible for the museum garden after the move to the Exhibition building (see Chapter 3).







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Previous page: Richard Daintree, the government geologist for north Queensland had been sent to London in 1871 to arrange the Queensland Annexe in the International Exhibition of Arts and Industries. He remained there as Queensland's agent general. In 1872 he arranged a similar display, here photographed by the official photographer to the exhibition, and described in *The Times, London* 17 June 1872:

thanks to the energy and hard work of Mr Daintree, the result is extremely creditable to the colony, and holds out great promise of its future prosperity. The walls are hung round with geological maps of Queensland, with pictures of the aboriginal inhabitants, with a great variety of coloured photographs of scenery, most artistically executed by Mr Daintree himself, and with illustrations of the past and present flora and fauna of the country. The maps exhibit almost every variety of mineral wealth; very extensive coalfields of two formations, and an abundance of tin, copper, gold, silver, and other metals. Specimens of the various ores are displayed in cases, and finished metal work of a high order of merit. Among the vegetable productions are cotton, a grass likely to be valuable in the manufacture of paper, and a great variety of woods, many of them of beautiful grain and close texture, capable of receiving a fine polish, and well adapted for the best kinds of cabinet work. Several cases are filled by a superb collection of stuffed birds, very well mounted, and many of them of gorgeous plumage. Stuffed kangaroos are also to be found, and kangaroo and other skins adorn the walls. Among a few native implements and weapons may be seen hatchets formed, as in the most primeval times, by binding a shaped flint or celt to a handle, and near these are nets and other contrivances for ensnaring creatures used as food.

At the opening 'some 50 gentlemen', including 'many of the leading colonists' then in London, sat down to a repast, provided by Mr Daintree, at which-

they might either mingle English and Australian foods, or dine exclusively upon either.

The..... Queensland contribution to the feast consisted of kangaroo soup, pate de homard a la dugong, ox tongues, sheep tongues, salt and spiced beef, mutton and lard de dugong'..... The kangaroo soup and the tongues were excellent and the meats, if not exactly excellent, were very eatable, and have improved Australian wines were placed upon the table but unfortunately with no information about their age, the cost at which they were produced or the districts yielding them. The best..... a white wine called Riesling..... had a really fine bouquet and an extremely pleasant flavour. The Australian hock....., a sound pure wine of natural character..... The 'Australian claret' was distinctly bad..... (*The Times, loc. cit.*).

In responding to the toast to Queensland, Mr Daintree referred to the 'abundant wealth and inexhaustible resources of all the British colonies'.

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