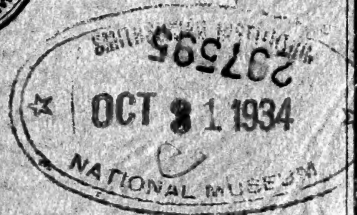


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PROCEEDINGS
OF THE
ROYAL ZOOLOGICAL
SOCIETY
OF
NEW SOUTH WALES
FOR THE YEAR
1933 - 4



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ROYAL ZOOLOGICAL SOCIETY OF NEW SOUTH WALES.

(Established 1879.)

Registered under the Companies Act, 1899 (1917).

PATRONS:

His Excellency the Governor, Sir Philip Woolcott Game, G.B.E., K.C.B., D.S.O.

His Excellency the Lieutenant-Governor, Sir Phillip Street, K.C.M.G.

COUNCIL, 1934-1935.

President: Theodore Cleveland Roughley, B.Sc., F.R.Z.S.

Vice-Presidents: Ernest J. Bryce, F.R.G.S.; Neville W. Cayley, F.R.Z.S.; Tom Iredale, F.R.Z.S.; and Ellis Le Geyt Troughton.

Honorary Secretary and Editor: A. F. Basset Hull, C.F.A.O.U., F.R.Z.S.

Assistant Honorary Secretary: Keith A. Hindwood.

Honorary Treasurer: Phillip Shipway.

Honorary Librarian: A. S. Le Souef, C.M.Z.S.

Members: Clifford Coles, C.M.Z.S.; Professor W. J. Dakin, F.R.Z.S.; E. A. D'Ombraun, M.B., Ch.M.; W. W. Froggatt, F.R.Z.S.; Aubrey Halloran, B.A., LL.B.; Frank Marshall, C.M.G., D.D.S.; Anthony Musgrave, F.R.Z.S., F.E.S.; E. F. Pollock, J.P., F.R.G.S.; Gilbert Percy Whitley, F.R.Z.S.

Honorary Auditor: R. J. Stiffe, A.C.A. (Aust.).

OFFICERS OF SECTIONS.

Avicultural Section.

Chairman: Clifford Coles.

Vice-Chairmen: Frank Buckle and Dr. Garnet Halloran.

Hon. Secretary: Grantley A. Duncan.

Assistant Hon. Secretary: J. Mackie.

Committee: E. Hargreaves, C. Springall, H. E. Peir and W. R. Smith.

Budgerigar Club.

Chairman: Neville W. Cayley.

Vice-Chairman: R. J. Murray.

Hon. Secretary: Ernest W. Jones.

Assistant Hon. Secretary: T. McSwiggan.

Committee: J. C. Mackie, S. French, E. C. Heery, Dr. F. Marshall, V. Peters, W. H. Relton.

Delegates Representing New South Wales on Australasian Budgerigar Council: Neville W. Cayley, S. French, Ernest W. Jones.

Accredited Representatives in Melbourne: Rev. D. G. Baillie, Councillor J. Hocking.

Ornithological Section.

Chairman: Neville W. Cayley.

Vice-Chairman: J. S. P. Ramsay.

Hon. Secretary: M. S. R. Sharland.

Committee: J. S. P. Ramsay, C. Coles, T. Iredale, P. A. Gilbert, and D. Leithhead.

Marine Zoological Section.

Chairman: F. A. McNeill.

Vice-Chairman: R. A. Johnson.

Hon. Secretary: Miss G. Charter Smith.

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ROYAL ZOOLOGICAL SOCIETY OF NEW SOUTH WALES.

The Annual General Meeting of the Society was held at Taronga Zoological Park on Saturday, 21st July, 1934, at 3 p.m. Ninety-seven members and visitors were present. The Honorary Secretary (Mr. Basset Hull) read the:—

FIFTY-FOURTH ANNUAL REPORT.

MEMBERS.

On 30th June, 1934, there were 556 members on the register, divided into the various categories, as follows: Associate benefactors, 3; life members, 24; ordinary members, 236; honorary members, 9; honorary associates, 3; life associates, 23; and associates, 258. Nine members died during the year, 21 resigned, and the names of 39 were removed from the register under Article 9.

These figures show a net increase over last year of forty members, principally represented by associates, as a result of sectional activity. There has been a reduction of 14 in the number of ordinary members, and any additions to the list will be appreciated.

DEATHS OF PROMINENT MEMBERS.

Sir Alexander Jarvie Hood, who had been a member for sixteen years, died on 8th May, 1934. He was a consistent supporter of the Society's aims, in addition to his many professional and philanthropic activities.

Dr. Thomas Lane Bancroft, of Wallaville, Queensland, died on 12th November, 1933. He was elected an honorary associate of the Society in 1928 in recognition of his distinguished services to Australian Zoology. His scientific research in relation to the Queensland Lungfish (*Ceratodus*) gained him international fame.

Frederick Ernest Mawle, of Port Arthur, Tasmania, who died on 30th March, 1934, was elected an honorary associate in 1930 in recognition of his valuable field work in conchology. He was born at Saltwater River, Tasman's Peninsula, in 1866. At the request of the late W. L. May, he investigated the Loricata fauna of Tasmania, discovering several new species, some of which were named after him.

George Robertson, who died on 27th August, 1933, was a director of Angus & Robertson Limited, who have published so many books dealing with zoological subjects. He was a member of the Society from 1922, and was always ready to promote the sale of the Society's publications.

THE COUNCIL.

Ten meetings of the Council were held during the year, the average attendance at which was 12 members. Dr. Waterhouse was absent for the latter half of the year through illness, and he resigned for that cause at the end of the year. An expression of appreciation of his long and valuable services to the Society has been placed on

record. Joining the old Society in 1908, he has from time to time filled the positions of honorary secretary, honorary treasurer, and president. Members will be glad to learn that his health is improving.

FINANCES.

Notwithstanding the additional expense in rent of the new room, and the falling off in the number of ordinary members, the Society's financial position is stronger than ever.

PATRONS.

In addition to His Excellency the Governor, Sir Philip Game, His Excellency the Lieutenant-Governor, Sir Phillip Street, was elected and has accepted the office of Patron.

FELLOWS.

The title of "Fellow" was conferred by the Council on Dr. A. Jefferis Turner, of Brisbane, in recognition of his distinguished services to Australian Zoology in Entomology, and on Mr. Gilbert P. Whitley for his work in Australian Ichthyology. There are now fourteen Fellows of the Society.

SECTIONS.

The year has been characterised by great activity in the sections, the number of members attending showing a steady increase. Lectures, talks, and the exhibition of films and lantern slides have maintained the interest of members. Amongst the notable occurrences may be mentioned the screening of films taken at the Moree Camp-out of the Royal Australasian Ornithologists' Union in October, 1933. The Egrets and Cormorants in the "rookeries", filmed by Mr. N. Chaffer, and Mr. J. S. P. Ramsay's stills were exhibited to His Excellency the Governor and party at the Society's room on 6th March, 1934.

A pair of "Royal Blue" Budgerigars, bred and donated by Mr. H. E. Peir, were presented to His Excellency for transmission to His Majesty the King, who had graciously signified his pleasure in accepting the gift. Dr. Garnet Halloran took the birds to England, and their safe receipt has been acknowledged by the private secretary, Sir Clive Wigram.

AVICULTURAL EXHIBITION.

The second exhibition of Cage Birds, held in the Blaxland Galleries, by kind permission of Farmer & Co. Ltd., on 24th to 27th April, 1934, was a financial success, although the attendance of the public was less than at last year's exhibition. A full account will appear in the report of the Avicultural Section.

OTHER FUNCTIONS.

The Society's annual dance was held on 8th July, 1933, and proved a pleasant and profitable function. A public exhibition of films and lantern slides was held at King's Hall on 13th June, 1934, the attendance being moderate only, though every member and associate was notified. However, there was a small balance of receipts over expenditure.

PUBLICATIONS.

Two parts of *The Australian Zoologist* were issued during the year. Part 5 completed volume 7, and part 1 of volume 8 appeared in a

reduced format on 9th May last. Council decided to publish reports and routine matters in a volume of PROCEEDINGS, to be issued free to all members and associates after the Annual Meeting each year.

The second edition of the late A. R. McCulloch's *Fishes and Fish-like Animals of New South Wales* was sold out during the year, and a new edition with a supplement by Gilbert P. Whitley, bringing the records up to date, was put in hand, and is now available. The price has been increased from 2/- to 2/6, but that is really nominal in view of the elaborate nature of the work with its 44 plates, illustrating the majority of the fishes found on our coast.

NATURAL HISTORY EXHIBITION.

By courtesy of the Directors of Associated Newspapers Ltd., a "Natural History" Exhibition was held in the *Sun* Building during the month of August, 1933, the total proceeds being devoted to the Society's Handbook Publication Fund. The Australian and Technological Museums, Taronga Park, the Department of Agriculture, the Harbour Trust, The University, and numerous individual members of the Society contributed exhibits, and great interest was shown, particularly by the numerous young people who attended.

The proprietors published a newspaper entitled *The Naturalists' Telegraph*, containing descriptive articles relative to Australian natural history and naturalists, which was distributed free to all visitors. In recognition of his valuable services to the Society in connection with this exhibition, the Council elected Mr. Thomas Dunbabin, editor of the *Telegraph*, an honorary member.

WIANAMATTA SHALE COUNTRY.

Inspection of certain areas by members of the Society resulted in a recommendation by the Council, addressed to the Minister for Lands and the Commissioner for Forests, that Forest Reserve 422, Parish of Londonderry, which comprises some of the peculiar Wianamatta vegetation, be proclaimed a Reserve for the preservation of Fauna and Flora. Replies were received stating that the plans would be noted accordingly.

DEE WHY LAGOON.

At the request of the Warringah Shire Council representatives of this Society were appointed to confer with that Council and other bodies in relation to a proposal to acquire the land surrounding Dee Why Lagoon for the preservation of Fauna and Flora.

BROUGHTON ISLAND.

The Council has made representations to the Minister for Lands and the Chief Secretary, protesting against the proposal to lease Broughton Island for the purposes of a tourist resort, golf links, etc., on the ground that the colonies of sea birds breeding there would inevitably be disturbed.

INTRODUCTION OF ANIMALS.

A letter was sent to The Department of Home Affairs, suggesting that no importation of birds or animals likely to affect injuriously the native fauna or flora be permitted. Suggestions for the introduction of deer into Western Australia and the Northern Territory gave ground for fear that some steps might be taken in the direction indicated.

The Honorary Treasurer (Mr. Phillip Shipway) submitted the Balance Sheet for the year ending 30th June, 1934, as follows:

ROYAL ZOOLOGICAL SOCIETY OF NEW SOUTH WALES.

BALANCE SHEET AS AT 30th JUNE, 1934.

LIABILITIES.				ASSETS.							
		£	s.	d.			£	s.	d.		
GENERAL ACCOUNT—					GENERAL CAPITAL ACCOUNT—						
Capital	..	1,010	0	0	Australian Consolidated Inscribed Stock	..	410	0	0		
Income	..	143	1	4	Office Furniture and Equipment (at valuation)	..	100	0	0		
				1,153	1	4	Library (at valuation)	..	500	0	0
HAND BOOK ACCOUNT—					GENERAL INCOME ACCOUNT—						
Capital	..	1,000	0	0	Commonwealth Savings Bank of Australia	..	95	11	1		
Income	..	234	9	1	Add Owing by Hand Book Fund on Adjustment	..	47	2	9		
				1,234	9	1	1,010		0	0	
							Cash on Hand	..	0	7	6
							143		1	4	
							HAND BOOK FUND CAPITAL ACCOUNT—				
							Australian Consolidated Inscribed Stock	..	250	0	0
							Australian Consolidated Treasury Bonds	..	750	0	0
							1,000		0	0	
							Including—				
							Albert Littlejohn Endowment	..	100	0	0
							Hume-Barbour Endowment	..	106	0	0
							Walter and E. Hall Endowment	..	175	0	0
							HAND BOOK FUND INCOME ACCOUNT—				
							Commonwealth Savings Bank of Australia	..	281	11	10
							Less Owing to General Fund on Adjustment	..	47	2	9
							234		9	1	
							£2,387		10	5	

I have examined the books and vouchers of the Royal Zoological Society of New South Wales for the twelve months ended 30th June, 1934, and certify that the above Balance Sheet and accompanying statements are properly drawn up so as to exhibit a true and correct view of the state of the Society's affairs as at 30th June, 1934, and the transactions for the year ended that date, respectively, as disclosed by the books of the Society and information supplied.

(Sgd.) ROBT. J. STIFFE, F.C.A. (Aust.),
Hon. Auditor.

(Sgd.) PHILLIP SHIPWAY,
Hon. Treasurer.

Sydney, 19th July, 1934.

**HANDBOOK FUND INCOME ACCOUNT FOR TWELVE MONTHS
ENDED 30th JUNE, 1934.**

RECEIPTS.				DISBURSEMENTS.							
	£	s.	d.	£	s.	d.	£	s.	d.		
To Balance at 30th June, 1933—				By Balance at 30th June, 1934—							
Commonwealth Savings Bank of Australia ..	81	9	11	Commonwealth Savings Bank of Australia ..	281	11	10				
Cash on Hand ..	23	18	5	Less Owing to General Fund on Adjustments	47	2	9	234	9	1	
			105	8	4						
„ Handbook Sales ..	3	6	6								
„ Interest on Investments ..	45	9	3								
„ Donations—											
L. A. Curtis, Esq.	5	5	0								
Walter and Eliza Hall Trust ..	15	0	0								
			69	0	9						
„ Repayment Advance to General Fund..			60	0	0						
			£234	9	1				£234	9	1

**GENERAL INCOME ACCOUNT FOR TWELVE MONTHS
ENDED 30th JUNE, 1934.**

RECEIPTS.				DISBURSEMENTS.			
	£	s.	d.		£	s.	d.
To Balance at 30th June, 1934—				By Publication <i>Australian Zoologist</i> , Vol. 7, Pt. 5 and Vol. 8, Pt. 1—including Postal and Delivery Charges ..	147	19	4
Commonwealth Savings Bank of Australia ..	13	19	4	„ Office Rent ..	156	0	0
Commonwealth Bank of Australia ..	45	17	0	„ Office Printing and Stationery ..	18	8	0
Cash on Hand ..	13	11	10	„ Office Furniture ..	7	9	0
			73	8	2		
„ Subscriptions—				„ Annual Dance (1933) ..	16	12	0
Annual ..	307	3	9	„ Annual Meeting (1933) ..	6	2	0
Life ..	10	0	0	„ Repayment Loan by Hand Book Fund ..	60	0	0
			317	3	9		
„ Sales <i>Australian Zoologist</i> ..	29	17	0	„ Exhibition ..	120	18	3
„ Rent of Office ..	32	5	0	„ Electricity ..	11	10	5
„ Interest on Investments ..	19	9	10	„ Electric Repairs (Epidiascope) ..	1	17	0
„ Bank Exchange and Postage ..	2	0	4	„ Subscription Refund ..	0	10	6
„ Telephone ..	5	14	7	„ Telephone ..	20	8	11
„ Sales Anthony Musgrave's <i>Bibliography of Australian Entomology</i> ..	4	0	0	„ Typewriter Repairs ..	1	5	0
„ Annual Dances (1933 and on a/c 1934) ..	51	8	0	„ G.P.O. Box Fee ..	1	0	0
„ Film Lecture ..	2	12	0	„ "Cabin" Equipment ..	1	17	2
„ Exhibitions ..	202	1	11	„ Petty Cash Expenses ..	25	0	0
„ Sundries ..	0	2	0	„ Bank Exchange ..	0	3	8
			£740	2	7		
				By Balance at 30th June, 1934—			
				Commonwealth Savings Bank of Australia ..	£95	11	1
				Add Adjustments due from Hand Book Fund ..	47	2	9
				Cash on Hand ..	0	7	6
					143	1	4
					£740	2	7

On the motion of Colonel Alfred Spain, Chairman of Taronga Park Trust, seconded by Mr. E. F. Pollock, the Annual Report and Balance Sheet were adopted.

ELECTION OF COUNCILLORS.

The following members were elected to fill the vacancies caused by the retirement of six members under Article 22: Clifford Coles, C.M.Z.S., Keith Alfred Hindwood, Frank Marshall, C.M.G., D.D.S., Theodore Cleveland Roughley, F.R.Z.S., Phillip Shipway, and Gilbert P. Whitley, F.R.Z.S.

PRESIDENTIAL ADDRESS.

The President (Mr. E. J. Bryce) then delivered his address.

Presidential Address.

JOURNEYINGS OF A NATURE LOVER.

By E. J. BRYCE, F.R.G.S.

Several of our scientific societies include in their membership a considerable number of business and professional men who are keenly interested in scientific matters. This applies more particularly to the Royal Zoological Society of New South Wales, the majority of whose members do not possess the thorough scientific training of the expert who has made science his life work. Many of these lay members of our Society, if I may use this term, have attained more than a nodding acquaintance of some particular branch of zoology, and they have contributed their share towards the advancement of the Royal Zoological Society. They are members of the different sections which meet monthly at the Society's rooms, where they exchange notes, gaining knowledge from each other as well as from the experts who deliver lectures from time to time.

From the Bird Cabin in National Park (for the use of which we are indebted to the National Park Trustees) and other accessible haunts, they have added to the store of knowledge of our fauna. Many of their observations are recorded by photography. Indeed, I think that the pictures, both motion and still, shown at some of our meetings eclipse anything of the kind that has been done in any similar society elsewhere. Members have shown remarkable patience, keen observation and artistic skill in producing such records.

Many of our members reside in the bush, where the opportunities of observing and studying wild life are obviously better than in the more closely settled areas, and the data collected are invaluable to the scientists in the cities, who, after all, in a new country like Australia, are small in numbers, and whose chances of carrying out field work are limited.

The Society is indebted no less to these amateur naturalists, who so unselfishly render service to zoology, than to the experts from the University or the Museum, upon whose assistance we can always count.

Even a moderate amount of scientific knowledge will enhance the pleasures of a ramble in the bush, or by the sea-shore, there to identify perchance our wild birds, which are so fascinating and unique, and to watch their habits is a pursuit that amply repays the time spent upon it.

In my own case, I have derived an immense amount of satisfaction from the study of nature, and what knowledge I possess has augmented my enjoyment during my wanderings in many parts of the world. In relating some incidents concerning natural history to you, it will demonstrate my point, so, like Puck, I propose to put a girdle round the earth in forty minutes.

I remember travelling across the sunburnt plains of Persia, with a caravan of pilgrims, on their way to Meshed, the holy city of the Shia-Mahommedans. The landscape was brown and generally dreary, the tiresome journey only being varied by the frequent incantations

to Allah by my devout fellow travellers—until suddenly a number of Great Bustards appeared out of the dry tussocks that covered the countryside. These stately birds have long since disappeared from England. They were last seen in the County of Norfolk early in the nineteenth century, and they are found now in Europe only in the plains of Hungary and south-eastern Russia. The Great or Bearded Bustard (*Otis tarda*) is the largest game bird in Europe, and a first cousin to our Plain Turkey. What a thrill I experienced to see such a rare bird, which is becoming scarcer and scarcer, and will probably share the fate of the Dodo eventually.

If I were asked the question what are the most valuable birds in the world, I should reply without hesitation, "The Guano birds of Peru." When travelling along the west coast of South America I encountered millions of sea birds, which on closer approach proved mainly to belong to three species: the Guanay or White-breasted Black Cormorant (*Phalacrocorax bougainvillei*), the Piquero or Varied Gannet (*Sula variegata*), and the Alcatraz or Peruvian Pelican (*Pelecanus thagus*). They travel in immense flocks, at times appearing like a rain cloud and obscuring the sun, gorging themselves from the unlimited supply of fish that swim in the waters surrounding their island homes. Millions of these small fish about the size of a large sardine are feeding on the plankton carried by the Humboldt current from the far south. The fish are so numerous that the ships travelling south, which is against the direction in which the fish swim, lose two to three knots per hour. The droppings from millions of these birds on the rocks and islands off the coast of Peru constitute this valuable Peruvian guano, which accumulated over the ages, and forms huge masses of the most efficient of all fertilisers. Hardly any rain falls to wash away these valuable deposits, the rainfall in Arica is only 0.20 inch per annum. As many as seventy-five small fishes, from four to five inches long, have been found in the stomach and gullet of a bird killed on its return from the fishing waters. It has been estimated by a scientist, well acquainted with the bird life on the islands, that one colony of over six million birds consumes nearly one thousand tons of fish daily.

The birds are protected from molestation by the Peruvian Government, so that there may be a natural increase in bird life and in the accumulation of guano. The families of pelicans, gannets and cormorants of South America all have their representatives in Australia.

At the Australian Ornithological Congress held in Sydney in 1933 a suggestion was made that a guano industry could be developed in Australia by introducing certain species of South American cormorants to some of the islands off the west coast of Australia, arguing the fact that these cormorants are non-nomadic and would make the islands their permanent abode throughout the year.

In my opinion the scheme would not be practicable, as the vast supply of food provided by the Humboldt current would not be available, and this enormous and never-failing food supply is the main factor attracting the Peruvian guano birds to that region. Further, the steady and heavy rainfall on our coast would effectually prevent accumulation of deposits.

The Humming Birds (*Trochilidae*) aptly called "living sunshine" by a famous naturalist, only found in the Western Hemisphere, were a constant source of delight in my wanderings through North and South America. I encountered them everywhere—in the hot tropical lowlands of the Amazon River in Brazil, in the far south of Chili,

where the rainfall is eighty inches a year, and in the high Andes of Bolivia and Peru, up to the limit of perpetual snow. One never tires of watching these minute exquisite jewel-like birds, probing the flowers with their long curved bills, the fan-like tail expanded and the birds poising apparently motionless over the flowers. Frequently when delayed by the roadside and there was nothing else to interest one, the Humming Birds furnished an attraction which never waned. The Humming Bird must be on the wing whilst it extracts food from the flower. Never have I seen one to take nourishment while perching on a twig.

In southern Chili they fed on the honey of the wild fuchsia, in Peru on the flowers of the Aloes, in Pernambuco they hovered over the Poinciana blossoms, and even the flowers of the introduced Eucalypts are not despised. It is noteworthy that in many parts of South America the Australian Eucalyptus, first planted in the Argentine as recently as 1877, has become the dominant feature of the landscape. I have never seen finer bluegums anywhere, than in the highlands of Bolivia and Ecuador.

Humming Birds are found as far north as Alaska, there naturally only in summer, and it is amazing the long distances covered by these smallest of birds in their migratory flights.

My first experience of a Humming Bird was at Lake Kenoza in New York State. Watching a Golden Oriole building its pendulous nest in a pear tree in the garden of a farmhouse, a sudden apparition in the shape of a brightly coloured small bird, which proved to be the Ruby Throat (*Trochilus colubris*) darted with incredible swiftness at the red artificial flowers in my wife's hat. Again and again it repeated its fruitless quest. These birds are fearlessly curious and very fond of red. The glory of the Humming Bird is in its iridescent colouring; hovering with misty wings over a flowering shrub, it flashes first gold then green or red or purple, as each colour is caught by the sun's rays. It is not strange that the great ornithologist Gould wrote rapturously of the time when he was at length "permitted to revel in the delight of seeing the Humming Bird in a state of Nature." Of Australian birds, the Sun Bird (*Cyrtostomus frenatus*) of North Queensland resembles most nearly the Humming Bird, and to a lesser extent the Spinebilled Honey-eater (*Acanthorhynchus tenuirostris*). The Spinebill has two points in common with the Humming Bird, in that it frequents home gardens, and it hovers on the wing while sipping nectar from the flowers.

Less exciting are the ornithological finds in Europe, but there also much pleasure is derived in observing the birds. I recall with pleasure several visits with ornithologist friends to Epping Forest, the nearest accessible woodland area to London, stalking the Nightingale in the long twilight and listening to the exquisite melody poured forth from a bird so drab and plain in appearance. There is no doubt that the fame of the Nightingale is enhanced by the fact that it sings at the loveliest time of the year, the soft June nights, when all nature bursts out into blossom. The Nightingale (*Daulias luscinia*), a summer visitor to the south of England, is Europe's finest songster. I was more than once awakened when staying in a village in Holstein by the song of a Nightingale nesting in a nearby Hawthorn hedge. A larger species, the Thrush Nightingale (*Luscinia philomela*) is found in Eastern Europe and the Near East, and I frequently heard its song in the gardens of Tiflis in Transcaucasia. I saw them for sale as cagebirds in tiny cages in the bazaars of Teheran and Ispahan, where they are as popular with the Persians

as Budgerigahs are in Australia. Alas there is no society for the prevention of cruelty to animals in Oriental countries; and the people are totally oblivious to the sufferings of dumb creatures.

Similar conditions prevail in Italy and all Southern Europe. Count Axel Munthe records in his "San Michele" the cruelty and absolute lack of feeling for all animal life in Italy.

We have in our Rufous Breasted Whistler and Reed Warbler close rivals to the Nightingale. Even if their outbursts of song are not quite so full and varied, their song is more sustained and certainly lasts for a much longer period in the season.

The Chough or Red-legged Daw (*Pyrrhocorax pyrrhocorax*), a member of the Family CORVIDAE, was once common all over the British Isles. Learning that it is still found on Achill Island off the west coast of Ireland, I thought that fact sufficient incentive to take the trip to that comparatively isolated part of the British Isles. This bird resembles our crow, but is easily distinguished by its red legs and red bill, the latter curved. Its length is about sixteen inches, and in colour it is black. The early English painters occasionally included a Chough in their woodland scenes, an indication that it was not an uncommon bird in those days. In one of the galleries of Europe I saw a painting where St. Francis of Assisi was preaching to the birds, amongst them a red-billed Chough. The white-winged Chough (*Corcorax melanorhamphus*), sometimes called Mutton Bird by our bush naturalists, is a distant relative of this bird. The journey to Achill Island afforded me an opportunity of hearing Erse spoken by the natives, who have never forsaken their ancient tongue, although it had long disappeared from the rest of Erin.

On one occasion when resting near a waterfall whilst tramping through some of the charming fiord country of Norway, I noticed a bird disporting itself under the water, apparently feeling perfectly at home in its aquatic surroundings. The bird was the Dipper, or Water Ouzel (*Cinclus aquaticus*), a bird about seven inches in length, of a dusky plumage with a white front. It is also found in England and Scotland, usually near quick running rocky streams. This bird is in the habit of walking on the bottom of streams beneath the water in search of food, and is the only member of the Order PASSERIFORMES that can remain under water for any length of time. The family of Dippers or CINCLIDAE is not represented in Australia.

The European White Stork (*Ceconia alba*) is one of the migrants which travel from Northern Europe every year to the Zambesi region of Africa. I observed them feeding in the marshes of Rhodesia in January and a few months later met them again first in the Balkans and then in Germany, quite possibly the same birds. They travel these enormous distances twice a year, an unerring instinct guiding them to the same nesting locality year after year. The rector of the Holstein village with whom I stayed informed me that he distinctly recognised the Stork nesting on his roof as the same bird of the previous season. A Stork's nest on a farmhouse is considered a good omen by the peasants of the Baltic countries. Progress is driving the Storks away from their old haunts, as thatched roofs are becoming rarer and the Stork prefers to build his nest on such as these. Some of our wading birds—the Golden Plover, the Whimbrel, the Godwit and other waders—travel equally long distances, nesting in the tundras of Siberia. We have amongst the birds in Taronga Park a Jabiru, the only Australian member of the Stork family. There is no reason, however, why the European Stork should not be included in the birds of Taronga Park.

Most of the different species I have discussed are not easily kept in captivity, but stuffed specimens of all of these are housed in the Australian Museum. In not one of the many zoological gardens I have visited have I ever seen a Humming Bird, but I have since read that they have been successfully kept in captivity in the Regent's Park Zoological Gardens, London.

Few places remain in the world where so-called civilized man, sport-loving and destructive, has not penetrated, reduced, and in some cases exterminated the native fauna. Of these "preserves" I might mention the native states of India, in particular those where the Maharajah is an orthodox Hindu, and so averse to taking any life. So when travelling in Rajputana I was not surprised to see herds of antelope from the train. In Jaipur the monkeys, vultures, and peacocks are as tame as pigeons are with us. It only proves that wild animals and birds are not afraid of man if they are not molested. We have an instance of that nearer home with the wallabies at Jenolan Caves.

It is interesting to note that the Indian Lion, a maneless variety, which in the days of Nebuchadnezzar and Darius roamed over a large part of south-western Asia, only survives now in the native state of Kathiawar in western India, where the Rajah is preserving this animal in his state forest.

The last wild Indian lion, shot in 1859 near Gwalior, is an exhibit in the Bombay Natural History Museum.

In a trip from Cape to Cairo I was glad to see that civilization has not as yet entirely spoiled the African continent for the naturalist; large tracts of virgin country still provide shelter for wild animals and primitive natives. The Congo, one of Africa's mighty rivers, is a veritable paradise for a Nature lover.

Travelling down the river we passed vast papyrus swamps, an ideal home for myriads of waterfowl. The river narrows and the dark tropical forest comes up to the edge of the water, where monkeys and beautifully coloured birds can be seen in the trees; again the river widens and the forest changes to grassy savannahs, when a sight met my eyes that was unforgettable. Thousands of Lechwe Antelopes were browsing in the marshlands, young and old, with Water Buck and Sable Antelopes, with their gigantic horns, quite undisturbed by the approach of the steamer. No shooting is allowed from the river steamer, so these graceful animals take no alarm at a passing steamer. Birds there were in infinite variety and numbers: black and white Kingfishers, African Teal, Fish Eagles, perching on the overhanging branches of great forest trees; red and green Bee Eaters darting across the rivers in colourful flocks; Kavirodo Cranes elegantly poised on one leg; Shining Starlings; and, most plentiful of all through Africa, the Weaver Bird, which builds a quaintly shaped pensile nest. The Weaver Birds (*PLOCEIDÆ*) resemble Finches in size, colour and shape of bill. They construct retort-shaped nests composed of inter-laced grass and other similar materials. They nest in colonies and usually construct a number of dummy nests, a precaution to safeguard their young from the depredations of snakes and other marauders. The leaves are removed from the branches from which the nests are suspended, so as to make the approach of the enemy more easily visible.

Many Hippopotami came up to breathe, submerging again on catching sight of the steamer, and crocodiles lay sunning themselves on the river banks.

Of all the African animals the Giraffe is the most graceful, and fits in so beautifully with an African landscape. With its long neck and legs it looks like a survival of those prehistoric animals that roamed the earth thousands of years ago. I remember seeing a herd of twelve or fifteen giraffes, with their young, moving about among the Thornbushes and Acacias, feeding and paying scarcely any attention to us, and a sight more beautiful it would be difficult to imagine. Why anyone could bring himself to destroy these magnificent creatures I cannot understand. They are quite harmless, and they have no horns worth collecting as a trophy. When on Safari in Tanganyika I tracked a Giraffe for hours trying to get a snapshot, but was unsuccessful. A Giraffe can distinguish a man fully half a mile away, and, its head being so far above the lower bushes and thorn scrub, it has the advantage every time. Seeing one making a meal of the fine leaves of the Thornbush, I could not help wondering how it avoided lacerating its mouth with the sharp thorns which grow both ways. My African hunter companion informed me that, next to the Zebra, the Giraffe is still the most plentiful of the larger African Ungulata; no doubt due to the protection afforded it in many parts of Africa. Taronga Park possesses a fine specimen of this interesting animal.

Elephants (*Elephas africanus*) are still common in some parts of Africa, particularly in the Soudan. Probably no other area holds more of these animals nor heavier ivory. They could be seen in herds of from twenty to fifty from the steamer on the White Nile. The hundred and fifty mile stretch from Lado to Gondokoro represents today one of the remaining strongholds of the African Elephant. One day as the steamer approached rather close to the river bank a herd of elephants retired, but one cow with a calf, after erecting her huge ears to full stretch, and gazing intently for some seconds at us, threw up her trunk, trumpeting loudly, and charged directly towards the ship. The river stopped her, and she stood there watching us, furious and screaming. A flock of white Egrets rising out of the reeds usually indicate a herd of elephants, for these birds always ride on the back of elephants and feed on the parasitic tick.

Travelling on the Uganda railway from Mombassa to Nairobi we passed the Ukamba Game Reserve and saw quantities of game from the train: Hartebeest, the most common of all antelopes, Wildebeest (half antelope, half buffalo), Thomson's Gazelle, Burchell's Zebra, wild Ostriches, etc. Occasionally Buffalo, Rhinoceros, and even Lions are to be seen, though the last rarely show themselves in the open. For hours we had in sight the snow-clad peaks of Kilima-Njaro, sixty miles away. Most of these animals can be seen in Taronga Park.

It is not necessary to go overseas to be stimulated in the love of nature. Any suburban garden has its quota of wild birds, and even the most ordinary of our avian visitors are worth studying. My own garden on the North Shore line contains a considerable number and variety of native trees, and there I have recorded over a period of eight years seventy-four species of birds, amongst them the Oriole, Lambert Wren, Satin Flycatcher, and the Lyre Bird, whose incomparable mimicry makes him our most versatile feathered artist, and who amply repaid me for the sanctuary I gave him. A bird concert given by such artists as the Whistler, the Native Canary, the Thrush, etc., in the springtime, surpasses anything I have heard outside of Australia. Animals recorded in this same garden include Ring-tailed and Grey Opossum, Echidna and Bandicoot; and of lizards I have

seen the Goanna, Blue-tongued Lizard, Eastern Water Lizard, the Gecko, the Legless Lizard, and the Common Lizard.

The animal and bird life of Australia is unique and belongs to a past age, so for that reason it is particularly interesting. Several of our native species have become extinct within the last 100 years, and as indiscriminate shooting and the advancement of settlement proceeds, more species will disappear. Time is on the wing, and a biological survey of the fauna of Australia should be proceeded with without delay. This idea has been stressed by former Presidents of our Society, yet year after year goes by and nothing is being done. Other countries, notably America and Russia, are more alive to the economic value of such a survey. The Director of the Natural History Museum in Leningrad informed me that eight times more is spent under Soviet direction on zoological investigation than before the war.

It would be very desirable also to establish a chair of Economic Zoology in our Universities, and money donated by some of our wealthy citizens for that purpose would be well spent.

REPORTS OF SECTIONS.

AVICULTURAL SECTION.

Annual Report.

Shortly after his election as Chairman, Mr. Frank Buckle found that his daily avocation debarred him from carrying on his duties of Chairman of the Section, and he relinquished the position. Mr. Clifford Coles was duly elected in his stead.

The year on the whole has been a most successful and interesting one, 28 new members having been passed through this section alone.

The following lectures were ably delivered:

"The Avian Embryo", by Dr. Garnet Halloran.

"Diseases and Ailments of Aviary Birds and Their Treatment", by Mr. James.

"In Quest of the Blue Bird of Paradise", by J. E. Ward.

"Birds in Taronga Park", by Chas. Camp.

"The Trip to Moree", by Neville W. Cayley.

"The Danger of Aviculturists to our Native Bird Life", by J. R. Kinghorn.

"Pheasants and Pheasant Like Birds", by Frank Buckle.

"Bird Trapping and Experiences in New Guinea", by J. E. Ward.

"Some of the Dangers in Exotic Birds", by Clifford Coles.

In many cases the lectures were accompanied by interesting and appropriate slides.

During the year a successful and representative collection of Finches and Budgerigars was displayed at the annual show held in the Blaxland Galleries in conjunction with the Budgerigar Club.

The Section also handled a consignment of Finches from the Northern Territory for distribution among its members.

The average attendance for the year was 44, the maximum being 60 members at the May meeting, which speaks well for the popularity of the Section's meetings.

The names of some of our members were submitted to the Royal Agricultural Society and to the principal suburban avicultural societies for a list of judges from which to select adjudicators at their annual shows; and many and varied inquiries were received and answered during the year on avicultural matters generally.

G. A. DUNCAN,

Hon. Secretary.

BUDGERIGAR CLUB.

Annual Report.

I have to report that during the past twelve months the Budgerigar Club of New South Wales has been a very active body.

This Club suggested the formation of an Australasian Budgerigar Council, comprising delegates representing the numerous societies in each State and New Zealand. The co-operation of other States was sought, and a council was successfully inaugurated. Sixty-two members of this Club have been registered under the constitution of this council.

Regular monthly meetings of the Club have been held, and attendances at these averaged 33.

Keen interest has at all times been manifest, and the desire of members to assist in improving the world's most popular cage bird has at all times been in evidence.

Following up suggestions, embodied in last year's annual report, your committee undertook the great task of compiling a standard of perfection for Australia. In this undertaking assistance was sought from a wide range of local fanciers, together with many in Victoria and South Australia. The response was gratifying, and the various suggestions submitted greatly assisted your committee in this work. Many meetings were held, during which every detail was carefully discussed, and these were finally moulded into an ideal.

A detailed description of a model Budgerigar was compiled, together with a scale of standard points and a picture illustrating the ideal. These were subsequently submitted to the various societies in other States through the Australasian Budgerigar Council, and after a few minor alterations have now been accepted as the standard of perfection for Australia and New Zealand.

Great credit is due to our Chairman, Mr. Neville Cayley, who displayed skill, patience and a capacity for hard work in recording the committee's oral description of a standard bird in picture form, and your committee recognize that without his assistance its task would have been much more difficult.

Subsequently a list of colour definitions of the various coloured varieties was also compiled, and at the moment this is receiving the attention of the other States. When this has been finalized, it is suggested that the official standard and breeders' guide should be published by the Australasian Budgerigar Council.

Thus it will be seen that through the efforts of this Club, even though it is only in its second year of existence, much more has been achieved by Australian fanciers than has been done by the rest of the world over a period of upwards of ten years.

It is pleasing to report also that whilst your officials have been hard at work, they and many other members have been active in improving the quality of their stock by practising care and skill in their matings and methods of rearing, feeding and housing. This has resulted in a marked improvement in the quality of birds exhibited at the various shows held throughout the year, included in which were some splendid specimens of several of the new varieties that have been evolved in this State. Prominent amongst these, I feel it my duty to mention, is Mr. Harold Peir, to whom, I feel sure, you will extend congratulations. Mr. J. W. Catt has also had a very successful year and on all occasions exhibited birds of first class quality.

This Club, in conjunction with the Avicultural Section, organized its second annual show, which was brought to a successful issue at Farmer and Company's Blaxland Galleries, which were again placed at our disposal free of cost.

With a desire to encourage wide and even interstate competition, the directors of *The Sydney Mail* donated a unique and handsome challenge trophy, to be competed for by members of all clubs associated with the newly-formed Australasian Budgerigar Council. Birds competing for this trophy must be owned and bred by the exhibitor, and Mr. A. Ashton-Hansen is to be congratulated on being the first to win this coveted trophy.

A handsome cup was also awarded for the best greywing budgerigar of any colour in the show, and this was won by Mr. J. W. Catt.

Two very fine specimens that were given special mention by the judges were of a new shade, violet. These were exhibited by Mr. H. E. Peir and received favourable comment by breeders and visitors.

During the year it was resolved that this Club should only extend its patronage to shows which provided an approved schedule of classes and appointed a judge from this Club's official list, and it is gratifying to record that all societies that complied with our wishes were rewarded by substantial increases in their entries in the budgerigar sections of their shows.

Your retiring officers and committee look back with pleasure on their past year's work and trust that during the ensuing year still further progress may be made in fostering and improving the budgerigar fancy in Australasia.

ERNEST W. JONES,
Hon. Secretary.

MARINE ZOOLOGICAL SECTION.

Annual Report.

The annual meeting was held on 5th June, 1934, the close of the eighth year of the Section's activities, during which members attended in greater numbers and showed great interest in the proceedings. The Extension Committee has established a "Field-file" for recording abstracts of proceedings in MS., from which a summary can be prepared for publication. A "Documentary Library" was planned, and the compilation of popular reference lists of local authors and literature relating to Marine Zoology, beginning with the writings of systematic workers in Ichthyology and Conchology.

The following is a summary of the lectures delivered during the year:

1933—

- 3rd July: "A Naturalist with the A.I.F.", by J. R. Kinghorn.
- 7th August: "The Whitsunday Passage", by F. A. McNeill.
- 4th September: "Natural History Reminiscences", by Dr. G. A. Waterhouse.
- 3rd October: "Superstitions Regarding Animals", by M. Ward.
- 6th November: "Rambles in Westralia", by G. P. Whitley.
- 4th December: "Marine Divisions of Australian Fauna", by T. Iredale.

1934—

- 5th February: "Shells in Art and Industry", by Miss Joyce K. Allan.
- 5th March: "The Foreshore Life of the Port Jackson District", by A. Musgrave.
- 3rd April: "Fishes of the South Seas", by G. P. Whitley.
- 7th May: "Primitive Fishing and Magic", by F. D. McCarthy.
- 5th June: "The Fishes of New South Wales: New Additions to the Check List", by G. P. Whitley.

T. IREDALE,
Acting Chairman.

G. CHARTER SMITH,
Hon. Secretary.

ORNITHOLOGICAL SECTION.

Annual Report.

During the past twelve months considerable interest was manifested in the lectures given, and increased attendances at times taxed the seating capacity of the room. A record number of 65 members and friends was present at the February meeting, and an average attendance of 43 compares more than favourably with the previous year's average of 34.

In the field members maintained the high standard of previous years and the observations recorded in the minutes were extensive and full of interest, while it is a matter for pride that so many of the papers and photographs appearing in the *Emu* were contributed by members of this Section.

Excursions, organized each month by the Honorary Field Secretary, Mrs. Messmer, were well attended by members, and good use was made of the bird cabin at National Park during week-ends and holidays.

Many excellent photographs were procured, and in this regard Mr. Norman Chaffer is to be congratulated on his fine results with the cinematograph, and Mr. J. S. P. Ramsay for his ingenious adaptation of the Leica camera to bird work.

Mr. Neville Cayley's reputation as an author and artist was further enhanced by the publication during the year of his book, "The Budgerigar in Bush and Aviary". This authoritative treatise is an undoubtedly valuable addition to the literature of both aviculture and ornithology, and as such received instant recognition both here and abroad. We offer our congratulations to Mr. Cayley on his work.

A summary of the lecturettes delivered at the monthly meeting is here appended:

1933—

- 21st July: Mr. H. J. Marshall: "Through Tropic Queensland."
- 18th August: Mr. C. J. Coles: "Reminiscences of a Birdman."
- 15th September: Mr. T. Iredale: "Early Australian Ornithologists."
- 20th October: Mr. A. Musgrave: "A Naturalist on the Nepean."
- 17th November: Mr. M. Sharland: "Rambles of a Bird Observer."
- 15th December: Social evening.

1934—

- 19th January: Mr. Neville Cayley: "The Budgerigar in Bush and Aviary."
- 16th February: Messrs. Chaffer, Musgrave and Ramsay: "The Moree Camp-Out."
- 16th March: Mr. J. R. Kinghorn: "Birds and Agriculture."
- 20th April: Mr. T. Iredale: "Problems of Bird Migration."
- 18th May: Mr. A. S. Le Souef: "With a Cinema Camera in Taronga Park."
- 15th June: Mr. K. A. Hindwood: "Camps in Bird-Land."

R. EMERSON,

Hon. Secretary.

SYLLABUS OF SECTIONAL MEETINGS.

September, 1934, to June, 1935.

AVICULTURAL SECTION (Second Monday in the Month)—

1934.

September 10.—“Fifteen Years in North Australia”, by C. Price Conigrave.

October 8.—“Sea Birds”, by Tom Iredale.

November 12.—“Bird Reactions”, by A. S. Le Souef.

December 10.—“Birds of Prey”, by Neville W. Cayley.

1935.

January 14.—“African Lovebirds (Agapornis)”, by Clifford Coles.

February 11.—“Bird Life in the Northern Territory”, by E. W. Jones.

March 11.—“Experiences in Bird Transport”, by C. Camp.

April 8.—“Birdy Matters”, by Harold Peir.

May 13.—“Experiences with Aviary Birds”, by Jack Murray.

June 10.—Annual Meeting.

BUDGERIGAR CLUB (Third Tuesday in the Month)—

1934.

September 18.—“Birds with a Camera”, by M. S. R. Sharland.

October 16.—“The Cult of the Goldfish”, by T. C. Roughley.

November 20.—“Birds of Sydney-side”, by K. A. Hindwood.

December 18.—“Quail”, by Neville W. Cayley.

1935.

January 15.—

February 19.—

March 19.—

April 16.—

May 21.—

June 18.—Annual Meeting.

} Subjects to be arranged.

MARINE ZOOLOGICAL SECTION (First Monday in the Month, except when a Public Holiday; then on First Tuesday)—

1934.

September 3.—“A Trip to the Ballarat Trout Hatchery”, by Dr. Spiller Brandon.

October 2 (Tuesday).—“Destructive Organisms”, by R. A. Johnson.

November 5.—“Wild Fishes and their Domestic Habits in the Aquarium”, by A. K. Carter.

December 3.—“The Lure of the Loricata”, by A. F. Basset Hull.

1935.

(No meeting will be held in January.)

February 4.—“How Shells Look After Themselves”, by Miss Joyce K. Allan.

March 4.—“The Fishes of New Zealand”, by Gilbert P. Whitley; and “The Fishing Methods of the Maori”, by F. D. McCarthy.

SYLLABUS OF SECTIONAL MEETINGS—*Continued.*

April 1.—“The Romance of Sea-bird Migration”, by T. Iredale.

May 6.—“Marine Worms”, by W. Boardman.

June 4 (Tuesday).—Annual Meeting and Chairman’s Address:
“Adaptations Among Crustaceans”, by F. A. McNeill.

ORNITHOLOGICAL SECTION (Third Friday in the Month)—

1934.

September 21.—“Bird Mapping and Distribution”, Professor J. Macdonald Holmes.

October 19.—“Aviculture and Ornithology”, by Clifford Coles.

November 16.—“The Coolah Valley”, by P. A. Gilbert.

December 21.—Social Evening.

1935.

January 18.—“Bird Life in Antarctica”, by C. F. Laseron.

February 15.—“Bird Photography with a Leica”, by J. S. P. Ramsay.

March 15.—“Birds of Houtman’s Abrolhos Islands”, by C. Price Conigrave.

April 26 (Fourth Friday).—“Bird Behaviour”, by K. A. Hindwood.

May 17.—“Lyre Birds”, by M. S. R. Sharland.

June 21. Annual Meeting. Address by Neville W. Cayley.

Sectional meetings are held in the Society’s Room, 28 Martin Place, commencing at 7.30 p.m. Members and Associates may bring friends.

NATURE NOTES.

The Lyrebird.

References to an experiment which is being made by Mr. John Coyle, of Springwood, to breed Lyrebirds in captivity, was made at the July meeting of the Ornithological Section of the Society. A pair of birds, it was reported, had become so fearless in the presence of human beings as to perch on the arms and shoulders of visitors. A nest had been built in the enclosure in which they are kept, but no egg had yet appeared, although the nest had been completed some weeks.

Mr. Neville Cayley referred to a statement made by Mr. Coyle and published in the *Sydney Morning Herald*, that although the captive male Lyrebird was four years of age, it had not obtained its complete tail feathers, a fact which indicated that Lyrebirds lived to a considerable age.

Incidentally, Mr. Coyle has informed a member of the Society that wild Lyrebirds, after a certain age, acquire two extra feathers in the tail, making the complete number 18, instead of 16, as has hitherto been described by ornithologists. He is, however, uncertain of the period at which these appear, but believes it must be after the bird has reached its twelfth year.

Correspondence concerning the Lyrebird which appeared in the columns of the *Sydney Morning Herald* was also discussed at the meeting, more especially one statement by a writer that he had once seen a male Lyrebird hiding twin young ones behind a rock. Mr. Clifford Coles expressed the opinion that, in spite of statements that had been made to the contrary throughout the years, there was no authentic case of two eggs having been found together in a Lyrebird's nest, or of two young ones ever having been reared at the same time.

M. S. R. SHARLAND.

Authentic Life Record of a Stone Curlew.

In Rockdale, a suburb of Sydney, an old resident of the district, whom I have known personally for some years, keeps a fine specimen of a Stone Curlew, which readily answers to the name of "Curly". Towards the end of this year (1934) he will celebrate his twenty-ninth birthday. As far as Mr. J. R. Kinghorn, ornithologist of the Australian Museum, knows, no other bird of this species has reached this age in captivity in Australia.

This bird came from Alstonville, on the Richmond River, near Casino, N.S.W. In his third year he was brought to Sydney, his days from then on being spent in three different suburbs. During his life he has always been allowed absolute freedom in the garden, keeping guard about the house like a faithful hound, every now and then giving forth that mournful cry so characteristic of these birds. Despite his seasonal attacks of rheumatism and gout (or whatever old birds get!), he seems good to pace his domain for several more years yet, to meet the stranger at the gate with that watchful twinkle in his eye which belies his real age.

This record I can state as absolutely authentic: I have watched the Curlew myself for over 20 years.

W. H. P. KINSELA,

Member, Anthropological Society, N.S.W.

Australian Museum,
College Street, Sydney,
27th April, 1934.

Nail-tailed Wallabies.

There are three well-marked species of Nail-tailed Wallabies, so named from the possession of a hard appendage at the tip of the tail, the origin and use of which is obscure.

The largest of the genus *Onychogale unguifera* inhabits the northern part of the continent. It is rather rare in collections, and practically nothing is known of its habits. The following notes, supplied by Mr. Albert De Lestang of Burketown, North Queensland, are of special interest. They came in request for information regarding a specimen sent to the Australian Museum.

"It is found throughout this locality, westward of Burketown; is common but widely scattered, feeding in company with the Agile (*Wallabia agilis*), but also found at times by itself or in company with one or two mates on the plains or open timbered country; occasionally at long distances from water in the scrubby highlands, going to water in the evening and at night. It is thus unlike the Agile, which loves to camp by day in the shady undergrowth and under palms fringing the ever-running streams. It camps in the long grass in the plains or under shady bushes in timbered country near its feeding ground. When moving lazily it folds one arm or shakes them both in a playful manner, but if pursued it emits shrill cries. It is very fast, much faster than the Agile."

Mr. Harry Barnard, of Brisbane, has also met with this species in the field, and specially mentions its peculiar cry, which is frequently heard in the bush near its habitations.

A. S. LE SOEUF.

Movements of the Fairy Penguin, *Eudyptula minor*.

This species, which is so abundant off the southern Australian coasts, is the smallest of this interesting family of sea birds. It has an awkward gait on land, being more of a shuffle than a walk, but it can run, if occasion warrants it, fairly fast. In the water its pace and activity are astonishing, being much faster than any fish of similar size that I have been able to observe. Small fish on which it feeds have no chance of escape if a penguin sets off in pursuit. Its speed under water is seemingly better than when swimming on the surface. It is interesting to note that the only means of propulsion is the wing, as the feet are carried straight out behind and are not used as are those of other water birds. It literally "flies" under water and can turn almost at right angles. It returns with its prey to the top before swallowing it.

Each of the birds at present housed in Taronga Aquarium eats a little less than a quarter of a pound of cut up fish per day.

The call of this penguin is very loud for the size of the bird, and pairs or parties are inclined to sing in chorus.

A. S. LE SOEUF.

LIST OF MEMBERS

As on 31st August, 1934.

Note.—Unless otherwise specified, members are residents of the State of New South Wales.

Members will oblige by notifying the Honorary Secretary of any change of address.

PATRONS.

His Excellency the Governor, Air Vice-Marshal Sir Philip Woolcott Game, G.B.E., K.C.B., D.S.O.
His Excellency the Lieutenant-Governor, Sir Phillip Street, K.C.M.G.

ASSOCIATE BENEFACTORS.

Albert Littlejohn, 9 Young Street, Sydney.
Walter and Eliza Hall Trust, 117 Pitt Street, Sydney.
Gustavus Athol Waterhouse, D.Sc., B.E., 39 Stanhope Road, Killara.

FELLOWS.

Burrell, Harry, "Yarrenbool", Manilla.
Carter, Herbert James, B.A., F.E.S., "Garrawilla", Kintore Street, Wahroonga.
Cayley, Neville W., 42 Newcastle Street, Rose Bay, Sydney.
Chisholm, A. H., *The Argus* Office, Melbourne.
Dakin, Professor William John, The University, Sydney.
Froggatt, Walter Wilson, 24 Young Street, Croydon.
Hull, Arthur Francis Basset, C.F.A.O.U., Box 704, G.P.O., Sydney.
Iredale, Tom, "Solander", Queenscliff Road, Manly.
Musgrave, Anthony, Australian Museum, Sydney.
Roughley, Theodore Cleveland, Technological Museum, Sydney.
Tillyard, Robin John, D.Sc., F.R.S., Division of Economic Entomology, Canberra, F.C.T.
Turner, Dr. A. Jefferis, Wickham Terrace, Brisbane, Queensland.
Waterhouse, Gustavus Athol, D.Sc., Stanhope Road, Killara.
Whitley, Gilbert Percy, Australian Museum, Sydney.

HONORARY MEMBERS.

Buchanan, Robert, National Park, Audley.
Dunbabin, Thomas, "Sun" Office, Sydney.
Johnston, Professor T. Harvey, The University, Adelaide, South Australia.
Le Souef, E. A., Margaret River, South West, Western Australia.
Lyell, George, Gisborne, Victoria.
Minchin, A., Zoological Gardens, Adelaide, South Australia.
Sherborn, Dr. Charles Davies, British Museum (Natural History), Cromwell Road, London.
Stiffe, R. J., 350 George Street, Sydney.
Waterhouse, Mrs. G. J., 19 Mackenzie Street, Lindfield.

LIFE MEMBERS.

Austin, Thos. P., "Talbragar", Kuringai Chase Avenue, Turramurra.
Buckle, Frank, Berowra.

Cohen, George Judah, 10 Spring Street, Sydney.
 Coles, Clifford, Bancroft Avenue, Roseville.
 Dangar, R. H., "Turee", Coolah.
 Dellow, Walter Joseph, 32 Alibone Street, Ashfield.
 Dixson, Robert Craig, J.P., 33 Hunter Street.
 Dixson, William, Gordon Road, Killara.
 Foreman, Dr. Joseph, "The Astor", Sydney.
 Gurney, W. B., Department of Agriculture, Box 36A, G.P.O., Sydney.
 Halloran, Aubrey, B.A., LL.B., Bull's Chambers, 28 Martin Place, Sydney.
 Hordern, Mrs. Nora Ebsworth, Belltrees, Scone.
 Hordern, Sir Samuel, "Babworth House", Darling Point, Edgecliff.
 King, Sir Kelso, K.B., Mercantile Mutual Insurance Co., 117 Pitt Street, Sydney.
 Levien, Robert Henry, 49 Wycombe Road, Neutral Bay.
 Minell, Mrs. Dorothy Ebsworth, 15 Wyuna Road, Point Piper.
 Nash, Albert Edward, 15 Beresford Chambers, 76 Pitt Street, Sydney.
 Spain, Col. Alfred, V.D., 16 Spring Street, Sydney.
 Spring, Robert Alexander, "Woodford", St. Elmo Street, Mosman.
 Troughton, Ellis Le Geyt, Australian Museum, Sydney.
 Turner, W. H., 476 Pitt Street, Sydney.
 White, Alfred Henry, Belltrees, Scone.

ORDINARY MEMBERS.

Abbott, Mrs. A. L., Violet Hill, Dungog.
 Adey, A. R., 107 Castlereagh Street, Sydney.
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Nubling, Erwin, Flat 2, 23 Hughes Street, Potts Point.
 O'Brien, B., 541 King Street, Newtown.
 O'Brien, N., 525 King Street, Newtown.
 Oliver, Arthur W. L., Custom House, Shanghai, China.
 Oliver, W. R. Brooks, Dominion Museum, Wellington, New Zealand.
 Owens, H., 88 Sproule Street, Lakemba.
 Paine, Mervyn, Seaforth Crescent, Manly.
 Patterson, E., Woodford Street, Northwood.
 Paul, H. G., c.o. H. Jockel, Mathews Chambers, The Corso, Manly.
 Paul, H. J., 2 Gerrard Street, Cremorne.
 Pearson, R. B., Quantambone, Brewarrina.
 Peir, P. A., Rockdale.
 Peters, V., Mt. Auburn Road, Auburn.
 Phelps, J., 75 Ben Boyd Road, Neutral Bay.
 Poacher, Herbert, 459 Liverpool Road, Croydon.
 Pocock, H. W., c.o. Nock & Kirby, Ltd., 188 George Street, Sydney.
 Polak, J. M., 154 Castlereagh Street, Sydney.
 Priestley, E. A., 15 Goddard Street, Arncliffe.
 Pring, E. H., 24 Highfield Road, Lindfield.
 Probsthain, Arthur, 4 Great Russell Street, London, W.C.1.
 Quiney, H. R., 16 Clovelly Road, Randwick.
 Ramsay, J. S. P., 55 George Street North, Sydney.
 Relton, H., junior, 19 Village High Road, Vacluse.
 Reynolds, J. W.
 Rhodin, C., Kyle Parade, Blakehurst.
 Richardson, A., Piggott Street, Dulwich Hill.
 Ridley, D. M., Vale Avenue, Dee Why.
 Risby, Miss D., 26 Cremorne Road, Cremorne.
 Ross, C. S., 36 Harnett Street, Marrickville.
 Royal Zoological and Acclimatization Society of Victoria, Royal Park,
 Melbourne.
 Salmon, H., 86 Charles Street, Ryde.
 Sands, F. W., 37 Duncan Street, Arncliffe.
 Sandoz, S. E., "Croissy", Ferry Street, Hunter's Hill.
 Scott, Cecil Baliol, Whitton.
 Sears, Miss C., 539 New South Head Road, Double Bay.
 Seaward, William Trotman, "Myala", Scone.
 Shoults, F., 8 Bembridge Street, Kogarah.
 Scott, J. F., Bank of Australasia, Martin Place, Sydney.
 Sharland, M. S., c.o. "Sydney Morning Herald" Office, Pitt St., Sydney.
 Sharp, J. H., 1 Moore Street, Campsie.
 Shaw, J. H., Osborne Avenue, Ryde.
 Sheridan, Miss Helen, 36 Stuart Street, Longueville.
 Shutt, S. E., 39 Hocking Avenue, Earlwood.
 Smith, G. H., "Cremona", Harrow Road, Lidcombe.
 Smith, Miss Gladys Charter, "Capri", Deewhy.
 Smith, Miss Vera Irwin, 13 Upper Cliff Road, Northwood.
 Smith, W. R., 28 Tindale Road, Artarmon.
 Springall, C. W., 478 Mowbray Road, West Lane Cove.
 Springall, K. W., 478 Mowbray Road, West Lane Cove.
 Stacey, T. D., 27 Watson Street, Bondi.
 Steeles, C. E., 70 Bayview Street, Undercliffe.
 Stewart, A., 443 Parramatta Road, Leichhardt.
 Tancred, P. H., 10 Hardy Street, South Ashfield.
 Taylor, H. W., 27 Bathurst Street, Woollahra.

Thackway, A. E. J., "Wyoming", Albyn Road, Strathfield.
Thomas, J. F., Tenterfield.
Thomson, Dr. R. M., Chapel Road, Bankstown.
Thurman, A. J., Anthony Street, Croydon.
Thurman, F., 84 Edwin Street, Croydon.
Thurman, W. A., 254 George's River Road, Croydon Park.
Tipper, J. D., 72 Midson Road, Epping.
Tomlin, Miss M. N., 148 Blues Point Road, McMahon's Point.
Trewartha, F. J., Lane & Trewartha Ltd., 108 Hunter Street, Newcastle.
Vaughan, O., 29 Highland Avenue, Gordon.
Wachsmann, A. C. W. de B., Beecroft.
Ward, James, 167 Victoria Street, Dulwich Hill.
Ward, J. E., 10 Ewenton Street, Balmain East.
Warner, Miss E. M., Box 1595, G.P.O., Sydney.
Watkins, G. W., *Sydney Morning Herald* Office, Sydney.
Webster, Mrs. T., 20 Park Road, Kogarah.
Webster, T. E., 20 Park Road, Kogarah.
Weeding, Rev. Benjamin J., Methodist Manse, Hallett, South Australia.
White, F., 33 Short Street, Homebush.
Whitehouse, N. V., 183 George Street, Brisbane, Queensland.
Whiteley, A., 17 East Crescent, Hurstville.
Whitley, P. N., 9 Dundas Street, Coogee.
Whitley, Mrs. P. N., 9 Dundas Street, Coogee.
Wilks, E. r., 42 Beach Street, Coogee.
Wilks, H. O., 124 Castlereagh Street, Sydney.
Williams, Amos E., Bullembalong Road, Berridale, via Cooma.
Williams, George Richard, 34 Rowe Street, Eastwood.
Williams, Miss G. M., "Seacombe", Wolseley Street, Drummoyne.
Wise, Miss Mary I., P.O. Box 53, Sale, Victoria.
Withers, Miss N. J., 9 St. John's Avenue, Gordon.
Worth, G., 14 Renwick Street, Marrickville.
Woods, R. F., 81 Grasmere Road, Cremorne.
Woods, C. W., 30 Jome Street, Pymont.
Youngmann, H., 13 School Parade, Marrickville.

MEMORANDUM

AND

ARTICLES OF ASSOCIATION

OF THE

ROYAL ZOOLOGICAL SOCIETY OF NEW SOUTH WALES.

With Rules made under Article 40. As amended, and in force on
1st July, 1934.

[Copy.]



NEW SOUTH WALES.

CERTIFICATE OF INCORPORATION.
No. 58443.

The Companies Act 1899.

I CERTIFY that an Association styled "ROYAL ZOOLOGICAL SOCIETY OF NEW SOUTH WALES" has been registered this day as a limited company, the Governor-in-Council having directed such Association to be registered with limited liability without the addition of the word "limited" to its name, pursuant to the provisions of Section 52 of the Companies Act, 1899.

GIVEN under my hand at Sydney this Seventeenth day of August,
One thousand nine hundred and seventeen.

(Signed) J. W. CROKER,

Assistant Registrar of Joint Stock Companies.

Association not for Profit.

MEMORANDUM OF ASSOCIATION
OF THE
**ROYAL ZOOLOGICAL SOCIETY OF NEW SOUTH
WALES.**

1. The name of the Association is the "ROYAL ZOOLOGICAL SOCIETY OF NEW SOUTH WALES" and it is hereinafter referred to as the Society.

2. The registered office of the Society shall be situate in such place in the City of Sydney or its suburbs as the Council of the Society may from time to time determine.

3. The objects of the Society are:

- (a) To promote and advance the Science of Zoology.
- (b) To protect preserve and study the indigenous and introduced animals of Australia.
- (c) To introduce and acclimatise desirable and suitable animals from abroad.
- (d) To establish equip and maintain or assist in the establishment equipment and maintenance of biological stations in suitable localities within the State of New South Wales for the purpose of investigation observation and record of the life histories of the indigenous Fauna.
- (e) To promote hold and/or convene any congress of societies or individuals for the purpose of discussing zoological subjects and of taking such action in relation to Zoology as may be determined upon at any such congress.
- (f) To care for maintain treat and observe wild animals in captivity or otherwise.
- (g) To join with any other Society either within or outside of Australia in promoting the study of Zoology in all its branches.
- (h) To provide and maintain such premises libraries museums scientific collections laboratories and other scientific accessories and conveniences as may be deemed necessary or requisite for the information entertainment demonstration education convenience and use of the members of the Society.
- (i) To furnish and equip all and every such premises libraries museums laboratories accessories and conveniences.
- (j) To take over the assets and liabilities of any Society or Corporation having objects wholly or in part similar to the Society and in particular of the unincorporated Society known as the Royal Zoological Society of New South Wales.

- (k) To print publish and distribute or cause to be printed published and distributed any magazines pamphlets periodicals books or leaflets which the Society may think desirable for the diffusion of useful knowledge with respect to the animal kingdom and for the promotion and achievement of its objects.
- (l) Subject to the provisions of the Companies Act 1899 Section 53 to purchase take on lease (including building or improving lease) or in exchange hire or otherwise acquire any real and personal estate which may be necessary or convenient for any of the purposes of the Society.
- (m) To construct maintain demolish repair renew replace and alter any houses improvements buildings fixtures fittings or works necessary or convenient for the purposes of the Society.
- (n) To take or accept any gift whether subject to any special trust or not for all or any of the objects of the Society.
- (o) To sell manage lease mortgage dispose of or otherwise deal with all or any part of the property of the Society.
- (p) To borrow and raise money in such manner as the Society may think fit.
- (q) To invest any moneys of the Society not immediately required for any of its objects in such manner as may from time to time be determined.
- (r) To promote establish subsidise and support and to aid in the promotion establishment and support of any branch or affiliated associations and to inaugurate and carry out any scheme or system of affiliation.
- (s) To promote the passing of or enforcing or to join with any other Society or any body or persons in having passed or enforced any legislation having for its object the preservation or protection of the Fauna of New South Wales or elsewhere in Australia or any other object in connection with Zoology.
- (t) To offer give or contribute towards any scholarship prize medal or award for any research literary contribution article essay or effort connected with Zoology or any kindred or interdependent study.
- (u) To apply the profits (if any) or other income of the Society for the promoting of the above objects.
- (v) To do all such other lawful things as are incidental or conducive to the attainment of the above objects.

4. The income and property of the Society whencesoever derived shall be applied solely towards the promotion of the objects of the Society as set forth in this Memorandum of Association and no portion thereof shall be paid or transferred directly or indirectly by way of dividend or bonus or otherwise howsoever by way of profit to the persons who at any time are or have been members of the Society or to any of them or to any person claiming through them or any of them. Provided that nothing herein contained shall prevent the payment in good faith of remuneration to any officers or servants of the Society or to any member of the Society or other person in return for any services actually rendered to the Society.

5. The fourth paragraph of this Memorandum of Association is a condition upon which a license is granted by the Governor to the Society in pursuance of section fifty-two of the Companies Act 1899.

6. If any member of the Society pays or receives any dividend bonus or other profit in contravention of the terms of the fourth paragraph of this Memorandum his liability shall be unlimited.

7. Every member of the Society undertakes to contribute to the assets of the Society in the event of the same being wound up during the time that he is a member or within one year afterwards for payment of the debts and liabilities of the Society contracted before the time at which he ceases to be a member and of the costs charges and expenses of winding up the same and for the adjustment of the rights of the contributories amongst themselves such amount as may be required not exceeding one pound or in case of his liability becoming unlimited such other amount as may be required in pursuance of the last preceding paragraph of this Memorandum.

8. If upon the winding up or dissolution of the Society there remains after satisfaction of all its debts and liabilities any property whatsoever the same shall not be paid to or be distributed among the members of the Society but shall be given or transferred to the Taronga Zoological Park Trust or to such other body or institution as shall be directed or approved by the Chief Secretary for the State of New South Wales for the time being holding office.

ARTICLES OF ASSOCIATION
OF THE
**ROYAL ZOOLOGICAL SOCIETY OF NEW SOUTH
WALES.**

INTRODUCTORY.

1. None of the regulations contained in the Table marked A in the second Schedule to the Companies Act 1899 shall be the Regulations of this Society.

2. These Articles shall be construed with reference to the provisions of the said Companies Act 1899 and any Act amending the same and terms used in these Articles shall be taken as having the same respective meanings as they have when used in those Acts.

3. The expression "the Society" hereinafter used shall mean this Society and the expression "the unincorporated Society" hereinafter used shall mean the present unincorporated body or association of persons known as the Royal Zoological Society of New South Wales and the expression "the Council" shall have the meaning given to it by Article 17 hereof.

4. The Society for the purpose of registration is declared to consist of twenty members but the Council of the Society may from time to time register an increase of members.

MEMBERS.

5. The Society shall consist of (a) ordinary members limited in number to three hundred (b) associate members unlimited in number (c) honorary members not exceeding at any one time ten in number and (d) honorary associate members not exceeding at any one time five in number for each section of the Society.

6. In these Articles whenever the word "member" is used without qualification it shall be deemed to include ordinary and honorary members.

member of the Council and elected by a majority of the Council present at a meeting thereof: Provided that not less than three weeks' notice in writing of the intention to propose such honorary member shall have been given at a meeting of the Council: Provided further that honorary members of the unincorporated Society shall be entitled to become honorary members of the Society upon notifying the secretary as provided by Article 7. Honorary members shall be entitled for such period as the Council may determine on election to all the privileges and rights of ordinary members excepting the right to vote at any meeting of the Society. Honorary associate members shall be persons not resident in New South Wales who have rendered distinguished service to Australian Zoology. They shall be elected by a majority of the Council present at a meeting thereof upon nomination by a duly convened meeting of a section of the Society. Honorary associate members shall be entitled for such period as the Council may determine on election to all the privileges and rights of associate members.

15. Every ordinary or associate member having paid all arrears of subscriptions due to the Society and every honorary member of the Society shall be at liberty to withdraw therefrom upon giving notice of such withdrawal to the Council in writing on or before the thirty-first day of May in any year.

16. No member retiring from the Society or ceasing from any cause to be a member shall be entitled to or have any claim upon any portion whatever of the property of the Society.

COUNCIL AND OFFICERS.

17. The affairs and undertakings of the Society shall be managed by a Council which shall consist of eighteen persons who must be ordinary or honorary members of the Society and shall act in an honorary capacity as members of such Council. The members of the first Council of the Society shall be the present members of the Council of the unincorporated Society who shall subject to these Articles retain office in the Society until the next Annual General Meeting of the Society to be held in the year 1918. For the purposes of record and identification the first members of the Council of the Society are as follows:

President: Arthur Francis Basset Hull, R.A.O.U.

Vice-Presidents: Herman E. Finckh; Walter Wilson Froggatt, F.L.S., F.E.S.; Alfred Edmund Jaques; Sydney Thomas Doidge Symons, M.R.C.V.S.

Honorary Treasurer and Secretary: Gustavus Athol Waterhouse, B.Sc., B.E., F.E.S.

Council: John Honeyford Campbell; Henry George Chapman, M.D., B.S.; Sydney Dodd, V.D.Sc., F.R.C.V.S.; Ernest Arthur D'Ombraïn, M.B., B.S.; Charles Hedley, F.L.S.; Stephen Jason Johnston, D.Sc., B.A.; Allan Riverstone McCulloch; William Joseph Rainbow, F.E.S.; William Charles Shipway; David William Campbell Shires; Colonel Alfred Spain, V.D., F.I.A.; Robert Henry Todd, M.D., F.R.C.S.I.

17A. The Council shall have power to confer the following titles:

(a) Upon any person corporation or trust who or which has contributed to the funds of the Society:

(i) A sum of not less than one thousand pounds the title "Endowment Member";

(ii) A sum of not less than five hundred pounds the title "Benefactor";

(iii) A sum of not less than one hundred pounds the title "Associate Benefactor".

(b) Upon any ordinary or associate member who has rendered valuable service to the Society or to Australian Zoology the title "Fellow".

18. The Council may appoint any patrons and vice-patrons of the Society who need not be members thereof and may also appoint any temporary substitute for the honorary secretary or honorary treasurer and any additional secretaries or assistant secretaries or other officers for special duties.

19. The Council may at any time remunerate by fixed salary or otherwise any of the honorary officers of the Society whereupon the honorary office filled by such officer shall *ipso facto* become suspended while such officer is receiving remuneration and he shall cease to be a member of the Council during such period.

20. The Council may appoint committees and sub-committees for any special object and may delegate to any such committee or sub-committee the functions and powers of the Council relating thereto. All proceedings of a committee or sub-committee shall be reported to the Council. Any member of the Society may be so appointed.

ELECTION OF COUNCIL.

21. Each candidate for membership of the Council shall be nominated by two ordinary members of the Society and the names of all such candidates together with the names of their nominators shall be delivered or posted to the President in sufficient time to reach him at least seven days before the Annual General Meeting. Each such nomination shall be accompanied by the consent in writing of the candidate proposed or such other evidence of consent as may be accepted by the President.

22. Not less than six of the existing or elected members of the Council shall retire from office each year and the vacancies thus created shall be filled up at the Annual General Meeting by election by ballot from among the ordinary members or honorary members of the Society nominated as provided by Article 24 and retiring members of the Council shall be eligible for re-election.

23. The retiring members of the Council shall include all who during the preceding year have been elected by the Council to fill vacancies as provided by Article 26 and whenever less than six vacancies shall be thus created the number of vacancies shall be increased to six by the retirement of those members who shall have been longest in office and in this respect the holding of office in the Council of the unincorporated Society shall be taken into account. In the event of there being more members of equal service than the number required to make up the number of vacancies to six the members to retire shall be determined by lot at a meeting of the Council held prior to the Annual Meeting.

24. At a meeting of the Council held before the 30th day of June in each financial year a list of members of the Council shall be prepared indicating those whose seats are to be vacated in accordance with the provisions of Article 23 and a copy of such list shall be sent to each ordinary member of the Society by posting the same to his address as contained in the Society's Register of Members fourteen days before the Annual General Meeting.

25. In the event of no candidates being nominated as hereinbefore provided or of the nomination falling short of the full number required or being void through any informality or through want of qualification on the part of the candidates or their nominators all such deficiencies may be supplied by election by ballot of qualified candidates then and there proposed at the Annual General Meeting.

26. If between two Annual General Meetings a vacancy in the Council occurs the Council may appoint an ordinary member of the Society to fill such vacancy.

27. The seat of a member of the Council shall become vacant if he shall become insolvent if he shall be convicted of any misdemeanour or felony or if he shall become from any cause incapacitated from attending to his duties.

28. If any member of the Council absents himself from all meetings of the Council for three consecutive months without the leave of the Council or without written explanation tendered within fourteen days after the third of such meetings the Council may declare his seat vacant and elect an ordinary member to fill such vacancy.

MEETINGS OF COUNCIL.

29. The Council shall meet as often as they shall deem it expedient but at least once in every three months and five members present shall form a quorum. A meeting of the Council may be summoned at any time by the Secretary by direction of the President or by the honorary secretary on the written request of at least three members of the Council. In the absence of the President from any meeting the chair shall be taken by one of the Vice-Presidents who shall be elected if more than one are present and in the absence of the President and all the Vice-Presidents the members present shall elect one of their number to the chair.

ELECTION OF OFFICERS.

30. The officers of the Society shall be elected annually by the Council from among their number at a meeting of Council to be held within fourteen days after the Annual General Meeting. The following officers shall be so elected: President four Vice-Presidents Honorary Secretary Honorary Treasurer Honorary Editor and Honorary Librarian.

AUDITOR.

31. A professional Accountant shall be appointed by the Council as Auditor at such remuneration and for such term as the Council may determine. No member of the Council shall be eligible for such appointment. The annual accounts of the Society shall be examined and the correctness of the balance sheet certified by the Auditor.

DUTIES OF OFFICERS.

32. The duties of the President shall be to preside at all meetings of the Society and Council to regulate all the proceedings thereat and generally to execute or see to the execution and proper carrying out of these Articles and the resolutions of the Society or Council.

33. The Honorary Treasurer or his representative duly authorised or appointed by the Council shall demand and receive for the use of the Society all moneys due or payable to the Society and shall keep full and particular accounts of all sums so received. An account or accounts in the name of the Society shall be kept in such bank and operated on in such manner as the Council may direct. The Honorary Treasurer shall pay all accounts and require receipts for the same and

shall lay before the Council at each meeting a statement of the moneys expended according to warrant since the preceding meeting with vouchers for the same. He shall prepare and produce balance sheets whenever required by the Council so to do and shall keep separate accounts of the moneys voted for separate purposes and a general account of all moneys received and expended by the Society. The accounts shall be made up to the end of June in each year and be audited in the month of July following by the Auditor and the Honorary Treasurer shall lay the account so audited before the next Annual General Meeting.

34. The Honorary Secretary shall attend all meetings of the Society and Council and any committee or sub-committee thereof if and when required so to do. He shall keep the minutes of all such meetings conduct all correspondence issue notices of meetings keep proper books and generally perform all such duties as are usually performed by any officer in the like position. He shall keep and maintain thoroughly and efficiently a register to be called the Register of Members.

35. The Honorary Editor shall have charge under the direction of the Council or a sub-committee thereof of the printing and publishing of the reports transactions proceedings and papers of the Society including the journal or magazine known as the *Australian Zoologist*.

36. The Honorary Librarian shall have control and custody of the books records manuscripts scientific apparatus and accessories belonging to the Society and shall be responsible for the due cataloguing care and arrangement of the same.

COMMON SEAL.

37. The Common Seal of the Society shall be in the custody of the Honorary Secretary. It shall not be affixed to any document except by order of the Council and any document to which the Seal is affixed shall be attested by five members of the Council including the Honorary Secretary or Acting Secretary.

VALIDATION OF ACTS OF COUNCIL.

38. All acts done by any meeting of the Council or of a committee or sub-committee thereof shall notwithstanding that it be afterwards discovered that there was some irregularity in the appointment of any person or persons constituting the Council committee or sub-committee be as valid and effectual as if such person or persons had been duly appointed.

POWERS VESTED IN THE COUNCIL.

39. The general management of the Society shall be vested in the Council who may exercise all such powers and do all such things as may be exercised or done by the Society save such as are by these Articles or by any Statute for the time being in force required to be exercised or done by the Society in General Meeting subject nevertheless to these Articles to the provisions of the Companies Act 1899 and to such resolutions not being inconsistent therewith as may be adopted by the Society in General Meeting but no such resolution shall invalidate any prior act of the Council which would have been valid if such resolution had not been adopted.

40. The Council shall have power from time to time to make alter and repeal all such rules as they may deem necessary for the

proper conduct and management of the Society and in particular but not exclusively they may by such rules regulate:

- (a) The admission of persons of both sexes under the age of twenty-one years to the privileges and benefits of the Society.
- (b) The admission of visitors to the premises and benefits of the Society and the rates of subscription to or the prices of the official journal and other publications of the Society.
- (c) The times of opening and closing any rooms or buildings belonging to the Society or any part thereof.
- (d) The conduct of members of the Society in relation to one another and to the servants of the Society.
- (e) The setting apart of any part or parts of the Society's premises for particular purposes.
- (f) The duties and functions not defined by these Articles of any honorary officer.
- (g) Generally all such matters as are commonly the subject matter of rules.

The Council shall adopt such means as they deem sufficient to bring to the notice of members of the Society all such rules and any amendments alterations and repeals thereof and all such rules so long as they shall be in force shall be binding upon all members of the Society provided that no rule shall be inconsistent with or shall affect or repeal anything contained in the Memorandum or Articles of Association and that any rules may be set aside by a resolution of a General Meeting of the Society.

MEETINGS.

41. An Annual General Meeting of the Society shall be held on a day in the month of July to be fixed by the Council. General Meetings of the Society other than the Annual General Meeting may be called by the Council at any time. A Special General Meeting shall be called by notice issued within seven days after the receipt by the President of a requisition signed by not less than seven ordinary members. Such requisition shall contain a statement of the business to be transacted at such meeting and no other business shall be transacted at such meeting. Every Annual General, General and Special Meeting shall be called by notice containing the time and place of such meeting and the particulars of the business to be transacted thereat. Such notice may be either by advertisement in at least two of the daily papers published in Sydney fourteen days at least before the date of the meeting or may be sent by post to all ordinary members of the Society at the address as contained in the Society's Register of Members not less than fourteen days before the date appointed for such meeting.

42. At every Annual General, General or Special Meeting of the Society seven members shall form a quorum.

43. In every case of a General Meeting of members if on the lapse of half an hour after the time appointed a quorum shall not be present the meeting shall thereupon stand adjourned until the corresponding day and hour the following week provided the same do not fall on any public holiday in which latter case the meeting shall stand adjourned to the day after such holiday. All meetings shall have power to adjourn their proceedings from time to time to any date to be fixed by such meeting.

44. In the case of any adjournment of any General Meeting whether for want of a quorum or otherwise the date hour place of

and business to be transacted at the adjourned meeting shall be advertised in one of the daily newspapers circulating in Sydney not more than five or less than three clear days before the date to which such meeting shall be adjourned.

45. Any ordinary member who is desirous of bringing forward any business for consideration at any Annual General Meeting shall forward to the Honorary Secretary not later than the first day of the month of July a notice in writing signed by himself and one other ordinary member as seconder stating in concise terms the motion or motions he wishes to move and the Council shall cause such notice of motion or motions together with the names of the proposer and seconder to be included in the notice summoning the meeting.

46. At the Annual General Meeting and at all Special General Meetings when questions of order procedure or interpretation of the Articles shall arise the ruling of the Chairman shall be accepted as final.

47. The Chairman of a meeting of the Council or of the Society shall in case of an equality of votes (whether by ballot or otherwise) have a casting vote in addition to his original vote.

48. If any member shall have violated any of these Articles or any rules of the Society or in any way have acted in opposition to the fundamental rules principles or objects upon or for which the Society has been established or in any other manner which would make it undesirable in the opinion of the Council that he should continue to be a member he may be expelled from the Society and if a resolution that he be expelled shall be carried by three-fourths of the Council present at a meeting duly summoned to consider the case or by a majority of ordinary members present at a General Meeting the member so expelled shall thenceforth cease to be a member of the Society as if he had resigned in the usual course and shall not be entitled to have any part of his annual subscription for the current year returned to him.

PROPERTY OF THE SOCIETY.

49. The Council may appoint members of the Society to act as Trustees of such property of the Society as cannot be conveniently vested in the Society itself. The Council may also jointly with any donor or with the approbation or sanction of such donor appoint members of the Society to act as Trustees of any donation gift or other property (conditional or unconditional) which may be made to the Society for any specific object purpose or benefit of or for the Society or in aid of its objects. The Council may from time to time remove or discharge any Trustee and supply any vacancy in the office and decide on the mode of investing or dealing with the moneys and investments of the Society.

NOTICES.

50. All notices in these Articles directed to be given may be served personally or by sending the same through the post in a prepaid letter addressed to such person at his address as entered in the Register of Members or at his last known place of abode but the non-receipt of such notice shall not invalidate the proceedings of a meeting held in pursuance of such notice.

ALTERATION OF ARTICLES.

51. No alteration shall be made in these Articles except by resolution carried by a majority of not less than three-fourths of the members present at an Annual or Special General Meeting called in accordance with the provisions of Article 41.

The following are the names, addresses and descriptions of the original signatories to the Memorandum and Articles of Association of the Royal Zoological Society of New South Wales:

Arthur Francis Basset Hull,
Queenscliff Road, Manly,
Public Servant.

David William Campbell Shiress,
325 Ernest Street, North Sydney,
Accountant.

Herman Edward Finckh,
Raglan Street, Mosman,
Freeholder.

William Charles Shipway,
32 Bradley Head Road, Mosman,
Solicitor.

Alfred Spain,
Architect,
16 Spring Street, Sydney.

Sydney Dodd,
"Oatley", Spit Road, Mosman, Sydney.
Pathologist.

Ernest Arthur D'Ombraïn,
"Corella", Taunton Street, Pymble, N.S.W.,
Ophthalmic Surgeon.

Stephen Jason Johnston,
"Donnottar", Ranger Road, Cremorne,
Zoologist.

William Joseph Rainbow,
"Thelma", 70 Cambridge Street, Stanmore,
Entomologist.

John Honeyford Campbell,
"Merridale", Cremorne Road, North Sydney,
Public Servant.

Dated Ninth day of August, 1917.

Witness to all the above signatures:

Gustavus Athol Waterhouse,
Stanhope Road, Killara,
Assayer.

ROYAL ZOOLOGICAL SOCIETY OF NEW SOUTH WALES.

Rules Made Under Article 40, and in Force on 1st July, 1934.

1. *Capital Fund*.—In order to carry out the objects of the Society, a Capital Fund is established, and the following moneys shall be paid into such fund:

- (a) All unconditional cash donations and benefactions.
- (b) The subscriptions of all Life Members.
- (c) Such sums as the Council may from time to time appropriate from the balance standing to the credit of the Annual Income Account.

2. *Annual Income*.—The Annual Income shall consist of:

- (a) All annual subscriptions paid by members.
- (b) Interest and dividends derived from investment of the Capital Fund.
- (c) Sales of *The Australian Zoologist*.
- (d) Such other income as the Council may from time to time determine.

3. *Handbook Publication Fund*.—A Handbook Publication Fund is established for the purpose of providing for the preparation, printing and publication of Handbooks to Australian Zoology. This fund shall consist of:

- (a) Such sums as are expressly donated to the fund.
- (b) Any amounts received by the Society by way of Government grant.
- (c) The net proceeds of sales of Handbooks.
- (d) Interest and dividends derived from any investments of the fund.
- (e) Such sums as the Council may from time to time appropriate from the balance standing to the credit of the Annual Income Account.

4. *Sections*.—

- (a) Sections shall consist of not less than three members, one of whom shall act as Chairman and one as Honorary Secretary.
- (b) Meetings of Sections may be held in the Society's office on such dates as may be fixed by the Chairman and Secretary, in consultation with the Executive Officers of the Society.
- (c) Notices and reports of proceedings of Sections may be published in *The Australian Zoologist* subject to the approval of the Publication Committee. All such notices and reports must be handed to the Honorary Secretary of the Society.

(d) Postage on Sectional notices required to be sent by post will be defrayed by the Society, and the necessary stationery will be provided, but any other expenses incidental to the work of the Sections must be met by the members of such Sections.

(e) During the month of June, Sections shall report to the Council on their operations for the current year.

5. *The Australian Zoologist*.—This journal will be supplied free of cost to all Life Members, Life Associate Members, Honorary Members and Honorary Associate Members, unless otherwise requested.

The rates of annual subscription to others will be:

(a) To Ordinary Members elected prior to 1st July, 1933, 1s.

(b) To Ordinary Members elected after 1st July, 1933, 2s. 6d.

(c) To Associate Members, 2s. 6d.

Back numbers may be sold at the following prices: Vols. 1, 3, 4, 5, 6 and 7, complete, unbound, at £1 each net. Vol. 2, complete and unbound, at 12s. 6d. net. Single Parts at published prices, less 20 per centum.

6. *Election of Fellows*.—

(a) Nominations of ordinary or associate members for the title of "Fellow" must be made on a form provided for the purpose, signed by the nominator and seconded by another person, both of whom must be members of the Society. A statement of the services to Australian Zoology relied upon as qualifying the nominee for the title must be added.

(b) A Qualifications Committee shall be appointed by the Council, and shall consist of those members of Council who are Fellows, who may co-opt the Professor of Zoology of the University of Sydney, or such other zoologist, not being a member of the Council, as they may think fit.

(c) Each nomination must be addressed to the Honorary Secretary, by whom it shall be referred to the Qualifications Committee for examination and report.

(d) The report of the Qualifications Committee shall be submitted to the Council at an ordinary meeting, and the nominations shall then be dealt with.

Royal Zoological Society of New South Wales

MEMBERSHIP.

Class.	Amount of Subscription.	
	£	s. d.
Associate Member	0	5 0 per annum
Ordinary Member	1	0 0 " "
(Members joining after 1st January in any year pay one-half subscription.)		
Life Associate Member	2	10 0 in one sum
Life Member	10	0 0 " " "
Associate Benefactor	100	0 0 " " "
Benefactor	500	0 0 " " "
Endowment Member	1,000	0 0 " " "
Honorary Associate Member	} Elected for services to Australian Zoology or to the Society.	
Honorary Member		
Fellow		

PRIVILEGES.

Members of all classes may attend all meetings of the Society and its various Sections. Every member (other than an Associate or Life Associate member) receives a free pass to Taronga Zoological Park and Aquarium, and twenty tickets each year, admitting 20 adults or 40 children to the Park only.

APPLICATION FOR MEMBERSHIP

should be addressed to the Honorary Secretary, Box 2399 MM, G.P.O., Sydney, accompanied by a remittance of the amount of subscription. The number of Ordinary Members is limited to 350, and should there be no vacancy at the time of application, the applicant will be registered as an Associate Member, and shall take precedence in accordance with the date of his admission to Associate Membership.

PUBLICATIONS.

The Australian Zoologist.

A Journal containing papers relating to the Zoology of Australia. Published at irregular intervals. Subscription to ordinary members elected prior to July 1, 1933, 1/- per annum; ordinary members elected after June 30, 1933, and all associate members, 2/6 per annum.

Vol. No.	Parts.	Date.	Pages.	Plates.	Price
					(unbound)
					£ s. d.
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II	4	1921-22	172	45	0 12 6
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V	4	1927-29	362	41	1 0 0
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VII	5	1931-33	398	23	1 0 0

Note.—Single parts of any volume may be obtained at published prices, less 20 per cent., to members or associates. Prices may be ascertained on application to the Honorary Secretary.

