



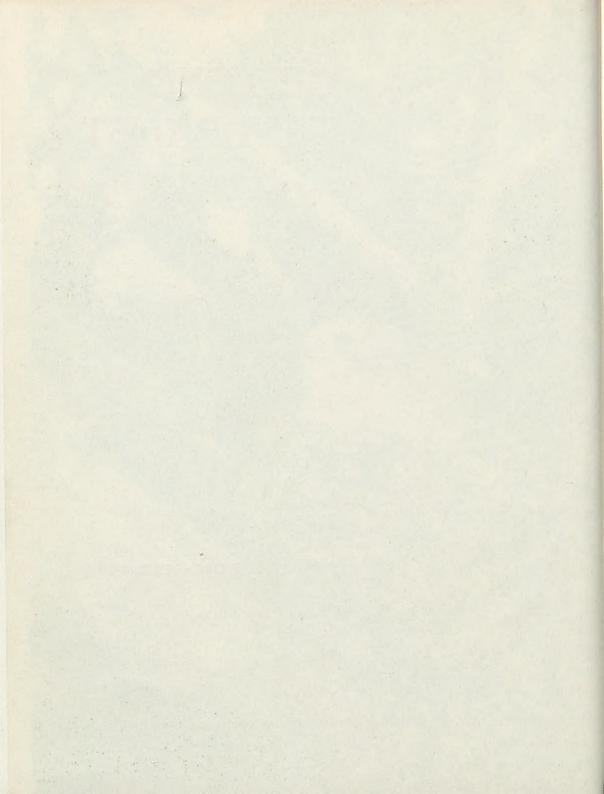
## GEELONG NATURALIST

Vol. 9 No. 1

MAY 1972

RED-CAPPED ROBINS

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Geelong Field Naturalists

Club

Vol.9 No.1
May, 1972.

Hon. Editor: Trevor Pescott, 4 Victoria Terrace, Belmont. 3216.

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GEELONG

#### NATURALIST

Journal of the

Geelong Field Naturalists

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Vol.9 No.4 February, 1973.

Hon. Editor: Trevor Pescott, 4 Victoria Terrace, Belmont. 3216. THE BARRABOOL BARRABOO

by Peter Fagg, Orbost

Near Ceres, about five miles west of Geelong, in the Barrabool Hills, there are a few outcrops of Cambrian Period rocks, commonly known as greenstone. These are associated with smaller outcrops of pink-coloured granite rock of the more recent Devonian geological Period.

Early Stratigraphy

The plutonic rock, the granite, intruded upwards into the Cambrian rocks some 350 million years ago. Then subsequent erosion for the next 200 million years caused the masses of greenstone and granite to become exposed, in much the same way as the You Yangs are today. The term "monadnock" is used to describe such an exposed, residual feature. The Barrabool monadnock, however, was submerged during the Jurassic - Lower Cretaceous Periods, to be covered with what we call today the Barrabool Sandstones. Erosion of the greenstonegranite masses provided the boulders of these rocks which can be found in the conglomerates in the lower part of the Lower Cretaceous Barrabool Hills succession. (Spencer-Jones, 1970.) Now these Barrabool Sandstones have eroded so that, at the present time, some of the former greenstone-granite monadnock is once again exposed to view.

The Barraboo

The fascinating term "barraboo" is used to describe a former monadnock which was covered by sediments but which is now re-exposed following erosion. "Barraboo" was a term used by Mr. Harold Yates, M.Sc., formerly Lecturer in Geology at the School of Mines and Industries, Ballarat, and at the Victorian School of Forestry, Creswick, Victoria. (Yates, 1965.) It is a picturesque word, the derivation of which I can only guess at.

The barraboo in the Barrabool Hills is most prominent as two hills, George's Hill, and Gleeson's Hill. Another barraboo of interest is the Dog Rocks, one mile south-west of Batesford. (See the photographs.) At the Dog Rocks, large lumps of the Cambrian rock which "fell" into the Devonian granite magma during the magma's upward intrusion, have, following erosion, become exposed as "roof pendants" of greenstone. (Anon., 1967.) The major roof pendants

#### THE BARRABOOL BARRABOO (cont'd.)

abut the property of the Geelong Cement Company, and may have been covered by overburden from their limestone quarry. Loose bits of greenstone, however, can be found on the eastern side of the Friendin-Hand Road.

Origin and Uses of Greenstone

Greenstone is the common name for epidiorite, which is very hard, dense, dark-greenish rock. The original Cambrian rock was diabase, a rock very similar to basalt and dolerite. This diabase suffered considerable alteration by pressure and heat, so that the epidiorite consists mainly of the minerals horneblende and plagioclase. This is the composition of normal diorite, but because epidiorite is the product of rock changes, the name epidiorite (epi = later) is used (Yates, 1965.)

Elsewhere in Victoria, greenstone outcrops at Mt. William, near Lancefield, and diabase outcrops near Chatsworth, Mt. Stavely, and Juluka, 15 miles from Ararat. Ceres and Dog Rocks and the above places were important sources for axe-head stone for aborigines, as the following early passage, describing tribal trading meetings at Mt. Noorat, near Terang, notes: "The aborigines from the Geelong district bring the best stones for making axes, . . ." (Dawson, 1881, in Mulvaney, 1964.) Also, "Many edge-ground axes of this (Ceres and Dog Rocks) stone have been found in the district, particularly in the south around Bream Creek and Torquay, and also from a number of places in Central Victoria." (Gibson, 1968.)

Spencer-Jones (1970) says that the epidiorite in the Barrabool Hills "has not been quarried to any extent, but in the future, as the reserves near Fyansford become exhausted, this material may have to be used. The stone tends to be sheared in places but should provide good quality aggregate. When this stone is polished it has a very attractive appearance and if large blocks could be quarried there may be some demand to use it as a veneer stone, providing non-sheared and fractured material can be found."

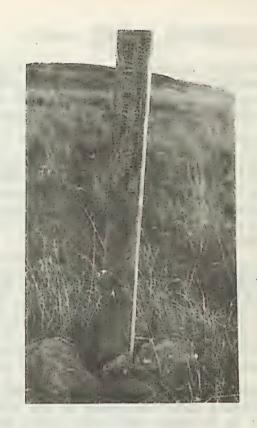
Ouarrying the Barraboo

For this latter purpose, according to a local resident, the epidiorite at Gleeson's Hill is at present being quarried. (See the photographs.) The start of the quarry was inspected in mid-1971: decomposed greenstone had been encountered to a depth of about 10 feet at that time, and in cross-section, the weathered



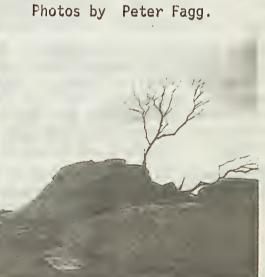
Above: Start of greenstone extraction, George's Hill, 1971.

Right:- Extractive industry Licence marker peg, George's Hill, Barrabool.





love:leeson's Hill reenstone ltcrop. ght:- At the lig Rocks.



#### THE BARRABOOL BARRABOO (cont'd.)

boulders appeared to have a narrow, pink-coloured layer at the weathered/non-weathered interface. A boundary corner peg near the Gleeson's Hill quarry shows that on 29th September, 1969, R. Heaver applied for an Extractive Industry Licence.

Sluice mining has been carried out in one hillside near the Ceres barraboo for coarse sand deposits created by in-situ weathering of the granite associated with the epidiorite. In this area can be found small former roof pendants of partially decomposed epidiorite. The sand has been mined to a maximum depth of about 70 feet, and there are several pits as yet not reclaimed in any fashion.

Finding the Outcrops Gleeson's Hill is in Allotment 23, Parish of Barrabool. After taking the Hamilton Highway out of Geelong, turn south to Ceres Bridge and Ceres, and about 1.3 miles after crossing the Barwon River, a slightly rocky hillside patchily covered with Hedge Wattle appears on the left. A walk up the slope is necessary to see the epidiorite and granite closely.

George's Hill is in Allotment 22, Parish of Barrabool. It is visible about one mile to the south-west from Ceres Bridge, and it is believed that the mining company is using for access the road turning due west, 0.8 miles south of the Ceres Bridge. These two uneven hillsides contrast strongly with the very smooth slopes generally encountered in the Barrabool Hills.

The Dog Rocks is in Allotment 17, Parish of Gherineghap. It is reached after following Friend-in-Hand Road for about 2.5 miles north of the Hamilton Highway. The Friend-in-Hand turn-off is at Stonehaven, about 0.3 miles west of the Ceres turn-off. Do not venture into the paddock with the "dog rocks" without first obtaining permission from the owner at the junction of the Gheringap - Fyansford and Friend-in-Hand Roads.

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Vol.5 No.2. July, 1968. Geelong Field
Naturalists Club.

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#### L.C.C. SUBMISSION

The Geelong Field Naturalists Club is preparing a submission for presentation to the Land Conservation Council with a view to preserving areas of public land around Geelong.

The following Committee members are seeking data, plant, bird and animal lists, notes on geological and aboriginal sites, etc. for inclusion in the Club report.

Mr. Ted Errey, 3 Leonard Street, Belmont. 3216. Mr. Jack Wheeler, 72 James Street, Belmont. 3216. Mr. Trevor Pescott, 4 Victoria Terrace, Belmont. 3216.

#### AN HOUR COUNT. No. 1

#### by Roy Wheeler

The article "From Geelong to the Flinders Ranges" by Valda Dedman in the journal of November, 1971 was an excellent one, written by one who has a real love for the outdoors and the many things nature has provided for us to see and admire. The photograph of the Artemora Hut has a stool in the foreground and this immediately brought to my mind "I wonder how many different birds I could have seen from this stool within an hour".

For a number of years in various parts of Eastern Australia I have been recording whenever possible an hour bird count. The rules are simple. First choose what you regard as a good bird watching place and take a chair or stool or just sit on the ground and record all the bird species together with their numbers within earshot and in binocular range over an hour. You must not move from your original position and because of this a stool is possibly the best as it allows a watch in all directions. It means concentration and alertness but it can be most relaxing and a challenge to your powers of observation and hearing. It also gives the basic bird list for each area, something to use as a foundation for future lists. It is surprising what unusual and unexpected species pop up on such occasions. You can sit in your back yard, your front garden, on a hillside, beside a river. creek or lake or on the sea-shore, in fact anywhere birds are to be found. Having done it once you may have the urge to try it again and get ahead of your previous tally. If you have an hour to spare try an hour count sometime. Mrs. Dedman's account of their camp on the Murray River near the Kulkyne brings to mind a count I did with Mrs. Wheeler on the banks of the Murray River at Barmah a few years ago.

On January 11, 1969 Mrs. Wheeler and I were taken by friends up to Barmah to see nesting colonies of cormorants, egrets and night herons in the Barmah Forest. We stayed overnight at the comfortable motel in the township and early the next morning we walked over the then rather new bridge into New South Wales. We looked across towards the last home of the remnants of the once famous aboriginal Cummeroogunga tribe and thought of their passing with sadness. On our return across the bridge we found we had enough time before breakfast to do an hour count.

#### AN HOUR COUNT No. 7 (cont'd.)

We sat on the grassy banks of the Murray River on the left of the Victorian-side approach to the bridge. Nearby was a wire mesh fence protecting the remains of the old punt that for so many years served faithfully and well the local inhabitants and the travellers wishing to cross the river. It was a warm morning, the start of what was to be a very hot day. Here are the details of that count as recorded in my note book:

Barmah, Vic. On banks of the River Murray on January 12, 1969 from 6.25 to 7.25a.m. Weather warm and sunny with some cloud and a northerly breeze about force 2. Birds in order of sighting: House Sparrow, 14; Black-backed Magpie, 14; Noisy Miner, 27; Red-backed Parrot, 30; Brown Treecreeper, 11; Noisy Friarbird, 9; Welcome Swallow, 4; Yellow Rosella, 8; White Cockatoo, 16; Magpie-lark, 15; Galah, 12; Little Pied Cormorant, 4; White-plumed Honeyeater, 8; Little Friarbird, 10; Spotted Pardalote, 8; Kookaburra, 2; Willie Wagtail, 8; White-faced Heron, 9; White Ibis, 4; Black-faced Cuckoo-shrike, 11; Sacred King-fisher, 2; Starling, 8; Black Cormorant, 10; Brown Hawk, 1; Budgerygah, 4; Rainbow-bird, 7.

Total: 26 species and 254 individuals.

\*\*\*\*\*\*\*

#### SUBSCRIPTIONS NOW DUE

You can help support the Geelong Field Naturalists Club by paying your subscriptions early each year; they become due in April, and if they are not paid within a reasonable time, an unnecessary burden is placed on Club resources.

The Subscription Secretary is Mr. John James, whose postal address is Bellbrae 3221; please be sure to include your own address so that our records can be kept up to date.

#### AN EXCITING DISCOVERY

#### by Geoff Gayner & Noel Young

During January this year, on our Christmas holidays in "the east", we spent two or three days in the Alpine areas of the Snowy Mountains. One of the tasks we set ourselves, was to look once again for the rare and elusive little frog which is found only above the snow line in this region.

Not far from Kiandra we decided to make a last search at a likely looking swamp, before heading down out of the unpleasant misty rain and fog which now enshrouded the mountains. We trudged for a short while in knee deep vegetation, our senses already more alert for leeches and snakes than frogs. But soon, a quiet, muffled call was heard and traced to a patch of sphagnum moss. After some minutes of probing about, Geoff parted the moss to reveal a tiny toadlet. We could hardly believe our good fortune! But there was no mistaking the distinctive black and yellow stripes of the Corroboree frog.

Pseudophryne corroboree is only 25 to 30 mm long, with a strikingly beautiful pattern of glossy yellow and black stripes, looking very like a generous daubing of gloss enamel paint. He resembles a tiny plastic toy, except when moving with the crawling action typical of all toadlets. His short legs are not designed for leaping or hopping. The fingers and toes are small and webless. His black eyes are set into black stripes, making them almost invisible. He is plump, with a stumpy snout, and his underparts, unlike the spectacular dorsal surface, are white. The call is best described as a dainty "A-yip! ip! ip!" the last two short syllables being of distinctly higher pitch.

The Corroboree frog is only recently known to science, and probably the first discoveries were made by workmen of the Snowy Mountains Authority in the 1950's.

(Ref. "Australian Frogs" by Densey Clyne. Periwinkle series.)

\*\*\*\*\*\*\*\*\*\*



Corroboree frog in its natural environment. Above:-

Compared with a man's finger-tips to show its tiny size.
- Photos by Geoff Gayner & Noel Young. Below:-



## EVOLUTION AND ECOLOGY SOME THOUGHTS AND COMMENTS

#### by D.F. King

Evolution and ecology are phenomena that have been with us since time began, although man has only come to study evolution since Darwin pronounced his theories, and ecology has only recently received much attention. Both are bound together because each influences the other, although the degree of influence can vary quite extensively in some cases and little in others. This, basically, is one of the dilemmas that faces man to an increasing amount. How far can he go in influencing ecology without disastrously affecting it? Or perhaps start a self perpetuating chain reaction which will end only when the face of the Earth, as we know it today, is totally destroyed, and, with it, Man himself.

Man has developed means of altering both the evolutionary and ecological processes in a matter of weeks and months that would, under natural conditions, if they prevailed, have taken hundreds of thousands of years. Examples are the bulldozing away of entire forests, whole-sale removal of natural vegetation and replacing with exotics or crops, extensive surface mining, damming of rivers, not to mention extensive pollution. All of these have perhaps known immediate repercussions, but long term developments are another matter entirely. In many cases, what started out as a simple solution to a problem has wound up producing a number of new problems, the solving of which needed a great deal more resources than the original problem. Use of some pesticides might here be sighted as an example, or the wholesale depletion of the Cedars of Lebanon for timber and the unchecked grazing of seedlings by goats in the Middle East reducing the area to bareness and desert over the last 2000 years.

Climatic conditions and geological conditions form the basic platforms upon which a particular ecology is formed, and changes in these, both individually and collectively, will inevitably produce alterations in that ecology, and with it will come evolutionary changes in some or all the creatures and vegetation associated with it. The amount of modification to the ecology

#### EVOLUTION AND ECOLOGY (cont'd.)

will depend much upon the degree of change and the time taken to change. As evolutionary changes are necessarily a slow process, changes in environment must be slow if those living things must change in order to survive in the new conditions. If not, then they must become extinct, at least in that particular area of their range that is affected.

In the beginnings of life on this Earth, plant life would have been the first essential to provide food and shelter for creatures in the same manner as they do today, although they are different today in their appearance and form. This is because there have been tremendous changes in climatic and geological conditions throughout the many millions of years. The earliest creatures would have been very small, but larger and still larger creatures evolved eventually when conditions were suitable for their development and continued survival, such as abundant vegetation, swamps and water to support great bulk, and a generally tropical type of climate to promote vigorous and lush vegetation.

When, as it did in ages past, the climatic and geological changes occurred bringing drier and cooler conditions, the larger creatures gradually became extinct because physically they were unable to adapt to the new conditions. The very large animals needed water to support their great bulk and a great deal of readily available vegetation to sustain them. Large creatures invariably have a small number of off-spring at relatively long intervals which makes any but the very slowest evolutionary changes absolutely impossible. As examples, the mouse may have several litters of young in the course of a year, whereas, the elephant will average a single off-spring once every nine years. Of course, creatures still smaller, such as insects and microfauna, reproduce at even greater rates and so if each successive generation makes a minute evolutionary change or adaption, a considerable change may come about in a relatively short time and, consequently, increase its chances of continued survival, even if some what changed from its original form. This, undoubtedly, is one reason for the tremendous number and variety of all the small and minute creatures.

Changes in the size or range of a particular habitat can have

#### EVOLUTION AND ECOLOGY (cont'd.)

much the same effect on the flora and fauna as did the total climatic and geological changes of past ages. As an example, a well established forest produces its own climatic conditions within its confines. Fluctuations in temperature throughout the day will be far less than in open country and humidity at ground level will remain more constant and throughout all the seasons of the year these fluctuations will be much less than in the open country. This state of affairs induces a specific and stabilized ecology to be formed. In the same manner an established open plain or savannah terrain will have a specific ecology that can sustain itself in conditions of relatively large changes in temperature and humidity but, of course, entirely different from that of the forest.

A small reduction in the size of this forest will have very little effect upon the ecology as a whole but, a stage will be reached, with further reductions, when an imbalance will occur that cannot be re-balanced without the exclusion of one or more species of creature or plant. This, of course, is the situation over large areas of the world today, and the outcome is by no means certain, and why a great increase in our knowledge of the relationships of all the creatures and plants within each specific area is vital in determining what is required to maintain stable and balanced conditions.

A situation that often occurs is that a forested area has a great many of the large trees removed for timber. The fluctuation in temperature throughout the day will probably increase and probably the average humidity will be decreased. These changes may be extremely small but could be enough to affect some creatures or plants that are particularly sensitive to these changes and cause them to become depleted or exterminated from this area. That in itself may not be important but its repercussions on other creatures and vegetation closely associated with them could become very important because they may be an essential link in the food chain or a link in the environmental chain, or, perhaps, both. Now instead of a complete stable chain we have several smaller but unstable chains, which, given sufficient time will stabilize again, although not in exactly the

#### EVOLUTION AND ECOLOGY (cont'd.)

same form as the original.

Margins between types of terrain or country, such as that between water and land, between mountain and valley, between forest and plain, all tend to hold a greater variety of flora and fauna than there is in either of the adjacent areas. Here occurs an overlapping of the various species, and interaction between them can be most marked and spectacular; a fruitful area for the study of both evolution and ecology. This variety progressively decreases with the distance from the margin area, and it would seem that the amount of benefit of conservation relative to the land area required is maximized; and, conversely, alienating such areas will have greatest adverse effects. Examples of such areas that are continually being alienated are mined sand dunes, filled or drained swamps and de-forestation. For these few reasons, and by no means are they the only reasons, it is vitally necessary that as much of these areas be reserved and allowed to remain in their natural state for all time.

As previously mentioned, it is the larger or higher rank of creature for whom adjustment is most difficult, and possibly the same holds true for plants. Are we not then tending to evolve a world with an invironment consisting largely of insects and very small creatures, of weeds, algae and lichen, and vainly combatting it with ever increasing amounts of pesticides and herbacides?

#### Further reading:

Fritz-Martin Engel, Creatures of the Earth's Crust, Harrap. W.M.S. Russell, Man, Nature and History, Aldus Books.

\*\*\*\*\*\*\*\*\*\*\*

#### GIRRAWEEN

#### by Valda Dedman

We had been driving along the highway all day and were looking for somewhere to camp the night when we discovered it. Girraween National Park! We had not even heard of it before, and had no idea of the delights awaiting us at the end of four miles of somewhat rough and narrow road.

Girraween is just north of the Queensland border, close to the New England Highway. The park comprises some 12,603 acres, squeezed in among orchards of peaches and apricots and grapes, which border the road that cuts it in half. In a way it is a park almost by accident, made up of the leftover bits of country-side that no one wanted, yet it is very much a National Park in its own right. What gives it its distinctive charm?

I think the secret is in the contrasts: the freshness of the creek, the richness of flowering vegetation, and the bareness of the rugged granite peaks.

The creek is absolutely delightful. Swiftly flowing, clear and cool, it makes its way over and around granite boulders, and in one place it is dammed back naturally by a rock outcrop into a deep swimming pool a hundred yards long. If you are lucky, in the clear pools you may see, as some members of the family did, heavily built yabbies, shining red like plastic toys, some up to a foot long. They also encountered a Bush rat (Rattus fuscipes?) sunning itself on a rock. It was rather sleepy and let them stroke its soft grey fur. However, too much handling provoked a sharp bite.

The creek is overlooked by bare granite mountains, one of them with a great rectangular block twenty feet high poised half way down its side. We climbed this peak, the Pyramid, making our way across the creek, over patches of pale granitic sand, along the trail that winds through flowering shrubs and plants. In midsummer most had finished blooming, but there were still golden Guinea flowers (Hibbertia sp.), tall blue Lobelias (Lobelia gibbosa), those "one sided" plants with deep blue petals outthrust,

May 1972



Above:- The Creek with part of the Pyramid in the back-ground.

At right:- Tor on top of the Pyramid.

Photos by Valda Dedman.



#### GIRRAWEEN (cont'd.)

grey-white furry flannel flowers, and white Hyacinth orchids spotted mauve (Dipodium punctatum). Wrens and thornbills chittered in the undergrowth, and a rufous whistler sat in a stringybark and sang to us. Up we climbed, through a corridor whose walls were composed of great split blocks. Bushes were growing in the crevices, and ferns found foothold in the moist overhangs. Right on top, amid round weathered rocks, was another striking tor, a tall oval boulder balanced on two tiny bases only a few inches across. The Pyramid overlooked yet another hill, even smoother and barer. While we were resting on top two Little eagles (Hieraatus morthnoides) flew over, their high-pitched double whistle striking just the right note for these bare surroundings.

But down below, the feeling was quite different. In spring the bush must be a magnificent sight as gold, orange, white, pink and purple mingle in profusion. We could only guess at the full wonder, as we looked at bushes hanging with seedpods of various shapes and sizes. There are two Wildflower Trails, with many plants named. One trail winds around and even under overhanging granite boulders, the other takes in various vegetation types, from creekside varieties to swampy heathland.

The attractiveness of Girraween has been enhanced by good management. The park is extremely well kept, and necessary facilities blend in harmoniously with the surroundings. We were pleased to find picnic tables, fireplaces, mown grass where it was needed, and an absence of litter.

In short, we fell in love with Girraween. One thing is certain: we shall return.

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#### THE DRAMA OF A GREY BUTCHERBIRD'S INJURY

#### by Jack Wheeler

Early last September, Mr. Hackleton of Highton, rescued a male Grey Butcherbird from the onslaught of a vicious attack by nesting White-backed Magpies. "Butch" as he is now known to the Hackleton's was a regular visitor to their yard for scraps of meat, and he had apparently received a wing injury from which he was unable to defend himself from larger birds.

A vet. examined the wing and strapped it up, hoping that the injury was such that it would heal and suggested a ten day period of isolation in a cage. The day of release of the strapping came along and daughter Jill had made a tiny hood to fit over Butch's head whilst the operation was in progress. The wing appeared O.K. but when placed back into the cage commenced to droop and soon it was apparent that a further period of strapping was necessary if Butch was ever to fly again. This period of confinement was not very acceptable to him, but he kept contact with his female by calls and she came in and accepted food from him through the cage wire. She had been nesting when the injury occurred but despite gales, and the lack of help from her mate, was able to successfully rear one young.

This young was despatched to fend for itself, and then another male came on the scene and was fraternising with Mrs. Butch. He fought Butch through the wire of the cage and after several days of this, Butch became silent and subdued - he had given up the ghost as it were.

After almost four weeks of further strapping, the bandage was eventually removed and the result very reassuring. There was only a slight dip in the injured wing. But Butch had to learn to fly again, so son Mark, set about building an aviary and when completed, Butch was transferred to his new home. This was most successful and even though restricted, his flying improved each day, and Butch commenced to take interest in life again and regularly called to his mate, despite the opposition.

Early in December, almost three months after his injury, Butch was

#### THE DRAMA OF A GREY BUTCHERBIRD'S INJURY (cont'd.)

released and became united with his mate, and soon drove off the suitor. Mrs. Butch celebrated by making another nest in the limb of a high pine right over the Hackleton back yard, with easy viewing from the kitchen window. She sat and sat and sat, but after several weeks gave it away, the eggs no doubt being infertile.

Today, they are both still about and visit the Hackleton's regularly to be fed, and their lovely song brings delight to the neighbourhood.

Postscript:

At the December meeting of the G.F.N.C., President Jack Wheeler made a presentation to Mrs. Hackleton on behalf of the Hackleton family, for a job well done.

\*\*\*\*\*\*\*

#### "NATURE CONSERVATION IN VICTORIA"

One of the most important books yet printed on Victorian nature is the result of a survey carried out by Mrs. Judith Frankenberg M.Sc., under funds supplied by the Victorian National Parks Association.

Although marred by several errors - the Ocean Grove Nature Reserve for example is named "Cuthbertson's Reserve" and credited with 320 acres instead of 200 acres - the immense wealth of information stored within its 145 pages makes the book at \$2 wonderful value.

The biological content of the State and its Resources shows in tabluated form lists of mammals, birds, reptiles, amphibians, fishes and vascular plants; existing reserves, deficiencies, needs, recommendations as well as problems in maintaining viability of the reserves are all included.

The book is a MUST for every naturalists bookshelves.

Review by T.W.P.

#### THOUGHTS ON PLANTING RIVER RED GUMS

#### by Joyce Hunt

Now in my hand a dollar's worth of trees,
Ten inches tall, and scarce a hundred leaves between them all.
A hundred years from now, when we are dust,
Magnificent, wide-spread, these trees will stand
Regal and tall.

I see a wedgetail eagle sitting here
Full fifty feet up, watching for his prey;
And gang-gangs, passing through, may stay awhile.
Rosellas, living rainbows, face the sun
In gorgeous splendour.
And cheeky little robins, flame-red fays Will brighten up the dismal winter days.
Magpies will nest herein, and, carolling,
Will fill the air for miles around with song.
The creek will ring with laughter through the years
As kookaburras chuckle gleefully
And teach their young to laugh.

Nocturnal creatures, timid and wide-eyed Gliders and possums here will find a home; While welcome shade and shelter will be found By weary man.

A hundred years from now these trees will be But middle-aged, and twice a hundred years Hence, Nature lovers, coming here, may bless The long-forgotten ones who now dig, fence, And plant with toil-worn hands For many generations yet to come.

Now, in my hand a dollar's worth of trees ---- A living monument in years ahead!
So, happily, with joy and thankfulness,
We kneel to plant Red Gums beside the creek.

#### WESTERN WARBLER AT OCEAN GROVE

#### by Eric Bound

Whilst watering the garden in my home at Ocean Grove recently my attention was attracted by a thin thread of melody emanating from somewhere in the grove of golden wattles on the east side of the house. The morning was calm and quiet, otherwise the elfin song could easily have merged into and been lost in the general noise level. The tune was unmistakeable; it recalled a spring morning some years ago when my wife and I in company with Mr. Alec Chisholm, stood in the lovely bushland near Maryborough and listened to the same melody. It was the Western Warbler which had a nest with eggs in a sapling close by; and I remember well that as we listened "Chis", as we called this grand old man of ornithology, likened it to an excerpt from one of the classics. To hear it again so unexpectedly (for I have no knowledge of any previous record for this area), was a most rewarding experience. Careful observation revealed the tiny bird moving through the



wattle trees, feeding as it went, and singing from time to time. It remained within earshot for approximately three quarters of an hour before moving on. I have not seen or heard it since. The presence of this bird in Ocean Grove could well be linked with the discovery of an unidentified nest in the Ocean Grove Nature Reserve by Mr. Ron Lavery, the description of which bears some resemblance to the nest of the Western Warbler. Perhaps the future may yet produce a nesting record of this rare and beautiful little songster in our local bushland.

The nest of a Western Warbler - Photo by Eric Bound.

#### WE VISIT LABERTOUCHE

#### by Ted Errey

For the Club's October Week-end Camp-out in 1971, we made our third journey east of Melbourne, this time going into the hill country north of Drouin, where our headquarters were established in the Brighton Grammar School Camp at Labertouche, about 66 miles from Melbourne.

There the following 37 enthusiasts settled for varying portions of the weekend:- Mrs. E. Yeoman, Mr. L. Wilkinson and his nephew Paul, Mr. and Mrs. L. Vincent and family, Miss A. Robert, Mrs. B. Quirk, Misses F., E. and F. Poole, Mr. G. Mathison, Mr. R. Martin, Miss M. Martin, Miss R. Marsh, Mr. & Mrs. G. McCarthy and Glen, Mrs. M. Macauley, Mr. & Mrs. J. Lindros and family, Miss L. Hill, Miss M. Hickman, Mr. E. Errey, Mr. and Mrs. H. Dunn and family, Mrs. F. Cross, Miss N. Cross and Miss M. Arthur.

For those not relishing the pleasure of a night or two under canvas, the Casa Blanca Motel at Drouin was available and was patronised by these members: Miss A. Webber, Mrs. F. Singleton, Mrs. B. Rushbrooke, Miss L. Ramsay, Mr. and Mrs. H. Kroger and family, Mr. and Mrs. J. Hunt, Mrs. M. Guild, Mrs. M. Green, Mr. and Mrs. N. Gillham, Miss M. Freeman, Mrs. B. Campbell, Miss M. Brownhill, Mrs. J. Bailey and Mr. O. Andrews.

A detailed sheet of instructions on how to reach the Camp, with a clear map, made it impossible to miss our way in on the Friday night. Mr. Bob Barrow, of the School staff, and three very helpful boys welcomed us with hot tea as we arrived.

The Grammar School Camp is set in bushland approximately 12 miles north of the Prince's Highway, and has a number of sturdy tents, with floor boards, to accommodate parties of boys from the school who occupy the camp as a study centre for a greater part of the year.

A modern timber building on the hillside overlooking the tenting area serves as a kitchen and dining room on the lower level, while the larger upstairs section provides a splendid recreation and study area, with a huge open fireplace. Shelves hold necessary reference books, and collections of pressed botanical

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#### WE VISIT LABERTOUCHE (cont'd.)

specimens, tree identification sets and so on.

Those of us fortunate enough to be enjoying the hospitality of the Camp were fed right royally by Bob and his helpers.

The school direction sheet gave useful information on the district. The Camp is only 350 feet above sea level, but Gentle Annie, two miles to the north, is 2250 feet. The area is "multiple use" forest, from which large quantities of timber are taken for paper pulp, firewood and building purposes.

There are several special wildflower reserves, mainly for grevillea, boronia and grasstree, and the district is popular with tourists and hikers. The Bunyip River catchment area to the west and that of the Tarago River over the range to the north-east provide water for the Mornington Peninsula and the towns of West Gippsland.

Saturday morning found the campers out early to see what there was of interest. Close by many plants of Blue Dampiera provided color that we have all too little of in our bushlands. Hill Banksia was common, though past its best flowering, but Truncate Phebalium was at its peak and a number of fine specimens along the creek were covered in white.

The creek banks and the swampy ground alongside were the homes of many fine ferns. At least fifteen species were found during the weekend, mainly along Ryson Creek close to the camp. These included seven species of Water-fern. On our guided tour on Sunday morning, our Warragul hosts pointed out Fork-ferns growing on the trunk of a Soft Tree-fern.

Further afield, Pink Boronia was commencing a great display in various shades to almost white, but it was the height of the plants that amazed us. We are familiar with this genus as shrubs up to three or four feet, and found it hard to reconcile ourselves to the sight of boronias reaching many feet above our heads. The dense sprays of pink even on smallplants were delightful to see. Later in the morning and during our Sunday tour, Grevillea barklyana, growing to tree size with trunks one could almost split for posts, also brought forth incredulous gasps.

After lunch we set out for Warragul with the Motel group, and were led by the Warragul F.N.C. officials on a tour of the proposed Mount Worth National Park. A bitterly cold wind shortened

#### WE VISIT LABERTOUCHE (cont'd.)

our appreciation of the magnificent view from Mt. Worth of the Gippsland countryside, but we were much impressed with the area under consideration.

During the drive two plants were of special interest. One was the clematis in full bloom, which in some of the gullies appeared almost to smother the blackwoods along the creeks. The other was a hybrid pittosporum, a natural cross between Sweet Pittosporum (P. undulatum) and Banyalla (P. bicolor). These were splendid specimens, with foliage midway between the two parent species. Cutting material brought back unfortunately produced no results, but this hybrid should certainly be persisted with. The Warragul folk did not know of any plants in cultivation.

Saturday's program concluded with a social evening in the Drouin West Hall, where Geelong and Warragul Field Naturalists entertained one another with a slide evening, a light supper and the accompanying discussion so important on such occasions.

The Warragul people escorted us again on Sunday morning, this time along local roads, to various wildflower reserves. More of Mueller's Boronia we saw, and the huge Grevilleas. By the waterfall on Lawson's Creek was a Myrtle Beech, not an ancient warrior like those of Mait's Rest, but an interesting specimen just the same. Proudly we were led to a roadside cutting, where a plant with greenish cream bells clung to the moist bank. This was Fieldia australis, an epiphyte usually found on treefern trunks. The wet sheltered gullies contained many treeferns, and on one of these grew the Fork-ferns mentioned earlier.

Other attractive plants included several not found in Geelong bushland. The Handsome Flat-pea was one, without the sharp corner spines on the leaves that the common Platylobium has. Tetratheca stenophylla, a taller species than the local ones had long leafless stems. Acacia obliquinervia, with sickle-shaped phyllodes having the midrib noticeably to one side, was a tree we had found near Lake Mountain during our Marysville weekend in 1969. On that trip we found the Wonga vine which was also growing at Labertouche.

Many plants that are well known in the Geelong area were there also. Prickly Geebung and Horny Conebush were common, as were Prickly Moses and Myrtle Wattle. Mountain Correa, Wiry Bauera and Dusty Miller were found, and the blue flowers of Love Creeper.

#### JUNIOR PAGES

#### BIRDS THAT I HAVE SEEN AT 219 ROSLYN ROAD, BELMONT

#### by Elizabeth Flowers

Magpie, Pallid Cuckoo, Wattle-bird, Starling, Yellow-winged Honeyeater, Willie Wagtail, Blackbird, Dove, Sparrow, Mudlark, Crow (Raven), Lorikeet, Thrush, Goldfinch, Silvereye.

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#### BUTTERFLIES I HAVE SEEN

#### by Helen Dedman

This summer and autumn I have seen many beautiful butterflies.

All of them I have studied closely in the bugcatcher, and then I let them go. In Canberra I saw the Common Brown, the Meadow Argus and the Orchard Butterfly; at the Warrumbungles I saw Kershaw's Brown, and at home I have seen the Painted Lady, Australian Admiral, Meadow Argus, Cabbage White, Common Brown and the Monarch.

Orchard Butterfly
The female is bigger than the male, which is 4" across, while the female is 4-1/4" to 4-1/2". There is a difference between the sexes. The male is darker, and the female has a row of red spots and a row of blue spots on the hind wings. The caterpillar grows about 1" long. When you touch the back red feelers come out of



Above: - Wanderer Butterfly, also called the Monarch Butterfly.
- a drawing by Helen Dedman.

Below: - The black-and-yellow Wanderer Caterpillar:



#### BUTTERFLIES I HAVE SEEN (cont'd.)

its head. Its scientific name is Papilioaegeus aegeus.

Painted Lady

The female Painted Lady is not as dark as the male. They both have white on the tips of their feelers. The male has four light blue spots on the hind wings. This butterfly is found over most parts of Australia except the central areas. Its scientific name is Vanessa cardui kershawi.

Meadow Argus

The male and female Meadow Argus are practically the same, but the male is smaller than the female. The Meadow Argus is found over all Australia except the central parts. Its scientific name is Precis villida Calybe.

Australian Admiral

The sexes look alike, but the upper side is quite different from the underside. On the underside of each upper wing is a blue eye, and a red patch at the base. The lower wing is mottled and striped in different shades of brown on the underside. The Australian Admiral is found in southern and eastern Australia. Its scientific name is Vanessa itea.

Monarch or Wanderer

The Wanderer is a very beautiful butterfly. The sexes are almost the same, except that the male has a scent pouch on the lower wing. It is mostly orange and black, but it has also some yellow and white. The wings are edged black, spotted white. At Mrs. Watt's, in Belmont, I saw a Wanderer coming out of its chrysalis. The caterpillar is striped yellow and black. It likes to feed on the swan plant and often spins near one. The butterfly is found along the east coast of Australia. Its scientific name is Danaus plexippus.

Common Brown

The male is smaller than the female Common Brown. The male is mostly yellow and yellowish brown, with a blue eye on each upper and lower wing. The lower wing on the female is mostly yellow, except for the blue eye and the brown edging. The upper wing is yellow near the base. Near the edge it is splotched with black and white, and has a blue eye near the top of the wing. It is found in southern Australia. Its scientific name is Heteronympha merope merope.

Kershaw's Brown

Both the underside & upperside are patterned alike, but the underside is much lighter than the upper, & has one more eye. The wing expanse is 1-3/8". The scientific name is Oreixenica kershawi kershawi.

#### THE LAST WORD

The value of an Editorial should be that it brings forcefully to the reader appropriate comment on topical issues; however, since we go to print quarterly, and recently most erratically, it is felt that the impact of our Editorial has been lost.

One of the improvements incorporated in this issue of 'Geelong Naturalist' is to leave the first and subsequent pages for the main article of the issue - the first to come first - and it is intended that on the last few pages more Club news will be printed, including some comments from the Editor as "The last word....."

Whilst on the topic of improvements, I would like to thank all who have made suggestions on improved layout, in particular Mr. Bill Smith and Mr. Peter Fagg.

You will note, for example, that we have altered the cover layout, allowed more space in the first pages, adopted the policy of underlining scientific names (in lieu of italics) and included Club Activities.

All of these things are to the good.

No doubt there are many ways the format can be improved - so please give your suggestions to the Editor.

It is intended too, that the quality of printing and paper be improved, but the ultimate result of this will be increased costs. There has not been an increase in price for eight years, and it is unrealistic to believe we can continue as we have without some loss of quality of paper at least unless the cost rises accordingly.

There will not be an increase this year - but it seems inevitable that we will either have a rise next year or a cut back on pages; the latter would be most undesirable.

TREVOR PESCOTT
Hon. Editor.



## Published by THE GEELONG FIELD NATURALISTS CLUB Geelong, Victoria

The G.F.N.C. meets on the first Tuesday in the month, at 8 p.m. in the McPhillimy Hall, St. George's Church,
La Trobe Terrace, Geelong.

#### Visitors Welcome

All papers submitted for publication in this journal should be sent to the Hon. Editor.

### GEELONG NATURALIST

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#### RECORDS OF THE WHITE-BROWED WOOD-SWALLOW OVER 120 YEARS

#### by. Roy Wheeler

In the early days of settlement in the central Victorian districts near Port Phillip Bay the appearance of great flocks of White-browed Wood-swallows (Artamus supercilliosus) during the spring and summer was a fairly regular event. In New South Wales they were known then as the "five year bird", meaning that their appearance was at least once in every five years. The early pattern of the birds in central Victoria was much the same as this Sometimes they appeared in great numbers, stayed a few days and a change in the weather and they moved off again and at time returned later to start and breed immediately. The White-browed Wood-swallows were often accompanied by varying numbers of Masked Wood-swallows (Artamus personatus).

The earliest record I can trace back is from Isaac Batey who when living on Jacksons Creek near Sunbury records that in the spring of 1850 that the she-oaks were alive with wood-swallows and many nested. In 1860 A.J. Campbell reports immense numbers on the Werribee Plains, in 1865 Campbell again records swarms in the parks about Melbourne and in 1868 William Clayton saw myriods in the Moorabbin district. In 1870 A.J. Campbell again reports a visitation. In 1888 Campbell found nests in the Brighton district.

Sir Charles Belcher in his book "Birds of the District of Geelong, Victoria" says "At rare intervals, not oftener, I think once in ten years on an average, the Wood-swallows come to Geelong in swarms about the end of October, borne down on us from the interior of the continent on the wings of the north wind. And even when there is such a visitation, not all the birds remain to breed. In the year, 1891, for instance, they descended in thousands upon the Queenscliff Road bush about the middle of October, exhibiting every appearance of staying for the summer. But by the end of November most had gone, and my record of nests found there that season amounted to seven only. Sudden cold weather would probably turn back all those birds which had not actually begun to nest".

In 1894 R. Hall recorded them in numbers in the Box Hill district and the following year (1895) A.J. Campbell said they arrived in

#### RECORDS OF THE WHITE-BROWED WOOD-SWALLOW (cont'd.)

tremendous numbers over Melbourne and nested at Toorak, Camberwell, Burnley and Royal Park. In 1896 they appeared at Myrniong, a huge flock passing over in a N.N.E. direction before daylight.

In 1897 they were again noted by A.J. Campbell at Burnley and they bred in numbers at Cheltenham in November of that year. Sir Charles Belcher again mentions in his book "There was another smaller irruption towards the end of 1897. I do not know whether in that year they settled in the Queenscliff bush, but they were breeding in small numbers at Freshwater Creek and were plentiful at Highton, where Mr. Mulder notes that on December 24 there were nests all over the orchard on branches of the fruit trees. He found the birds very tame, the male bird sometimes sitting on a branch a few feet above his head and scolding vigorously. On this occasion some nests were found in low bushes and in hedges, and even on the tops of haycocks in the field. On Christmas Day in that year he noted them as being plentiful at Bream Creek, accompanied by a few pairs of the Masked species".

In 1898 in "Wombat" Vol.3 is mentioned "Large numbers about Geelong" possibly the same birds mentioned by Sir Charles. In 1899 they appeared again in Melbourne and Sir Charles makes a mention of this period as "In subsequent years they have not appeared in good numbers, though it is usual for a few pairs to come to the Eastern Park every summer and these probably breed".

The next invasion was in 1907 and reported by C. Cole at Hawthorn. In 1911 Sir Charles Belcher has this to say "At the You Yangs on October 29, when after a dewy night, a warm north wind sprang up at 9 a.m., veering later to north-west and skies continued cloudless all day, glass falling, great numbers of wood-swallows kept flying low over towards the north-west and in the teeth of the wind. A very few perched on the plantations near Lara, but a great body flew far to westwards".

In 1912 Mr. St. John saw a huge flock pass over the Botanic Gardens in Melbourne on October 14. Let me quote Sir Charles Belcher again "Geelong is rather far south for them. They breed more freely about Melbourne and visit the districts to the east of the metropolis more frequently than they do this part of the country.

#### RECORDS OF THE WHITE-BROWED WOOD-SWALLOW (cont'd.)

On October 26, 1912 I noted for the first time a flock of Wood-swallows flying during a south wind. They were moving north-west, over Aberdeen Street, and had doubtless come down from the interior with the north wind which had blown all the preceeding day".

In 1915 Tom Tregellas reported flocks at Ashburton and Charles Barrett recorded them nesting on sweet briar bushes in a paddock at Greensborough in January, 1916 and in that same year flocks were reported in the Dee Valley and Mt. Ben Cairn in the Warburton district. In 1919 G.A. Keartland said the birds were common about Melbourne and Charles Barrett recorded them nesting at Cheltenham. In 1921 birds were nesting at Ashburton and the following year Stan Lawrence had three species the White-browed. Masked and the Dusky Wood-swallows nesting in close proximity to each other. In 1923 the birds appeared again and Mr. Tonge of Eltham reported large numbers feeding on the Bogong Moth. That same year Dudley Dickison said they arrived at Ashburton on October 24 in hundreds and started nesting immediately. Mr. Bill Heathcote over the next few years recorded them at Glenroy in 1926, 1928, 1929, 1931 and 1934. In 1926-31 migrations the birds had come in from the south whereas in 1934 they appeared in thousands from the north and the noise was deafening as flock after flock arrived at Glenroy. 1937 the birds were reported breeding at the You Yangs. October 1938 I saw my first White-browed Wood-swallow at Cheltenham - Beaumaris when out bird-watching with the late Rev. Clarence Lang. In 1940 W. Heathcote reported birds at Glenroy, South Morang and Diamond Creek between October 5 and November. In that same year I saw a huge flock pass over Rosebud on October 12 a day of high temperatures. A.G. Campbell recorded the birds at Kilsyth that same year. In 1941 they again visited the You Yangs. In 1944 W. Heathcote reported flocks at Glenroy on November 17 and at the Botanic Gardens, Melbourne on November 19. The following year (1945) birds were nesting at Wattle Park and at Burwood and in October flocks were again seen at the You Yangs. On October 12, 1946 during the morning I heard and saw big flocks passing over Cheltenham and they were reported at Pascoe Vale, Heidelberg, Kilsyth and Coimadai. The birds were common at the You Yangs in December. In December 1949 and January, 1950 birds were in numbers at the You Yangs. In 1951 the White-browed Woodswallows were at Werribee on November 3, Studley Park on November

The White-browed Wood-swallow on her nest.



Editor's Note: -

The photograph printed above has been kindly loaned by Mr. Wheeler to accompany his notes on the species.

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#### RECORDS OF THE WHITE-BROWED WOOD-SWALLOW (cont'd.)

4 and the last big flock I have seen near Melbourne passed over the Laverton Salt Works on December 1.

From this time it is most noticeable that the large flocks of the previous 100 years are starting to dwindle. Reports are only scattered in the last twenty years. In 1957 birds appeared at Geelong and Doncaster on October 20 and at Werribee on November 1. Some nested at the You Yangs in October. In 1960 a flock of 300 were recorded at Melton and a few nested at Batesford in January, 1962. That same year a flock remained at Toolern Vale between November 24 to December 17. In 1963 a small number were seen at Nunawading and in 1965 were two reports of birds deserting their nests after a cold snap in mid-November, one of nine at Nunawading reported by H. Tarr and the other of dozens at Durdidwarrah by Len Harvey. In that same year the birds nested at Bendigo in large numbers. In 1967 a mixed party was seen at Batesford and in 1968 a flock passed over Ballan on December II. A small party of both species was seen near Frankston also on December 8, 1968.

Although the pattern has changed over the last few years, I always hope that one day I will hear the familiar "wood-swallow" calls once again, and perhaps on some hot, north-wind day in the October's of the future they will again visit us in their hordes and perhaps even nest as they did in the days of Sir Charles Belcher, in the fruit trees, in the bushes but alas the days of the haycock's I am afraid are gone for all time.

White-browed Wood-swallows still occur in their millions in Central New South Wales, Queensland and other inland areas and long may they live there. Bendigo, Maryborough, and the Mallee Districts still have their regular visitations of this attractive and friendly bird and we hope that this gradual decline as apparent in Central Victoria does not spread to these areas also.

Local observations (J.R. Wheeler):

25-11-67 Anglesea. Several flying young. (Nesting in area) 10-12-67 Anglesea. Still nesting.

Queenscliff - several flocks - approx. 700 birds.

2-12-67 Batesford Sanctuary. Twenty plus and nesting.

Durdidwarrah. Fifty plus. 10-12-67

#### RARE BLIND SNAKE IN WESTERN AUSTRALIA

#### by Thomas I. Fletcher

During June 1968 near Woodstock Homestead approximately 100 miles south of Port Headland, Western Australia I was most surprised to see an 18" live blind snake being overpowered by many Common Meat Ants.

At the time of my arrival on the scene the ants had already managed to move about 4" of the snake into their nest.

The snake and an ant were collected and forwarded to the Western Australian Museum. The following letter was received from the Curator of Vertebrates, Dr. G.M. Storr:-

"Thank you very much for the Blind Snake. It is <u>Typhlops grypus</u> and one of the rarest of the 20-odd Australian species. It is the first specimen I have handled, though I believe there was already one in our collection from the Roebourne Tableland. There are probably not more than about half a dozen specimens in the world's museums.

"This species is especially remarkable for the hardness and sharpness of its beaky snout, no doubt an adaptation for burrowing in hard country. It is also a handsomely marked species.

"The ant was identified by our specialist in the group (A.M. Douglas) as the common meat ant (<u>Iridomyrmex detectus</u>). Mr. Douglas tells me that in the Pilbara this species commonly takes over termite mounds and as Blind Snakes are often associated with termites, they run a risk of being overpowered by the voracious meat ants."

\*

#### BIRD-WATCHING AT HATTAH LAKES

#### by Jess and Arthur Collins

At the end of April 1972 we spent a week in a caravan on the shores of Lake Hattah. Except for a day in Mildura, most of our time was occupied in bush-walking and bird-watching. It was not our first experience of northern Victorian birds, as we had spent a week at Wyperfeld the previous November. However, the greater variety of habitats at Hattah enabled us to encounter 14 species which were new to us and to record some 90 species in all, our best day's sightings being 62.

The lakes themselves provided a never-ending pageant of water-birds. Little and Hoary-headed Grebes were common near the water's edge, with Crested Grebes further out in groups of a dozen or so. Black Swans were present in small numbers; Musk Duck were seen frequently in pairs, the male often obliging with his water-jetting display. By far the commonest duck were Grey Teal, in large flocks often close to the shore. Other ducks seen included Wood Duck, Mountain Duck, White-eyed Duck and Black Duck.

A small group of Pelicans appeared to alternate between the various lakes. White Egrets were always to be seen fishing in the shallows, together with Yellow-billed Spoonbills, accompanied on one occasion by a single Royal Spoonbill. White Ibis were not so often seen, and then only in small flocks.

White-faced Herons were always around, and on two occasions White-necked Herons were seen flying. One of the sightings which most interested us was a pair of Australian Darters sunning themselves on a fallen branch beside Lake Bulla and spreading their short wings in the familiar manner of cormorants.

The latter birds were about the commonest on the lakes, including the Black, Little Black and Little Pied species. Little Black Cormorants were there in rafts of 500 or more birds, keeping well out in the middle of the lake. On several occasions they were seen to be harried by a group of three Whistling Kites, which dived repeatedly to water levels, reaching into the water with their claws as if retrieving something from the surface. No

#### BIRD-WATCHING AT HATTAH LAKES (cont'd.)

actual attacks were seen, but the cormorants frequently panicked.

It was another story, however, when a family of three Whitebreasted Sea-eagles patrolled the lakes. This caused a general panic with clouds of birds flying around and screaming, though again no actual attack was seen. Only the Black Swans ignored the overhead menace, apparently feeling secure in their size and strength.

The thick growth around the weir on Lake Hattah concealed a family of Black-tailed Native Hens. We sighted one on two occasions late in the evening at close quarters, with little concern on the part of the bird, which pecked around the mud-bank very much like the domestic bantam with which it has been compared. Coot were present in considerable numbers close in to the shore with the smaller grebes, but strangely enough our only sightings of the Eastern Swamp-hen and the Dusky Moor-hen were on the banks of the Murray during a paddle-steamer trip from Mildura.

The lakes of course were not the only attraction. One of our favorite spots for bird-watching was the small valley on the approach road just short of the cattle-grid near the rangers' houses. At times this area of open grassland merging into mallee scrub and porcupine-grass clumps was alive with small birds. Willy Wagtails were common, several pairs at a time chasing one another through the scrub. Scissors-grinders performed their hovering act a foot or so from the ground while uttering their characteristic 'grinding' call. Eastern Whitefaces, Yellow-tailed and Chestnuttailed Thornbills frequented the open ground and low bushes, while flocks of White-browed Babblers investigated the trees and fallen branches.

It was here that we had several sightings of a family of three Crested Bellbirds, one an immature male with dark-grey 'bib' and two females. Later we saw a fine male in full plumage with sharply-contrasting black and white throat, and heard his ventriloquial song ending in a low bell-like note.

Wrens were in some respects a disappointment. Among the low bushes in the valley were families of brown wrens with blue tails

August 1972



Top:-Lower:-

Striated Grass-wren Peaceful Dove

photos by Trevor Pescott



#### BIRD-WATCHING AT HATTAH LAKES (cont'd.)

and in some cases a flash of blue on the wings. These we took to be female or immature Black-backed Wrens, though we did not see a male in full plumage, possibly because of the season. Elsewhere, in the black box flats of the Kulkyne Forest we saw similar wrens with greenish tails, which we took to be probably the Purple-backed species.

However, two sightings of the Striated Grass-wren helped to make up the frustrations of identifying wrens. The first view was accidental and momentary, but next day a deliberate search among the porcupine-grass clumps along the Nature Trail near the park entrance produced a pair which were by no means shy. They ran about their affairs between the clumps with little regard for our presence, at times approaching too close to be focused in binoculars. Their size, for a wren, their delicately striped plumage and comparative tameness made this sighting a memorable occasion.

Another confiding little bird was the Red-capped Robin, both males and females allowing a close approach and extended observation. The familiar Hooded Robin of the South was also seen on occasion. Honeyeaters were common in the valley, including the White-plumed, Spiny-cheeked, Brown-headed, White-eared and Yellow-plumed species, while the Striped Honeyeater was seen in the buloke areas to the north.

A less welcome sight was a feral cat, a large tabby stalking through the mallee scrub. Having no firearms, all we could do was to report it to the Ranger to be dealt with in due course.

Another favorite location was the Old Calder Highway, a gravel road which cuts through the mallee section of the park to join the main highway some miles north of Hattah. Cruising in low or second gear and listening for bird song often resulted in locating an area which temporarily contained many birds, while a hundred yards away the scrub appeared to be lifeless. Here the Striated and Yellow-rumped Pardalotes were common, together with honeyeaters of various species, Black-capped Sittellas and White-winged Choughs. We failed to see any Mallee Fowl or their mounds, which was not surprising since the park is reputed to contain them at a density of only one pair per square mile.

#### BIRD-WATCHING AT HATTAH LAKES (cont'd.)

The Kulkyne Forest to the north of the park provided us with frequent sightings of small mobs of Emus, as well as giving access to other parts of the lake system which, however, were not so densely populated by water-birds as those within the National Park boundaries. Mallee Black-faced Kangaroos were common, but we saw no possums, in strong contrast to Wyperfeld, where they could be seen by dozens at night along the approach road. We were informed by the Ranger that the possum population was drastically reduced by a drought some years ago and is only slowly recovering.

The camping area on the shores of Lake Hattah had its own population of Galahs, White and Pink Cockatoos and Noisy Miners. A company of White-winged Choughs scavenged around the area with little or no regard for its human occupants, even coming to beg for scraps at the caravan door. Facilities, though not so good as at Wyperfeld, are quite adequate for a short stay. We drew rainwater from the Ranger's tank for drinking, and bucketed lake water from a clean sandy bottom at the swimming area for other purposes.

There were some unexplained differences in birds seen as compared with those at Wyperfeld. Yellow-throated Miners, common in the red gums at Wyperfeld, were not seen at all, whereas Noisy Miners, not observed at Wyperfeld, were present in large numbers around the lakes and elsewhere. Only once did we see a Brown Tree-creeper, which was one of the commonest birds in the black box areas of Wyperfeld.

Other highlights of the visit were our first sightings of the Pied Butcherbird, Yellow Rosella and Mulga Parrot, White-breasted Wood-swallow and Peaceful Dove. The latter brought back memories to one of us of war-time at Townsville, where the monotonous 'doo-doo' of these birds foraging in and around the tents went on all day.

We must conclude by expressing our appreciation of the help and advice of the Ranger, Mr. N.H.E. McDonald, who was a mine of information about the bird-life of the park. Another visit in spring-time when the waders and other migrants have returned from the North is definitely on our future program.

#### STUDY CAMPS IN THE OTWAYS

#### by Ted Errey

The forests of the Otway Ranges have long been one of the happy hunting grounds of Geelong naturalists. Interest has increased greatly in the eleven years since the formation of the present Geelong Field Naturalists Club, and during the last year or two a number of study camps have been organised to add to our recorded knowledge of the natural history of the region.

The collation of such information makes it clear which areas are most worthy of conservation, and appropriate recommendations can be made to the authorities. If rare plants, animals or birds are found in a certain locality or if an area itself possesses some distinctive feature that makes it of outstanding interest, then that locality or area must of necessity be set aside so that its assets remain intact for the benefit of future generations.

The Otway Ranges comprise a variety of habitats. There are foreshores and coastal strips. There is open heathland both coastal and inland. The forest itself varies, from open woodland with low scrubby trees, to dense rain forest where giant eucalypts, ancient myrtle beech and many varieties of ferns flourish. The southern slopes of the ranges are very different from the northern, for they receive more of the rain and less of the sun, with a consequent contrast in vegetation.

The building of plant lists necessitates much tramping along overgrown tracks and scrambling up and down tangled hillsides, as well as leisurely strolling along the easier ways. Mammal surveys also mean long hikes through similar territory, the morning inspection of the special cage traps often proving a particularly wet and cold operation. Then there are the spotlight excursions after dark to check on nocturnal tree-dwellers.

Preparation of a bird census calls for special skills, requiring sharpness both of ear and eye. Much listening can be done in camp. Many bird calls travel considerable distances, and an alert pair of eyes can pick up birds in flight while the billy boils or the bacon sizzles. But many names are added during the "all purpose" walks, when the general terrain is surveyed, and all is grist for the mill of searching naturalists.

Then, the overturning of a log or stone may reveal skinks, frogs or even Phreatoicopsis, a shrimp-like creature that has remained unchanged for millions of years. The thumping of a stick on a hollow tree trunk may startle into view a possum or a glider, an owl or a colony of bats.

Our camping sites have varied from Boonah and Peter's Hill in the east, along the range-top road between Benwerrin and Mt. Sabine, to the Parker and Calder Rivers in the heart of the Otways, and the Aire River and Moonlight Head in the west.

During Easter this year, the headwaters of the Cumberland River were investigated. Camp was set up on Mackies Mill Track, about midway between Mt. Sabine and Benwerrin. This was in an area where Mountain Ash, Manna Gum, Messmate and Broadleaf Peppermint comprised the top storey of the vegetation. Next in stature were Blackwoods, Musk Daisy-bush, Austral Mulberry, Banyalla and the mountain form of Varnish Wattle. Lesser shrubs included other Daisy-bushes, Satin-wood, Hazel, Prickly Coprosma, Prickly Moses, two species of Pimelea and Mountain Correa, though some specimens of this reached well over twenty feet.

Then there were ferns in profusion - Batswing and Mother Shield Ferns, Rough and Soft Tree-ferns, Bracken and Ground Ferns, Water Ferns, and several epiphytes such as Kangaroo, Finger and Gypsy Ferns.

Wiregrass, Tussock-grass, rushes and sedges helped in providing ground cover for small mammals, reptiles and sundry other creatures that delight in such hiding places.

The wiregrass, bracken and sharp-edged sedges made progress difficult off the beaten track, and as the mill had not been operating for thirty years or more, what track there was had not been beaten for some time.

In the mill's working days, most of the track had evidently been used by road vehicles. The final stage led down a steep incline and across the Cumperland via a timber bridge to the mill on the south bank. Timber was hauled up this section by cable along steel rails. Lengths of rusted rail are to be found on the rotted sleepers and collapsed bridge. A few wheels and axles



Above: - Fog shrouds our Easter 1972 camp.

Top Centre: - Butterfly Orchid
Top Right: - Slender Tree-fern

Right:- Fluffy Glider

Far Right:- Dusky (Swainsons)
Phascogale





still lie hidden in the undergrowth, with lengths of steel cable adding to Nature's own tangle. Rhizomes and young plants of Kangaroo fern were growing in the rust and moss covering a broken wheel.

Most of the mill buildings have long since fallen, but one section of sawn palings still stands in a fair state of repair under the green canopy of the returning forest. Several specimens of Tree Lomatia grow among the ruins of the bridge. Coral fungiand liverworts flourish in the damp forest debris.

In situations such as these ground dwelling mammals can be expected. To find which ones, if any, are in the vicinity, and in what numbers, traps have to be placed in likely spots. Clumps of swordgrass sedge or tangles of wiregrass and bracken may provide homes for nocturnal animals. Hollow logs or the buttressed stumps of old eucalypts also suggest the possibility of a sleeping-place for one of these shy creatures.

The mammal traps used are quite unlike the familiar rabbit or rat traps. They are made of wire mesh or light sheet aluminium in box shape with an open door at one end that closes behind the animal when it enters to reach the bait, which is a concoction of peanut butter, honey and oatmeal.

Naturally, special permission must be obtained from the Fisheries and Wildlife Department before such trapping can be done, and these permits are granted only to recognized naturalists.

Animals most frequently caught during our excursions are bush rats, or two of the smaller phascogales. These are listed and examined before being released in their own territory. Often troublesome parasites an eighth of an inch or more in length are found clinging to the skin, especially on the phascogales. These are carefully removed before the animal is let go, for several of these bloated ticks on a mammal not much more than mouse size would present a serious problem.

When the animals are to be freed, cameras and flash-lights are brought into action in the hope of obtaining a good photograph of the captive as it makes its way to freedom. This unfortunately is often a vain hope, for the phascogales particularly are very

fast off the mark. One moment they are being gently prodded to induce them to leave the cage. The next, they have disappeared into the undergrowth before the photographers' trigger fingers have begun to move. With the bush rats there is a better chance. They frequently pause outside the cage, to get their bearings perhaps, before making a more leisurely escape.

Up to the present, no trapping of tree-dwelling mammals has been attempted. At most camps, spot-lighting expeditions are made to see what creatures are abroad along the limbs and tree-trunks, for gliders and possums can be expected to be out and about during the hours of darkness. Owls and bats too, feed from dusk onwards.

In the main these excursions have not been very successful. Though several species of glider are known to live in the Otway forests little has been seen of them. Even Ring-tailed Possums are only occasionally found, usually high among the eucalypt foliage. On most evenings several bats appear momentarily in the beam of the spotlight. Otherwise night life seems much less plentiful than would be expected.

These mammals make use of the hollows in trunks and limbs of mature eucalypts for their nests and hiding-places. Every old messmate or bluegum taken from the forest means so many fewer retreats for the possums and the gliders. And every area cleared of eucalypts and replaced by pines means no hollow limbs at all.

Occasionally mist nets are used as an aid in listing the birds of a locality. These are very light fine-meshed nets, difficult to see against a background of foliage. A net is set up near a waterhole or across an open space in the forest, and so arranged that birds flying into it drop into folds of the material. Bats too are sometimes entangled, for the fine strands of the net apparently do not register on their radar.

Weather conditions can affect the pleasure and usefulness of these camps considerably, for they are held at any time of the year. Log fires help to counteract the cold, and are often necessary to dry out wet clothes or to thaw out the campers.

Much of our cooking is done over wood fires too, so they are generally of more use than gas stoves, particularly in the cooler months. In dry times, naturally, the portables come into their own. Cooking on these occasions is not restricted to a greasy frying pan and an old black billy. Soups and grills may be on anyone's menu, and generally a varied and appetising diet is enjoyed.

Extremely wet conditions do hamper all activities, and it is hoped that in the not-too-distant future a weatherproof shelter will be available for our regular use. This would not only protect us from heavy rain, but would also provide more suitable conditions for the detailed study necessary if full value is to be obtained from these camps.

\* \* \*

#### PLEASE KEEP US POSTED .

To ensure the arrival of the next issue of "Geelong Naturalist" it is necessary to know the current postal address of all Club members and Magazine Subscribers.

Any change of address should be forwarded to -

The Honorary Secretary,
Geelong Field Naturalists Club,
26 Fairbrae Avenue,
Belmont. 3216.

in order that the mailing lists are kept up to date.

\*

#### SOME BIRDS OF THE BELLARINE PENINSULAR

#### by Bruce Abbott and Philip Hughes, Ballarat.

From the 8th to the 11th of May, 1972 a bird watching excursion was held on the Bellarine Peninsular. Even at this time of the year a tremendous variety of bird life was recorded, in fact, a total of 93 species were seen. No summer migrants, - Dotterels and Sandpipers etc., were seen; most of these birds having departed prior to our arrival.

The area concentrated on for birding was east of a line joining Pt. Henry to Black Rocks. Several interesting areas are included in the district, some of these being Lake Connewarre, a State Game Reserve of 8,000 acres; Edwards Point; and Ocean Grove Nature Reserve. Weather conditions were not always propitious, sometimes thick fogs settled over large areas, making bird watching practically impossible. However at other times we did have ideal weather conditions.

The Ocean Grove Nature Reserve was by far the best single place for birding, 54 species being recorded there. Two species of Quail were seen, these being Stubble and Painted Quails. (Only one bird of each species was seen.) Two species of Bronzewing Pigeons were identified, - 2 Forest and 3 Brush Bronzewings and two migrant Cuckoos were calling from the park - the Fantailed and Golden Bronze Cuckoos. (Also one Golden Bronze Cuckoo was observed calling at Barwon Heads.) One day at about 4,30p.m. near the middle of the park one Barn Owl was seen emerging from a dead hollow tree. As it was still light this beautiful bird could be seen well until it flew silently into other parts of the park. Later on a Boobook Owl was heard calling from two different corners of the park. At one stage the owl uttered its familiar call for a continuous fifteen minutes, with only one stop of a few seconds. Nine species of honeyeater were seen, the Yellow-winged Honeyeater and Red Wattle bird being the most common.

At Lake Lorne, Drysdale, a group of 43 Eastern Swamphens were seen. It is interesting to note that some nesting boxes have been put in the lake. A short visit was made to the golf course on Swan Island, near Queenscliff where a brief walk was made a a total of 28 birds



Top:- Yellow-billed Spoonbill photos by Trevor Pescott Lower:- Black-faced Cuckoo-shrike



#### SOME BIRDS OF THE BELLARINE PENINSULAR (cont'd.)

were seen for the golf links. The best birds were Fairy Tern, Chestnut Teal, Hoary-headed Grebe, Fan-tailed Cuckoo, and Spiny-cheeked Honeyeater.

Fourteen Black-browed Albatross were seen sitting in the water off Pt. Lonsdale and two of these birds were doing the same at Barwon Heads later. Near Pt. Henry we identified six large Blackfaced Cormorants sitting on posts near the saltpans. A moderately common bird seen all along the coast was the Australian Gannet. They were usually in groups of about 2 or 3, but single birds were seen. The White-fronted Chat was a very common bird all over the Peninsular and a large number were seen at Lake Connewarre. Also at this lake two Plumed Egrets were recorded amongst many White Ibis and one Little Grass-bird was calling. Two Spiny-cheeked Honeveaters were seen every day at the Barwon Heads Camping Reserve. The birds were quite vocal and we were able to observe these beautifully plumaged birds feeding intently on Eucalypts within the camping reserve. These honeyeaters were also seen at lake Connewarre and Swan Island Golf Course. On the coastal cliffs at Barwon Heads two Singing Honeyeaters were seen. Unfortunately in this area, the plant known as South African Boneseed is gaining substantial heights of growth and is very common amongst the native flora of the coastal cliffs.

Following is a list of birds seen in the area, those birds marked with an asterisk are the ones seen at the Ocean Grove Nature Reserve. The total number of birds is 93 with 54 being seen at the Nature Reserve.

- \* Stubble Quail
- \* Painted Quail Spotted Turtle-dove
- \* Brush Bronzewing
- \* Forest Bronzewing
  Eastern Swamphen
  Little Grebe
  Hoary-headed Grebe
  Black-browed Albatross
  Black Cormorant

Little-pied Cormorant
Black-faced Cormorant
Australian Gannet
Australian Pelican
Crested Tern
Fairy Tern
Silver Gull
Pacific Gull
\* Spur-winged Plover

White Ibis

#### SOME BIRDS OF THE BELLARINE PENINSULAR (cont'd.)

Straw-necked Ibis Yellow-billed Spoonbill Large Egret Plumed Egret White-necked Heron

\* White-faced Heron
Black Swan
Chestnut-breasted Shellduck
Chestnut Teal

Grey Teal
\* Brown Hawk

Brown Goshawk

\* Whistling Eagle Black-shouldered Kite Kestrel

\* Boobook Owl

\* Barn Owl

\* Musk Lorikeet

\* Galah

Crimson Rosella

\* Eastern Rosella

\* Laughing Kookaburra \* Fan-tailed Cuckbo

\* Golden Bronze Cuckoo

\* Welcome Swallow

\* Tree Martin \*\*
\* Grey Fantail

\* Willie Wagtail

\*White-browed Scrub-wren

\* Blue Wren Mistletoebird

\* Scarlet Robin

\* Flame Robin

\* Southern Yellow Robin

\* Golden Whistler

\* Grey Thrush \* Magpie-lark \* Black-faced Cuckoo-shrike Blackbird

\* White-fronted Chat

\* Brown Thornbill

\* Yellow-tailed Thornbill

\* Buff-tailed Thornbill Striated Field-wren Little Grassbird

\* Orange-winged Sittella

\* White-throated Tree-creeper

\* Spotted Pardalote

\* Eastern Striated Pardalote

\* Grey-breasted Silvereye

\* White-naped Honeyeater

\* Brown-headed Honeyeater

\* Yellow-faced Honeyeater

\* White-plumed Honeyeater Singing Honeyeater

\* White-eared Honeyeater

\* Crescent Honeyeater

\* Yellow-winged Honeyeater Spiny-cheeked Honeyeater

\* Red Wattlebird

\* Noisy Miner Pipit Skylark

\* Red-browed Finch Greenfinch

\* Goldfinch House Sparrow

\* Starling

\* Little Raven Australian Raven

\* Grey Currawong

\* Grey Butcherbird

\* White-backed Magpie

#### "AN HOUR COUNT NO. 2"

#### by Roy Wheeler

In the north-central part of Victoria about five miles west of Redesdale and 23 miles south-east of Bendigo there once existed a place called Lyal. Gold was found there in 1880 and in a short time up to 5000 miners were working the area which included the infamous Horse Shoe Reef.

Gold mining continued until the turn of the century and finally like so many other mining areas gradually became deserted although spasmodic mining continued until 1940. All that remains of the former Lyal post office is a lone telephone post, some old bricks, a large bush of cluster roses and another of honeysuckle. Not very far from this site is a holiday home of Mr. John Ipsen the Hon. Secretary of the Bendigo Field Naturalists Club. On his property stands an old stone chimney and beside it a huge cherry plum tree, relics of the bygone diggings. This was once part of the home of a Chinese market gardener. In the wooded valley nearby are the remains of innumerable mine shafts, piles of stone and brick once the site of miners shacks, the remains of the battery, the old water channels winding through the trees, all relics of the activities of a mining community of some 90 years ago.

On the edge of the Kimbolten State Forest, near the Coliban River and the more recently constructed Lake Eppalock, it is a very picturesque area and prolific in native flora and fauna particularly birds. Mrs. Wheeler and I have stayed at Mr. Ipsen's "Lyal Glen" on a number of occasions and enjoyed it very much. I have often indulged in an hour count and the best of a number made was in December, 1965. As I mentioned in "An Hour Count No. 1" the rules are simple, choose a good bird-watching spot and sitting in a chair or stool count all the birds you hear and see within binocular range within the hour. Herewith are details of my best hour count at "Lyal Glen", Redesdale, Vic.

Monday December 6, 1965. 4.5 to 5.5 p.m. Clouds building up after a hot day of 90 deg. Wind north force 4 and gradually decreasing. Birds in order of sighting: Rainbow Bird 4; Welcome Swallow 42; Red-backed Parrot 26; Fuscous Honeyeater 17; Wedge-tailed Eagle 1; Yellow-tufted Honeyeater 12; Brown Treecreeper 2; White-plumed

#### "AN HOUR COUNT NO. 2" (cont'd.)

Honeyeater 3; Grey Thrush 1; Scissors Grinder 3; White-backed Magpie 10; Willie Wagtail 3; Eastern Striated Pardalote 9; Raven 29; Brown-Headed Honeyeater 3; Eastern Shrike-tit 1; Magpie-lark 2; Jacky Winter 2; Red-browed Finch 2; White-throated Treecreeper 2; Little Lorikeet 18; Black-faced Cuckoo-shrike 2; Eastern Rosella 4; Noisy Friarbird 2; Eastern Whiteface 2; Dusky Wood-swallow 8; Pipit 1; Red Wattlebird 1; Galah 2; White-faced Heron 1: Kookaburra 2.

Total 31 species and 217 individuals.

BIRDS FROM THE BUSES

by. Joyce Hunt

Although not a list of a specific area, the following is of interest to show how easily a good list of birds can be made on Club Excursions.

The birds named below were seen from the buses during our Mt. William excursion on July 16th, 1972; they do not relate to any one area, but were seen during the trip up to Lancefield and return.

Black Duck

Black-faced Cuckoo-shrike Fiame Robin Yellow-tailed Thornbill Brown Goshad Grey Fantail Nankeen Kes Straw-necked Ibis Kookaburra White-faced Heron Wedge-tailed Contained Unital Pied Cormorant Indian Myna Welcome Swallow Goldfinch Crimson Rosella Black-should Raven Brown Hawk White-backed Magpie Mudlark Willy Wagtail Ground Lark Black Swan

Little (?) Grebe

White Cockatoo

Brown Goshawk
Nankeen Kestrel
Spur-winged Plover
Kookaburra
Wedge-tailed Eagle
(on the ground)
Scarlet Robin
Indian Myna
Goldfinch
Swamp Harrier
Silver Gull

Black-shouldered Kite White-plumed
Brown Hawk Honeyeater
Mudlark Blue Wren
Ground Lark Whistling Kite
Galah Grey Butcherbird

Spoonbill (species?)

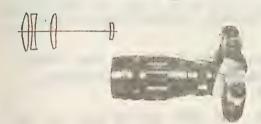
Quail (species?)

Mountain Duck Red Wattle-bird White-necked Heron House Sparrow

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#### JUNIOR PAGES

The study of nature, of birds, animals, plants, insects, pond life and of other things which are part of our world, is a wonderful one.

Boys and girls have many opportunities to enjoy nature study with their friends or even by themselves, and it certainly does help if Mum or Dad are naturalists or at least helpful to the Junior Member.

The notes that follow are from <u>Lisa Pescott</u>, whose Dad is a keen naturalist.

"In 1971, a man gave my dad a baby Ring-tail Possum to look after. We called her Snoopy, and when we went on holidays at Christmas, we put her in the car to play and eat.

"At Easter, we let her go in the bush. We were sad to see her go."

(Possums are protected by law, and special permission had to be obtained for Mr. Pescott to rear her; a condition of the permission was that she be released in the bush as soon as she was old enough.)

Baby animals and birds are often found orphaned or deserted by their parents, and they would die if not given protection; however very often they only appear to be deserted and in fact the parents have left them only whilst they are finding food.

It is far safer to leave any baby animals and birds just where you find them, even though their parents are no where to be seen.

Early this nesting season, a man rang Mr. Pescott to ask if he could identify four eggs he had found on the ground; they were Plovers eggs, and the adults were away feeding.

The man thought they had been deserted and so picked them up and took them to his office; by the time the eggs were replaced, the parents had found them gone and had flown away.

Often, too, young Magpies are found without parents near them and people pick them up thinking they have been deserted; what has really happened is that the adults are away looking for food.

So, if you find a nest, or baby bird or animal, it is much better to leave it alone, unless you are sure the parents are dead or

August 1972

# JUNIOR PAGES (cont'd.)

have left for good.

In the case of the possum, Snoopy, about which Lisa wrote, it was rescued from a cat and there was no way of knowing where its mother was living.

If you do rescue an orphan in this way, be sure you check <a href="immediately">immediately</a> with one of the Fisheries and Wildlife Inspectors or contact one of the senior Club members who will advise you what you should do.

\* \* \* \* \*

#### JUNIOR PROJECTS

Each year, the Club holds a Junior Projects Competition with books as prizes. The entries close each November meeting, with judging at the end of November and awards are made at the December meeting.

Projects can consist of collections of shells, stones, gum nuts, insects or newspaper photographs; other ideas are to make books of drawings, folders of diagrams, lists of birds or plants, life-cycle charts or astronomy charts showing the position of stars and planets.

Remember that native plants, birds and animals are protected so that collections of feathers, eggs and flowers can not be made.

\* \* \* \* \*

#### JUNIOR MEETINGS

Junior members of the Club can attend special Juniors Meeting held before the regular monthly meetings at 7.30p.m. on the first Tuesday of each month.

## THE LAST WORD . . . .

Since the printing of our last "Geelong Naturalist" the Editor has received a number of comments about the revised cover layout and contents arrangement - all, so far, of a favorable nature.

This is most gratifying, and to all who made comment may we express our thanks.

Of course there is no good reason to believe that we have gone as far as possible in the up-grading of our Journal, and any suggestions which may further improve "Geelong Naturalist" would be most welcome.

One way in which we can increase the value of our Naturalist is by maintaining the high standard of material we have had presented to us for publication, and it needs only a glance at the list of contents and authors to see that we are publishing useful material.

There is always a need for articles and photographs - the former as full stories, as lists for certain areas, as short notes or as random observations; and the latter to be to the correct size if possible and printed on contrasty, glossy paper.

Color slides are more difficult, but it is not impossible to reproduce them provided they are sharp and contain good detail.

As always, we are short of material, and the printing of "Geelong Naturalist" on time depends largely on the Editor having sufficient articles on hand in time.

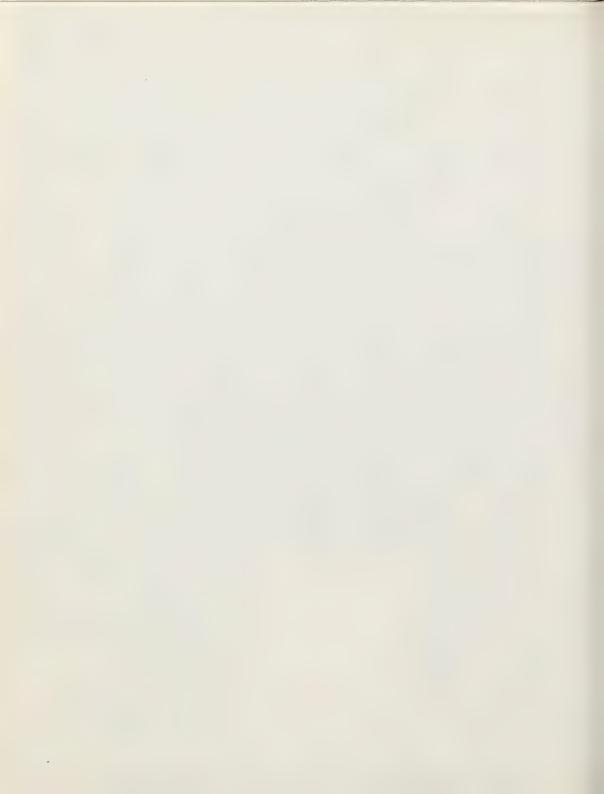
TREVOR PESCOTT Hon. Editor.



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### HONEYEATERS IN OUR GARDEN

# by Oonah McHaffie, Park Orchards

In sorting through some old issues of the "Geelong Naturalist", I came across the article "100 Questions About Sparrows" (Vol.2. No.3. October, 1965). The last two paragraphs read:

"Although these questions are on sparrows and directed primarily at school children, many similar questions arise about our native birds and can be answered only by careful observations by adults and juniors."

"These observations should be published in a journal such as our own, so that they can be shared with other observers. Too much valuable information has been lost already simply because the observers do not think the observations are of sufficient value to be recorded permanently."

Since I re-read the above, the Editorial in the issue of February, 1972, also mentions that many notes on observations are being lost.

These comments have encouraged me to write some notes about birds in our garden. Although commonplace perhaps to experienced bird observers, they may be of interest to beginners like myself, if only for comparison with their own experiences.

We live in an outer suburb about eighteen miles east of Melbourne. It is approximately three miles from Ringwood, and four from Warrandyte. It was a semi-rural area when we came here eighteen and a half years ago, but our own property was old orchard land denuded of trees except for pine trees for which Park Orchards was noted. Although we have lost some of the surrounding bush there still remains some habitat for the birds which accounts for our rarer visitors and, perhaps, the disappearance and reappearance of others.

When we first came here we had very few birds; many introduced species, but of native birds only Kookaburras, Magpies, Ravens, Currawongs and one or two Willy Wagtails. As our native trees and shrubs have grown, so has an increase in native birds taken place. Our bird list now numbers 42 native and 6 introduced species, but some of the native birds are only occasional visitors and some

## HONEYEATERS IN OUR GARDEN (cont'd.)

have been sighted only once or twice.

Sometimes many birds are around and at other times there is a dearth of bird life. We have never been able to discover the reason. Some are probably nomadic and some migratory but others are not placed under either classification in my reference books, yet they continue to come and go. Late Summer and Autumn this year (1972) fewer birds were around but this could be accounted for by the plentiful summer rain. (We hope this was the cause and not the depletion in the number of birds from pesticides or inroads to habitat). With a good supply of water there was no necessity for them to visit our bird bath which brought many species to our premises in other years, some only being observed when they came in for water.

The arrival and departure of the Honeyeaters is determined by the flowering of their favourite shrubs. We never cease to be amazed at the way the birds arrive at approximately the same time each year. We have a hybrid grevillea, "Poorinda Queen" opposite a window and it gives me the best opportunity for observation, especially as it has a long flowering period and is a great favourite of the Honeyeaters. As soon as the buds appear the birds start inspecting daily to see if the flowers are ready. The first to arrive is the Eastern Spinebill, followed soon after by the Yellow-faced Honeyeater. My notes show that these birds start regular inspections from the end of April or early May. Of course the flowering of the shrub varies according to climatic conditions. This year it commenced to flower in late May but in some years it starts in June. It continues to flower until January with, sometimes, a few flowers later still. These "spider" flowers are orange or apricot and almost match the chestnut colour of the abdomen of the Eastern Spinebill when he is among them. This year a White-eared Honeyeater also carried out an early inspection and is still around at odd times. It is a shyer bird and does not stay for as long a time. One White-plumed Honeyeater paid it a brief visit but has not been seen again. We hope that towards the end of the year a lot of the birds will return. Last December (1971) Honeyeaters feeding from Grevillea "Poorinda Queen", and others in flower at that time, were the White-plumed, White-naped, White-eared, Brown-headed, Yellow-faced, Eastern Spinebill, and,

# HONEYEATERS IN OUR GARDEN (cont'd.)

to our delight, we were able to add another to our list as one Yellow-winged Honeyeater appeared and visited the plants daily for a week or more. We always knew when it was about by its harsh chattering alarm call which it used almost continuously while feeding. This bird presented another puzzle. Why did it leave us after such a short period when food was still available? It will be interesting to see if it arrives this year and at the same time and if it remains longer.

We can never account for the preference of the Honeveaters for particular shrubs. We planted Grevillea sericea (Pink Spider Flower of N.S.W.) and Grevillea linearifolia (Narrow-leaf Grevillea, also of N.S.W.) for the birds as both flower almost continuously but we have rarely seen them on these shrubs. They have "spider" flowers similar to the hybrid mentioned but are simply not popular. Neither is Grevillea barkleyana (Large-leaf Grevillea from Gippsland, Victoria) which has toothbrush flowers, pale pink, but they enjoy Grevillea longifolia (formerly G.asplenifolia) which has toothbrush flowers also but of a deeper colour. They like Grevillea banksia of Queensland for the few flowers produced by our shrub which is not a robust plant. It suffers from frosts and does not like our heavy waterlogged clay soil. Surprisingly, the Eastern Spinebill regularly seems to be getting food from the flowers of Grevillea dallachiana which has rather inconspicuous flowers. This bird also likes the exotic plants - abutilons and fuschias.

Although the birds do feed from our Melaleucas, Banksias, Eucalypts and Hakea laurina (we have never seen them on our only other Hakea - saligna), the grevilleas are the most popular, partly because of the longer flowering period. The creeper, Kennedia rubicunda (Dusky Coral Pea) is another attraction but flowers for a comparatively short time.

The Red and Little Wattle Birds for some years mainly came in to our property when the Eucalypts, particularly Eucalyptus sideroxylon (the Red Ironbark) were in flower, but we were very pleased to find that they are now coming in quite close to the house to feed on Banksia ericifolia (Heath Banksia of N.S.W.) and last year, for the first time, we saw them on the Callistemon citrinus (Crimson Bottlebrush) and Callistemon rigidus (Stiff Bottlebrush of N.S.W.) and early this year a Red Wattle Bird was on Hakea laurina.

#### . A BUSHLAND REMNANT AT MARSHALL

# by Peter Fagg, Orbost. (Sept. 1972)

A remnant of bushland of a type that once covered much of the Bellarine Peninsula surprisingly still exists only four and a half miles from the centre of the City of Geelong. Although it has been, and still is, being exploited by man, this piece of bush remains as a valuable example of a layered woodland of eucalypts, wattles, and she-oaks.

#### LOCATION AND ACCESS

The bush block is a 10 acre square subdivision within the rectangular 320 acres bounded by the roads: Barwarre, Horseshoe Bend, Reserve, and Boundary Roads.

It is reached from Geelong by following the Geelong - Torquay Road until Grovedale is reached. Here, turn easterly into Reserve Road and follow this until the railway line is crossed. Turn sharp right immediately over the railway and proceed along Barwarre Road for 0.4 miles; a short walk easterly along a fence, starting at a dam adjacent to the road, brings one to the south-west corner of the block which is fenced on the four sides. See photograph.

#### OWNERSHIP

At present the block is privately owned by Mr. Bob Hose, a farmer, who lives at "Glenesk" on Horseshoe Bend Road, Marshall. The land previously belonged to his mother, who always liked the bush and never had any desire to clear it. As long as he is living, Mr. Hose says he will not have the bush cleared and sown down. He appreciates the value of the bush, and does not mind people wandering around in it. Naturalists will be heartened by this farmer's conservation-minded attitude.

#### SPECIAL SIGNIFICANCE

To my knowledge, after study of aerial photographs flown on 19th December, 1970, by The Department of Crown Lands and Survey, and after field checking, no similar type of native bushland exists as close to Geelong as does this Marshall block. It is 4.5 miles, in a straight line, from the Geelong G.P.O. (Batesford Sanctuary, 5.5 miles from the G.P.O. has different vegetation characteristics due

# A BUSHLAND REMNANT AT MARSHALL (cont'd.)

to its existence on a granite-derived soil.)

The Marshall bush block has a strong affinity to the type of vegetation found in the Ocean Grove Nature Reserve, the sole worthwhile reserve of the native vegetation which once covered much of the Bellarine Peninsula. This Reserve, less than half of what was formerly known as Cuthbertson's Square Mile, has had at least 100 plant species recorded for it. In contrast, there is a paucity of plant species in the Marshall block which is no doubt due to its small size, and to utilisation by cattle and man over probably not less than 100 years.

#### UTILISATION

Mr. Hose uses the eucalypt trees, not the she-oaks, for firewood, which he carts out on tracks through the block. His cattle use the area for shelter and for grazing. A small amount of rubbish, including cut thistles, has been dumped in one or two spots. This pattern of utilisation has probably been the same for many years.

#### TOPOGRAPHY AND SOIL

There is a very slight downslope to the north - probably about 2 or 3 feet over the ten chains. The surface is flat except for several small depressions of about 5 feet diameter and 1 to 2 feet below the general ground level.

The soil has developed upon Pleistocene high level alluvium deposits, being outwash sand, gravel and clay, in the near-coastal Barwon River basin. The present course of the Barwon River is about 2 miles north-easterly from the block. In one hole dug in the centre of the area, the following soil profile was seen:

0 - 2 ins. grey-brown sandy loam

2 - 9 ins. light grey clay loam 9+ ins. orange, red-mottled tight clay

Mr. Hose says the soil becomes oozy in a wet winter. This is explainable from the facts that the clay impedes drainage, and that the block is at the foot of a gradual rise to the south.

#### FAUNA

No study of fauna has been undertaken, although magpies are often

# A BUSHLAND REMNANT AT MARSHALL (cont'd.)

seen, and Mr. Hose says that the bush is a habitat for hares.

#### FIRE HISTORY

Mr. Hose says there was a fire in the southern half about 30 years ago (the 1939 fires?) which killed the wattles, but they grew up again in profusion. Fires lit in several spots in the area in August 1971 failed to burn much more than a few square yards of grass. A fire lit in August 1972 burnt dead wattle and she-oak branches on the ground over about half an acre, and scorched some tall shrubs.

(A plant ecology study in 1970 by students of Melbourne University in similar bushland near the Ocean Grove Nature Reserve found that hot fires at intervals were probably necessary for perpetuation of eucalypts as the dominant plant in these plant communities. Exclusion of fire may cause she-oaks to take over.)

#### VEGETATION HEALTH

Much of the Golden Wattle is dying off (this is natural for wattles after about 20 years), but there appears to be sufficient young seedlings of this species coming up through the grass to regenerate the wattle stand. This regeneration may or may not have been induced by a light ground fire. Grazing, however, is keeping many seedlings stunted.

Some die-back exists in the crowns of Yellow Gum, the most common eucalypt, but this die-back cannot be attributed to the action of Phytophthora cinnamoni as this pathogenic, root-rotting fungus was not detected by tests on soil collected in the area. One 40 feet high yellow gum that had been felled showed 41 growth rings at its butt, indicating that it was a seedling in about 1930.

#### VEGETATION STRUCTURE

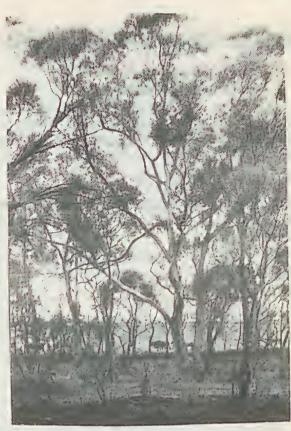
There are "layers" in this woodland which are formed by the various plant species which grow to different heights. These are approximately as follows:

Yellow Gum 40 - 50 feet
Drooping She-oak and
Cherry Ballart 20 - 25 feet
Golden Wattle 15 - 20 feet

November



Yellow Gum and Golden Wattle within the block Marshall Bush Block - 10 acres. Property of Mr. Hose



Near the edge of the block - a hybrid Eucalypt (E.camaldulensis x E.ovata)



The area looking north-east. (29.8.1972)

Photos by Peter Fagg.

# A BUSHLAND REMNANT AT MARSHALL (cont'd.)

10 - 18 feet Sweet Bursaria 5 - 10 feet Hedge Wattle Sedges and Flax-lily 1 - 2 feet

All of these six layers do not exist at any one point, but the eucalypts do noticeably stick out through the general she-oak See photographs. layer.

#### VEGETATION COMPOSITION

A total of 40 species are listed below. This an incomplete, preliminary plant list. Species marked with an asterisk are not native plants.

#### Monocotyledons

#### GRAMINEAE

\*Briza maxima Themeda australis Hordeum leporimum

(Kangaroo Grass) (Barley-grass) (Tussock Grass) Poa australis sp. agg.

#### CYPERACEAE

Lepidosperma sp.

(Sword-sedge)

#### LILIACEAE

Lomandra filiformis Dianella revoluta Anguillaria dioica Burchardia umbellata Tricoryne elation Caesia vittata

(Wattle Mat-rush) (Black-anther Flax-lily) Early Nancy) (Milkmaids) (Yellow Rush-lily) (Blue Grass-lily)

(Large Quaking-grass)

# Dictyledons

#### CASUARINACEAE

(Drooping She-oak) Casuarina stricta

#### SANTALACEAE

Exocarpos cupressiformis

(Cherry Ballart)

November 1972

# A BUSHLAND REMNANT AT MARSHALL (cont'd.)

RANUNCULACEAE

Clematis microphylla

(Small-leaved Clematis)

DROSERACEAE

Drosera sp.

(Sundew).

PITTOSPORACEAE -

Bursaria spinosa \*Pittosporum undulatum (Sweet Bursaria) (Sweet Pittosporum)

ROSACEAE

\*Rubus rubiginosa \*Crataegus oxyacantha (Briar Rose)
(Hawthorn)

MIMOSACEAE

Acacia armata mearnsii pycantha (Hedge Wattle) (Black Wattle) (Golden Wattle)

**FABACEAE** 

Dillwynia cinerascens Kennedya prostrata (Grey Parrot-pea) (Running Postman)

OXALIDACEAE:

Oxalis sp.

(Wood-sorrel)

MYRTACEAE

Eucalyptus leucoxylon
ovata
camaldulensis x
ovata (hybrid)

(Yellow Gum) (Swamp Gum)

(Studley Park Red Gum ?)

HALORAGACEAE .

Haloragis tetragyna

(Common Raspwort).

GENTIANACEAE

Centaurium pulchellum

(Austral Centaury)

# A BUSHLAND REMNANT AT MARSHALL (cont'd.)

#### SOLANACEAE

\*Solanum nigrum
\*Lycium ferocissimum

(Black Nightshade)
(Boxthorn)

PLANTAGINACEAE

\*Plantago sp.

(Plantain)

RUBIACEAE

Asperula scoparia

(Prickly Woodruff).

**ASTERACEAE** 

Leptorhyncos tenuifolia Helichrysum apiculatum "scorpioides Calocephalus sp.

\*Sonchus oleraceus
\*Taraxacum officinale

(Wiry Buttons)
(Clustered Everlasting)
(Curling Everlasting)
(Beauty-heads)
(Sow Thistle)
(Dandelion)

#### MOREL - A TASTY DISH!

# by Priscilla and Trevor Pescott

On the cover of this issue is a photograph of a fungus called the Morel, this particular specimen being found on a Club excursion to the Brisbane Ranges about six years ago.

A few years after this, during a caravan tour through the Flinders Ranges in South Australia, we found a large number of Morels and decided to sample them as we had heard that they are good to eat.

We cooked them just as we would mushrooms and declared them to be of finer flavour and texture than mushrooms.

Unfortunately, it is unusual to find sufficient to make a meal of them, but from personal experience we can recommend them if such a find is made.

# TWO YEARS OF GULL OBSERVATIONS

#### by Ira Savage

The Silver Gull, like any other bird, held no special interest to me until one Saturday morning several years ago.

I was sitting with my family in our car on the foreshore between Cunningham and Yarra Street wharves, feeding the Gulls with scraps, when out of the blue one particular Gull landed on the car bonnet; my wife was quick to notice that around each leg was a metal ring.

My interest was aroused, and we observed that one particular ring was numbered with five figures, the highest digit being placed at the top of the band and the other four following in their lesser numerical order, all numbers lying on their side.

The band on the other leg was of a particular color.

Having noted these details on the first scrap of paper we could find, with a stubby pencil found at the bottom of the glove box, the whole family became alert, searching amongst the dozens of jostling Silver Gulls for further band sightings.

I am not know sure of the outcome of these first brief moments of observation, but it was the beginnings, in October 1969, of a big program leading into the spending of many long, and very interesting, hours, of travelling many miles and getting into some hilarious situations, of observing and recording both band numbers and colors of many Silver Gulls.

My first contact was with Trevor Pescott, a bird bander and one of the leaders of the Geelong Field Naturalists Club, and later with David Purchase of the C.S.I.R.O. Wildlife Research Division in Canberra, who was then receiving records of all banded birds; I started to tally up a list of banded Silver Gulls, and in the following two years, made an impressive total.

I embarked upon the program by making use of our local beaches, starting at Rippleside, then Western Beach, and eventually through the Eastern Beach where Silver Gulls abound.

A first attempt at band reading was made at Rippleside Beach car park next to the Harbour Trust Workshops, where I quickly noticed while feeding the Gulls that several had bands attached; I had no

# TWO YEARS OF GULL OBSERVATIONS (cont'd.)

success in trying to read them with the naked eye, or by holding my 10 x 50 binoculars - my hands always appeared to be too shakey!

I realised I had a problem and my second try at obtaining the numbers was by getting my family to feed the birds and I lay flat on my tummy, elbows propped on the ground - but still no luck.

We came away very dejected at our lack of success.

I knew then that a binocular stand had to be devised, one that I could move around, to follow the restless bird as well as the perching one, and to do everything in a comfortable way; so I made a wierd, and to me, wonderful, stand with writing pad attachment and folding chair.

My next visit to Rippleside - with my extra gear and after a little practice - was a huge success. Once the Gull became stationary and the numbers became clear in the binoculars, it took only seconds to pick up.

It was "on" in a big way!

Dave Purchase of C.S.I.R.O., Canberra, on delivery of further readings, gave me full encouragement with literature to continue the observing. At a following meeting of the G.F.N.C., I picked up a leaflet on "Banded Silver Gull Observing" written by Dr. R. Carrick of the Mawson Institute of Antarctic Research, Adelaide University, seeking volunteers for this project.

dis name, and his project, did not then mean a thing to me, nor did they for some time after - little did I realise that at a later date the whole project I had let myself in for would hinge on him and his University assistants in a daily contact by special letter arrangement.

Nor did I realise I would have the pleasure of going out with him, and later with his assistants, looking for banded Gulls.

My son, at this time of the story, had to catch the 6.00a.m. train from North Geelong Station, a short distance from Rippleside Beach, so I made it my duty to arrive at the beach front by 6 o'clock. This punctuality was kept up only when it was daylight at that particular time, or at least breaking dawn as the winter months drew in.

# TWO YEARS OF GULL OBSERVATIONS (cont.d.)

The Silver Gulls I observed started to arrive at the water's edge in twos and threes from their sleeping quarters, and numbers grew until a group had gathered (anything from 80 to 300 birds, varying each day), and preening and bathing took place.

This was my best opportunity to feed them, their legs by then being clean and the band numbers and colors much easier to read; my success at reading these bands was almost 100%, and a good morning would average five bands at Rippleside.

At this beach I could hold them for only about a quarter of an hour, before they started to feed on the parkland behind the beachfront.

Even short grass made it difficult to table the numbers - hard flat ground like the car park was always best.

After Rippleside, came Western Beach, where I would arrive about 6.30a.m., staying for about 10 minutes before moving onto the area between Cunningham and Yarra Street Piers; another ten minutes would be spent here, then to finish up at the two car parks and lawns at Eastern Beach.

I always made full use of car parks (when empty if possible) as it makes for easy number reading.

From these three beaches, I could get anything up to 10 readings daily on an average.

This procedure would be repeated in the evenings, after about 5.15p.m., weather and light permitting.

Looking back over the records for the two years, I found that banded Gulls generally appeared between late October and the following July, whilst in the other months the banded Gulls would be absent; it was later, through letters from Dr. Carrick, that I came to know the reason for the absence.

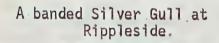
At the weekends and holiday periods, I visited as often as time permitted all the Silver Gull habitats down the Bellarine Peninsula, to Torquay, Anglesea and right down to Apollo Bay, all with varying results.

Torquay, in particular at Fishermen's Beach, was always a good spot,

# <u>Geelong</u> Naturalist



Silver Gulls il



# November 1972



light.





Mr. Savage checking a flock of Gulls for banded birds. Above:

Left: Silver Gulls at Rippleside.

Photos. by Trevor Pescott.

# TWO YEARS OF GULL OBSERVATIONS (cont'd.)

as were the Anglesea River estuary, local refuse tips of the areas in question, school playing grounds and local parklands.

I might add at this point that I always tried to read the numbers three times to be absolutely sure I did not make a mistake; doubtful digits were always pointed out in my dispatches to Canberra or Adelaide University.

A bright sunny day was always appreciated by me as it gave added clarity to the black numbers.

Silver Gulls marked in other ways were also observed by me - tags attached to wings, different shapes and colors, and letters painted on them were all used; some gulls were sprayed with colored dyes - I have seen mauve and yellow on the underside of the wings.

A Gull wearing a chicken ring was also once seen, but this I have been told by the experts is not an official way to mark the birds

From the reports I received from Dave Purchase in Canberra and Dr. Carrick in Adelaide, my sightings are nearly all of Silver Gulls originating from colonies in South Australia, ranging from the Coorong near the Victorian Border, to around Adelaide.

Dr. Carrick will publish at a later date an official document on the work carried out on Gulls, and he has asked me not to go into great detail on the results from my readings.

It has been my good fortune to spend one Saturday afternoon with Dr. Carrick and Mrs. Carrick in Geelong, visiting all the most promising spots; as I recall about 8 banded birds were seen at that time.

At a later date, two of Dr. Carrick's workers - John Ottaway and his assistant Denise, came to Geelong, in their Port Phillip survey; on this occasion I spent 9 hours with them, visiting the most likely spots, starting from the Geelong Grammar School and finishing up at Bell's Beach just before dark, having covered the Bellarine Peninsula and Torquay, and having made 20 sightings.

A most interesting point here - John's binoculars had an adjustment so that he could take readings at an incredibly close range, these having been specially prepared by a local optician; a good telescope was also part of their kit.

# TWO YEARS OF GULL OBSERVATIONS (cont'd.)

On this day, we used 24 loaves of bread, and the name "Mawson Institute of Antarctic Research" in large letters on their car never failed to draw curious people with some remarkable questions delivered to us through the car windows!

To Dave Purchase's surprise, I have recorded about 5 banded Gulls from the Sydney, N.S.W., area.

From John Ottaway's letter of 12th August, 1971, he has recorded against my name 947 sightings, the most at that time by any amateur; many of these were repeats, but these are still very useful to the studies at the Mawson Institute.

One or two of the Silver Gulls were almost permanent residents of one particular beach area during their part of the year in Geelong; Point Lonsdale and Queenscliff were not good places to pick up banded Gulls, even though there were many hundreds of unbanded Gulls there.

The two years of my observations - October 1969 to October 1971 - were well spent, as I learned a lot and made many friends - and gave many impromptu lectures to those interested who happened to be around.

#### BELMONT COMMON

The Geelong Field Naturalists Club has been given control over the swamp, bounded by the Barwon Heads Road, Access Road to Golf Course, Railway and Shire Depot, on the Belmont Common.

We are committed to carrying out tree planting and other works - and to pay an annual rental of \$1 - so that early in the New Year a call will be made to members for assistance both physically and financially to have earthworks carried out and tree planting done.

Many Club members have been concerned at the possibility of losing this area as a natural feature; however its future now seems bright indeed.

#### REPTILE SPECIMENS, PILBARA, WESTERN AUSTRALIA

# by T.I. Fletcher, Newtown

The following are notes on some of the various small reptiles collected by the writer near Port Hedland, Western Australia.

All specimens were forwarded to and identified by Dr. G.M. Storr of the Western Australian Museum, whose comments are shown in inverted commas.

Pygopus baileyi:

December 1967. "Although the specimen is badly battered we are keeping it, for I cannot remember another example of this species from so far north. In the Pilbara one would rather expect its relative Pygopus nigriceps."

Typhlops australis (?)

February 1968, Port Hedland. "I have had a good look at the specimen but am afraid that its head is too damaged to permit certain identification. In most characters it agrees with the wouthern species Typhlops australis which to date has not been collected anywhere near so far north as Port Hedland.

Demansia nuchalis:

June 1968. "This species (deadly when adult) is widely distributed over the northern and interior parts of Australia. It is closely related to the Dugite (D. affinis) and Brown Snake (D. textilis) which takes its place in the wouthwest and southeast of Australia respectively."

Varanus acanthurus:

June 1968. "Another widespread species, it occupies the greater part of the arid and semi-arid regions of W.A. and the N.T."

Lialis burtoni:

June 1968. "This member of the Legless Lizard family occurs over the greater part of Australia and New Guinea. It is absent only from the coolest regions."

# REPTILE SPECIMENS, PILBARA, WESTERN AUSTRALIA (cont'd.)

Egernia depressa:

Abydos, June 1968. "The excellent slides are of the Lesser Spiny-tailed Skink. The Pilbara variety (characterised by the beautiful pinkish coloration, in contrast to the brownish coloration of the southern specimens) is usually found under sheets of exfoliating granite."

August 1968:

"Thank you for the five lizards from the Pilbara. They are identified as follows:Sphenomorphus richardsonii, Gehyra variegata,
Amphibolurus inermis, Delma fraseri, Ctenotus
pantherinus."

Diplodactylus pulcher:

September 1968, Marillana. "This species is confined to the southern half of the state, east to Warburton Range. Previously it was not known from further north than Warroora and a little south of Mundiwindi. Hence your specimen is the first from the valley of the Fortescue, which represents a considerable extension of known range."

Typhlops bituberculatus:

September 1968. "This species (of blind snake) is widespread in the southern half of Australia. Marillana must be close to its northern limit."

Amphibolurus caudicinctus:

September 1968. "The dragon is a young A. caudicinctus, a common species in the Pilbara."

#### AN HOUR COUNT. No.3

## by Roy Wheeler

Lalalty is a small community in southern New South Wales about ten miles from Cobram, Victoria and on the Berrigan Road. Mrs. Wheeler and I have been fortunate enough over the years to have spent several short holidays there as the guests of Miss Marge Simpson, B.E.M. Miss Simpson is a keen birdo and her farm property attracts a lot of bird life particularly as the house is close to the Mulwala Canal. I usually sit on a chair at the northeast corner of the house and garden block overlooking a paddock of Murray Pine and Yellow Box, part of the canal and the plains beyond sweeping across towards the Murray River. Over the years the hour counts have been many and varied and during a recent visit in May, 1972 one list stands out because it was during this particular hour count I recorded a new bird for the district.

It was towards the end of the count when I noticed a small honeyeater flying out from an old almond tree in the garden catching insects. I suspected a White-plumed Honeyeater but imagine my surprise when the binoculars picked up a fine specimen of the White-fronted Honeyeater. This species lives normally in the drier mallee areas of the inland, but has a reputation for straying well away from those areas at times. In August 1959 a White-fronted Honeyeater was reported in the flowering Ironbarks in the plantations at the You Yangs. I remember making a trip down to see it as it stayed for some time. The bird at Lalalty stayed a couple of days and then moved on. Another interesting fact about this count was the number of Little Friar-birds. In the afternoon and evening of the day of the count an inch of badly needed rain fell and in the count over the same area the following morning they had practically all moved off. The change in the weather pattern had no doubt triggered off this movement. comparison I will give the details of both counts in this article.

Another interesting observation was during a further count when Mrs. Wheeler and I were both observing. We heard a flurry of wings and saw a Stubble Quail being hotly pursued by a magpie. The quail literally landed at our feet and remained absolutely motionless (except for the eyes) for at least half an hour. I

# AN HOUR COUNT. No.3 (cont'd.)

think I could have easily picked the bird up but refrained from doing so. No doubt the quail had seen in us the chance of rescue from the attack by the magpie. To have a bird put its trust in us was a very pleasing experience. When the count was finished we both stood up and it was only then that the quail moved off, slowly rising to its feet and walked off into the grass about the garden. In the meanwhile the attacking magpie had flown off but only after sitting for some time watching proceedings from a nearby post.

Here are the details of both the hour counts mentioned.
Lalalty, N.S.W. Property of Miss M. Simpson. May 9, 1972 10 to
11 a.m. Fine with a north wind force 3, cloudy at times. Humid
about 70 deg. Birds in order of sighting: Black Swan, 2; Blackbacked Magpie, 13; Welcome Swallow, 11; Noisy Miner, 28; Redbacked Parrot, 65; Crested Pigeon, 10; House Sparrow, 6;
Cockatiel, 11; Striated Pardalote, 2; White-faced Heron, 4;
Grey Fantail, 1; Raven, 33; Eastern Rosella, 6; Little Friarbird 38; Peaceful Dove, 1; Galah, 72; Olive-backed Oriole, 1;
White-necked Heron, 1; Magpie-lark, 1; Rufous Whistler, 2; Wedgetailed Eagle, 1; White-fronted Honeyeater, 1; Kookaburra, 1;
Nankeen Kestrel, 1; Straw-necked Ibis, 150; White Ibis, 2; and
Pelican 2. Total 27 species and 466 individuals.

Lalalty, N.S.W. Property Miss M. Simpson. May 10, 1972. 10.20a.m. to 11.20. Fine and sunny after over-night rain. No wind. About 65 deg. Blue Wren, 2; Noisy Miner, 57; Galah, 35; Black-backed Magpie, 26; Yellow-tailed Thornbill, 10; Welcome Swallow, 35; Starling, 72; Pied Butcherbird, 2; Grey Fantail, 6; Red-backed Parrot, 55; Striated Pardalote, 6; Cockatiel, 10; Raven, 56; Silvereye, 2; Yellow-billed Spoonbill, 1; White-faced Heron, 4; White-necked Heron, 1; Eastern Rosella, 14; Straw-necked Ibis, 6; House Sparrow, 6; Magpie-lark, 7; Willie Wagtail, 6; Black Duck, 24; Banded Plover, 1; Black Swan, 200; Mountain Duck, 2; Little Friar-bird, 2; and White-fronted Honeyeater, 1. Total 28 species and 649 individuals.

It will be noticed that in the combined total of species 37 were recorded. No two counts are ever the same, this I regard as one of the most interesting facts about an hour count. Try it sometime?

#### "SCRUBBIE"

## by Joyce Hunt, Paraparap.

The White-browed Scrub-wren (<u>Sericornis frontalis</u>) was not known in this area until November 1968, the nearest patch of bush or scrub being several miles away.

A pair possibly found our garden after being driven from their habitat by clearing. We believe that they nested here as two young were seen at the end of December. "Scrubbie", as we call her, came in answer to my call, fed on the table with the Blue Wrens - who, incidentally, are quite unlike the scrub-wren - and seemed quite at home here. She was not afraid of us, and came to our feet while we fed her. On one occasion she came into the porch when I called her by means of a wet cork on a bottle. This makes a lovely squeaky sound, and Scrubbie flew up several times, practically touching my hands, in order to ascertain the source of the sound. She wasn't fooled a second time; she knew it wasn't another bird.

During July 1969 we were away, and on our return had continued sightings of Scrubbie at close quarters; but during our absence some predator (possibly a stray cat) must have taken her mate, because poor Scrubbie built her nest, laid her eggs, sat on them - and nothing happened. So the little widow built another nest, laid another three eggs; and still no family.

The nest is an untidy mass of pelargonium and iris leaves, domed, and with a side entrance; similar to a Blue Wren's nest, but larger and more untidy, and less than 3 feet from the ground. Pelargonium leaves seem to be her favourite building material. One nest at least was lined with chook feathers.

Most birds enjoy bathing, but surely none enjoys it more than Scrubbie does. She has her own favourite bowl, 18 inches up, under a small shrub, where she splashes for minutes at a time. Regardless of the temperature - even on the coldest days - she splashes merrily in the late afternoons.

In the spring of 1970 she built again and laid more infertile eggs, and again in 1971. Poor frustrated little mother! We felt so very sorry for her, though she seemed happy enough. However, one Sunday morning in February 1972 there was great rejoicing, as

# "SCRUBBIE" (cont'd.)

two scrub-wrens were seen together. Scrubbie had found a mate!

During Autumn and Winter they were often seen together and we looked forward eagerly to the Spring when Scrubbie's eggs would no longer be infertile. During all this time they gave us a great deal of joy - such things as bathing in her bowl at the height of a heavy shower of rain, coming to within inches of my face when I peered into the mulberrry or photinea, inspecting me as closely as I could inspect her.

In July, from the kitchen sink, I saw her carrying pelargonium leaves across the path to the Dusty Miller plant. We did not go near the nest for a long time: they obviously trust us, so we didn't intrude: we just watched. However, a quick investigation on August 18th confirmed our hopes of a family at last. Several times we saw her take oatmeal from the bird table to the nest, and on August 22nd she didn't mind my standing there watching her. In fact I said: "Wait here, Scrubbie, and I'll get you some breakfast for your babies". She waited while I placed a spoonful of flaked oatmeal on the ground below the nest, and then proceeded to feed her chicks.

After three lonely years of widow-hood the proud little mother has produced a family of three who left the nest, 3.00p.m. on August 25th to enjoy our bird sanctuary; and they have now been immortalized by their inclusion in this issue of the 'Geelong Naturalist'!

# BIRDS SEEN AT BAMGAMIE

The following birds were seen at the Bamgamie bush, at Shelford and Inverleigh during our Club excursion, August 20th 1972, as compiled by Mrs. J. Hunt - White-backed Magpie, Mudlark, Willie Wagtail, Black-shouldered Kite, Spur-winged Plover, Brown Hawk, Galah, Corella Forest Bronzewing, Whistling Kite, Scarlet Robin, White-throated Tree creeper, White Cockatoo, Eastern Rosella, White-faced Heron, Grey Teal, Pipit, Brown Thornbill, Mountain Duck, Goldfinch, Skylark, Little Eagle, White-necked Heron, Kestrel, Kookaburra, Grey Thrush, White-eared and White-plumed Honeyeaters, Horsfield Bronze-cuckoo.

#### BIRD BEHAVIOUR AT TIDAL RIVER

## by John Hunt

Late in October 1968, with a party of members of the National Parks Association at Tidal River, we had a flat which had a sort of terrace in front, with a railing on the outside.

Here the birds would assemble, waiting for a hand-out.

A Little Wattle-bird frequented this area, having his wife and family of two parked in a nearby shrub.

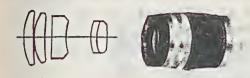
When we went out to feed the birds, Crimson Rosellas arrived in force, and the Little Wattle-bird ran up and down the railing forcing them off. Once he was defied by an immature rosella who stood up to him and refused to move, and indeed was quite aggresive. Little Wattle-bird was non-plussed and eventually gave way to the young rosella. An instance of the rising generation defying authority??

On occasions, hordes of seagulls joined the party, much to the annoyance of a Magpie who also thought the territory belonged to him. He, too, had a wife and family of two, and he took the assembly to be a personal affront and an invasion of his territory. After strutting around for some time - (and one could almost see him working out the problem) - he suddenly acted! "Everybody out!!" and he tore into them. Little Wattle-bird retired to "the bosom of his family" in the shrub, while bedlam reigned outside; the berserk magpie, wheeling, shrieking gulls, squawking rosellas, with occasional calls from Wattle-bird urging Magpie to greater efforts. However, Magpie was fighting a losing battle; the gulls weren't going to clear out when food was about. Magpie tired, and everyone else resumed their feast; until, after an interval, Magpie regained his strength and started the attack all over again. This procedure was repeated until all the food was gone, whereupon the gulls drifted away. Little Wattle-bird resumed his former position on the rail, and all was peaceful again.

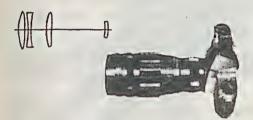
This was a very entertaining experience, a joy to watch, and a wonderful example of bird behaviour.

November 1972

# PHOTOGRAPHERS!

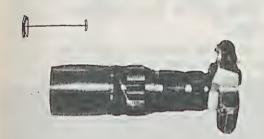


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PICTURED ABOVE ARE LENSES FOR THE ASAHI PENTAX — FROM THE TOP — 135 mm, 200 mm, 300 mm, 500 mm

# JUNIOR PAGES

Early this month, the Editor spent a week at Mallacoota in the far east of Victoria; he camped in a house across the lake from the town, and nearly every day spent some hours on the lake in a boat driven by an outboard motor.

Many interesting things were seen during this time, including shoals of little fish - possibly Mullet - which jumped clear of the water when they were disturbed, seabirds of many kinds, and at night the phosphorescent glow, wherever the water was disturbed, was quite bright.

One of the most interesting things the Editor saw was an Octopus washed onto the beach near his camp.

Octopuses - or should they be called "Octopi" any more than Platypuses should be called "Platypi" - belong to a group of animals called Cephalopods and are actually related to the Molluscs or Shellfish.

The word <u>Cephalopods</u> means "head feet", and the reason should be seen in the photographs on the next page - the arms are actually attached around the Octopus' head and not on his body; if you count the number of arms (or is it legs?) you will find there are eight - and this is just what "Octo-pus" means, eight feet.

Octopuses are found in waters all over the world, and although there are several different species in Victorian waters, the two in the photographs are the best known.

The largest is called the <u>Pale Octopus</u>, and it grows to about 18" in body length, with arms spanning perhaps 4 or 5 feet.

The eyes are quite large, and are well developed; the mouth which is at the base of the arms consists of a hard beak inside which is a radula or rasping tongue.

To feed, the Octopus grabs in its arms some fish or similar animal, and bites it with its beak.

The body of the Octopus is the round "bulb" above the head, and on the underside of this, just behind the head, is a syphon through which it can blow water; this forms a jet and the octopus actually speeds along with jet propulsion.

# JUNIOR PAGES (cont'd.)

The other species in the photograph is the poisonous <u>Blue-ringed</u> <u>Octopus</u> which is often found around Geelong.





Top: Suction caps on the arms of a large Octopus

Left: Blue-ringed Octopus

Below: Pale Octopus



# THE LAST WORD

No doubt most Club members have read of the formation, on November 15th, of the Geelong Environment Council.

The purpose of the Council will be to stimulate awareness of the environment and of its influence on the quality of life; it is concerned with the total issues of the environment, with particular emphasis on areas of significance to residents of Geelong and its environs.

Membership to the Council will be open in four categories and the relevant subscriptions will be as follows:

Adult individual members \$2.00 p.a.
Junior individual members \$1.00 p.a.
Corporate membership \$5.00 p.a.
Associate membership minimum \$10.00 p.a.

The purpose of the last category is to attempt to obtain the support and interest of business enterprises, who should in fact be wholeheartedly behind the Council.

It should be stressed that Council in no way impinges upon the activities of the Geelong Field Naturalists Club, but should back any conservation move by this Club.

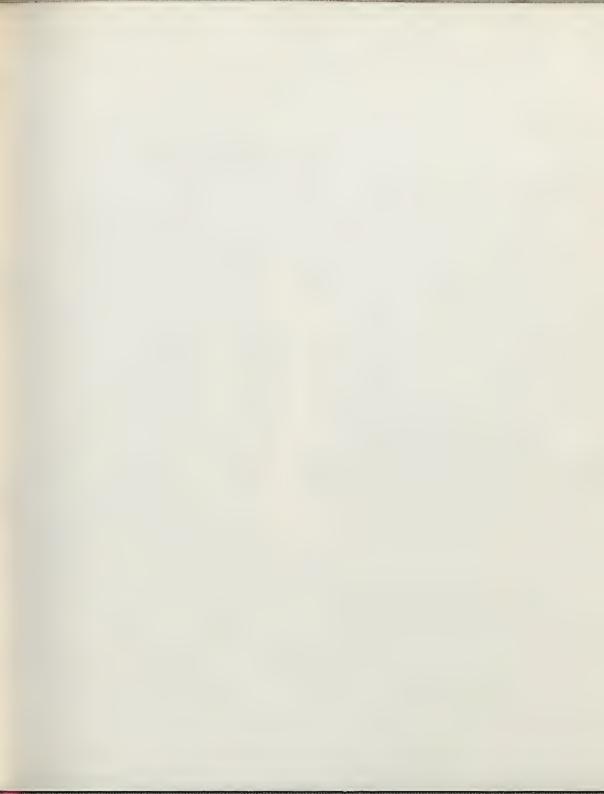
There are some areas of the environment which we as a Field Naturalists Club may be hesitant to invade, and it is hoped that the Geelong Environment Council will be able to enter since it is not involved basically with wildlife conservation; this Club has already many projects in this field which require an enormous amount of time and effort to complete.

Most Conservationists who have been involved in the formation of the Council support the objectives of it, and view it as an organisation which is needed in many major cities.

\* \* \* \* \*

May I take this opportunity of thanking all who have assisted in the publishing of 'Geelong Naturalist' in 1972; with the continued support of Club members, the coming year and future volumes of our Journal are assured.

TREVOR PESCOTT Hon. Editor.



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HOARY — HEADED GREBE ON HER NEST

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#### JUVENILE LEAVES OF PRICKLY MOSES

## by Peter Fagg, Orbost

On May 28th, 1971, during an Otways Survey Group weekend camp, I noticed some peculiar leaves sprouted by a mature plant named Prickly Moses (Acacia verticillata). These leaves were the pinnate, true leaves of this wattle. The peculiarity was due to the fact that these leaves were occurring on a mature plant whereas normally they would occur only on the seedling plant. McLuckie and McKee, in "Australian and New Zealand Botany" (P.644) explain the usual situation: "Australian species of Acacia with adult leaves reduced to phyllodes (flattened petioles, or leaf stalks) have seedlings with pinnate leaves, which appear in other species of Acacia and in related genera. The seedlings of Acacia verticillata, a common species in damp situations in Victoria and Tasmania, has several bipinnate leaves, then an abrupt transition to phyllodes, at first scattered but soon arranged in the whorls from which the species was named."

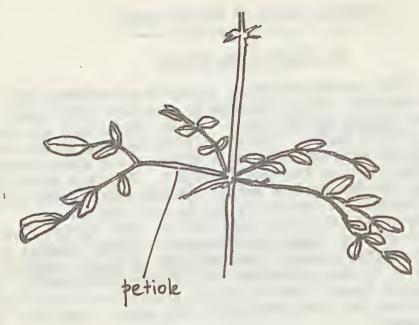
The phyllode of Prickly Moses is generally 5 - 15 millimetres long, 1-2 millimetres wide, and possesses a sharp point. (See sketch C.) The phyllodes are attached in annular groups each of 3-6 in number, along the branchlet at intervals of 2-20 millimetres.

On a few branchlets of the observed bush of Prickly Moses, there was a juvenile (pinnate) leaf section, or collar, of 5 - 10 centimetres in length. (See sketch A.) The juvenile leaves were arranged similarly to the phyllodes, yet their greater length made them stand out.

The juvenile leaflet was shaped from oblong to ovate-lanceolate, was about 3 - 8 millimetres long, and carried a very small, sharp terminal point. (See sketch B.) The juvenile leaflet had an often assymetrically-placed mid-vein which was always prominent, and sometimes there was also a short, secondary vein. The leaflet was fairly similar in design to the phyllodes of Gold-dust Wattle (Acacia acinacea).

What was the reason for the sudden change to and from juvenile leaves in the mature plant?

On the branchlets in question, there was a rust-coloured surface



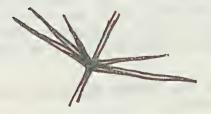
Enlarged 2-1/2 times from actual size.

Whorl of juvenile leaves.



Enlarged
5 times
from actual
size.

Juvenile leaflet.



Enlarged
2 times
from actual
size.

Whorl of phyllodes.

Sketches by Peter Fagg.

# JUVENILE LEAVES OF PRICKLY MOSES (cont'd.)

known to the birds but not to us.

lesion along the branchlet for at least 10 centimentres before the leaf reversion, which continued for about only 2 centimetres into the juvenile leaf section. This lesion was possibly induced by a fungus.

It is common for some plant genera to respond to injury by producing juvenile leaves, (this is seen in other wattles and in eucalypts) and it appears that this is the case here.

"BIRDS AND BERRIES"

### by Oonah McHaffie

Crimson Rosellas also elect us as hosts when their favourite food is available. Although flocks fly overhead fairly constantly, at the beginning of April this year they swooped in daily on to the Cratageous cordata (the Washington Thorn) until they had stripped it of every berry. They started at the top of the tree and, as that became depleted, moved downwards, finishing by cleaning up the berries on the ground which had been knocked down during their joyous banquet above. We did not grudge them the berries as they were delightful visitors, though considered pests by many people. I could see why when they varied their diet of berries by starting on our few remaining Granny Smith apples! Like the Honeyeaters they seem to have very strong preferences for food. After clearing off the berries mentioned above they started on the berries of two cotoneasters nearby but not with the same enthusiasm and, after a while, left the remainder for the blackbirds to finish off. Although one or two birds in full adult plumage were present at times, The Grey-backed the main group consisted of immature birds. Silvereyes enjoy the berries of the Cotoneasters but were only seen once or twice this year and were not as numerous as in previous years, I hope this is not another sign of decline in the bird population. It seems strange that these native birds should be attracted by the berries of the exotic shrubs and ignore the berries of Eugenia australis (Brush Cherry). We have not yet seen birds feeding on it, not even the Blackbirds. There must be some very good reason,

#### AN HOUR COUNT No.4

## by Roy Wheeler

The Belmont Common near Geelong, Victoria was the scene of an hour count I did early in August, 1972. The history of the Common is rather interesting and I am endebted to Mr. W.J. Morrow of the Geelong Historical Society for the following information.

"Prior to 1843 it probably was under the control of the Police Magistrate and there are records of the days of Foster Fyans and N.A. Fenwick which show it as a butchers' reserve. In 1843 it would have been controlled by the District Council of Grant - the fore-runner of the Geelong Town Council which took over in 1849. At that time the town boundary in that direction was approximately the line of the Waurn Ponds Creek. In 1857 the area South of the Barwon was separated as the Shire of South Barwon and in the course of time the Common gained the title of the South Barwon Municipal Common (proclaimed on May 4, 1863). The area then would have been crown land controlled by the municipality through common managers, etc.

"In 1905 the South Barwon Municipal Common was transferred to the newly formed Geelong Harbour Trust and whilst there was no specific power of sale granted to the Trust, if the area was disposed of under the powers of the Act the proceeds went to the Trust. During the time the area was controlled by the Trust it was used for the grazing of cattle etc., and was generally known as the Belmont Common. As far as I can remember only one major excision was made from the area until it was taken over by the joint municipalities in 1965 for recreational and municipal purposes, and that was for the creation of the Belmont Recreation Reserve south of the Waurn Ponds Creek and north of Breakwater Road. Later, of course, The Migrant Hostel area became the Shire of South Barwon depot. During the Trust's ownership the Common was also a Second Class Aerodrome, but it was later delicensed.

"Study of the parish plan for Corio, County of Grant, shows that at one time the area had been surveyed for subdivision and sale

## AN HOUR COUNT No.4 (cont'd.)

in small lots, this was just before the Trust took over in 1905 so that latter event probably saved the Common for posterity."

The District Land Office of the Department of Crown Lands and Survey say "The Belmont Common, Parish of Corio was formerly Crown Land vested in the Geelong Harbour Trust.

"By an Act of Parliament the area was divested from the Trust and was temporarily reserved for Recreational Purposes vide Government Gazette of 15th June 1966, page 2149 and placed under the control of the Cities of Geelong and Newtown & Chilwell and the Shire of South Barwon as joint Committee of Management.

"The area contained in the Reserve is 326 acres."

My thanks for the Geelong Historical Society and the District Land Office for this information.

Already a Golf Course and a Miniature Railway has taken over some of the Belmont Common it is to be hoped that a part of it can be set aside as a Nature Reserve particularly the little swamp near the Shire Depot along side the Barwon Heads Road. Wildlife particularly waterfowl has been part of the Belmont Common over the centuries and it would not be the same without them.

I made the hour count sitting on a stool on the platform of the miniature Railway Station and the details are as follows:
Belmont Common, Geelong, Vic. August 3rd, 1972. 10.30a.m. to 11.30a.m. Mostly dull with patches of sun with a cold north wind Force 3. Birds in order of sighting: White-plumed Honeyeater, 3; Black-shouldered Kite, 5; Eastern Swamphen, 63; Welcome Swallow, 46; Starling, 340; Skylark, 27; Spurwinged Plover, 35; Silver Gull, 67; White-faced Heron, 3; White-backed Magpie, 3; Pipit, 2; Willie Wagtail, 1; Little Grassbird, 1; Flame Robin, 2; Nankeen Kestrel, 5; Eastern Silvereye, 20; Raven, 7; Magpie-lark, 4; Rock Dove, 35; House Sparrow, 2; White Ibis, 1; Swamp Harrier, 2; Pelican, 1; Little Pied Cormorant, 1: Total 24 species and 636 individuals.

#### NEEDLE BUG

### by David F. King

One day during March an interesting and unfamiliar insect turned up in the back-yard swimming pool and appeared to be a praying mantis with two hair-like appendages projecting from the rear. Closer examination revealed that this was not a mantid but a species of bug that has completely adapted to the aquatic environment. The two hair-like projections, in fact, are syphons or breathing tubes which the animal projects through the surface of the water to breathe whilst remaining submerged.

These insects are commonly known as needle bugs and belong to the family Nepidae. This particular specimen was of the species Ranatra dispar. Nymphs have a similar form to the adults except that the adults have wings which are used for the purpose of dispersal, hence its presence in the swimming pool.

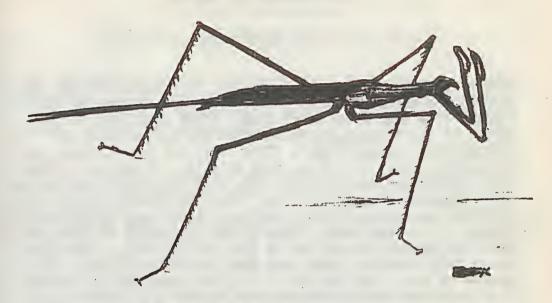
These insects spend most of their time amongst the reeds or mud at the bottom of ponds. The front pair of legs are used for grasping prey in a similar manner to the mantis, the tibia folding back on the femur which is equipped with short spines to aid in securely holding the prey. As in all true bugs the juices are sucked from the prey and for this purpose the Ranatra has a mouth in the form of a short beak with which it pierces the skin of its prey.

The middle and rear pairs of legs have series of fine hairs on the tibia which help it to move through the water with ease. Antennae are not visible on these insects and the gauze-like rear half of the wings fold under the thicker and much harder front half which forms a protective covering. The two eyes are conspicuous spherical projections each side of the head.

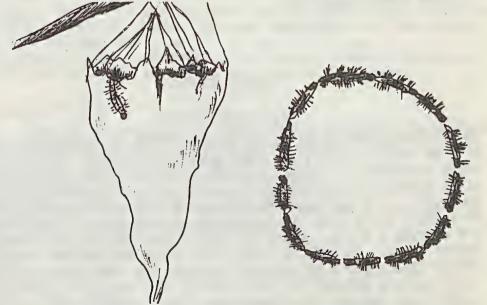
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Ranatra dispar (approx. full size)
(See page opposite) Sketch - David King.



Processional Caterpillar. (See page 92)

Sketch - Joyce Hunt.

#### PLASTIC BAGS AND WATTLES

#### by Joyce Hunt

Several of the wattles, the Boree (Ac. pendula) and Mulga (Ac. aneura) are attractive when young, but often spoiled by the plastic-like bags which adorn them. These bags contain the larvae of the Ochrogaster Moth, which are better known as "processional caterpillars". They leave the bag at night, and frequently travel in a line, head to tail. If prodded with a stick and forced into a circle they will continue to follow each other round and round in a ring. The plastic or silk-like bag contains the excreta of the creatures, also their cast skins and spines. On a coach tour of the inland, thousands of these were seen, and we were warned not to touch as the spines can cause severe skin trouble. They also have an unpleasant odor, and because of this, and the skin irritation caused by the spines, it is said that neither natives nor bushmen will camp under a tree that contains these bags or nests.

(See sketch page 91.)

WHALES ASHORE

## by Trevor Pescott

The incidence of whales being washed ashore is quite rare, but when it does occur, naturalists have the opportunity of inspecting at close quarters our largest mammals - the closeness of inspection being governed by prevailing wind and state of decomposition of the body. The two most recent records deal with the body probably of a Sperm Whale from the Gunnamutta strandings of last February and a Bryde's Whale - the first Australian record - at Limeburners Lagoon Corio. In 1955, a large Blue Whale was beached at Anglesea, around 1933 a whale of undetermined species came in at Pt. Addis (see 'Geelong Naturalist' Vol.8 No.4); earlier still, around 1900, a whale was washed into Bream Creek, and in 1867 a 90 ft. Blue Whale beached near Torquay ("The Mammals of Victoria" by C.W. Brazenor).

#### BIRDS OF ROCKLANDS

## Compiled by Jack Wheeler and Trevor Pescott

During the visit of members of the Geelong Field Naturalists Club accommodated at the Rocklands Lodge overlooking the lovely and nicturesque Rocklands Reservoir, a bird list of 105 species was recorded. Period 18/19th October, 1972.

Habitat:

Rocklands Reservoir - area 272,000 acre feet with little water plant growth, and some dead trees at margins. Bushland to shore in many regions.

Chalet: Cleared areas with shrubberies. Grassland.

Glenela River: Down stream from reservoir well timbered with Red Gums and messmate, thickly lined with tea-tree scrub and a sprinkling of banksias.

East of Reservoir: Slopes of box and messmate eucalypts, calytrix and heathy shrubs.

West of Reservoir: Some grassland, well timbered with Box and Yellow Gum.

Balmoral: The road between Balmoral and Rocklands Lodge commences with attractive river flats, timbered heathlands and open grassland lightly timbered.

Black Range: A nearby range of hills west of Victoria Range and very attractive wildflower heathland also well timbered.

#### Bird List and details:

Flock of 11 near chalet. Many tracks and other traces seen.

Common Bronzewing Pigeon: Several in foothills of Black Range.

Dusky Moorhen: Several on Glenelg River. Eastern Swamphen: Few on river at Balmoral. Hoary-headed Grebe: On river at Balmoral. Black Cormorant: Several on reservoir Little Black Cormorant: Few on reservoir. Little Pied Cormorant: Reservoir and River.

Pelican: Reservoir.

Spur-winged Plover: Many seen all areas mainly shores of reservoir and river.

Black-fronted Dotterel: One at spillway.

## BIRDS OF ROCKLANDS (cont'd.)

Australian Snipe: Flushed on river flat Balmoral. White-faced Heron: Dams, river and reservoir.

Maned Goose (Wood Duck): Small flocks river and reservoir.

Mountain Duck: One small flock reservoir.

Black Duck: Mostly river at Balmoral.

Grev Teal: River at Balmoral.

Swamp Harrier: River at Balmoral.

Wedge-tailed Eagle: Three circling above Chalet.

Little Eagle: A pair west of Chalet. Whistling Kite: Occasional birds.

Peregrine Falcon: One bird between Black Range and Chalet.

Brown Hawk: A lone bird often near spillway. Boobook Owl: Calling at night. Not seen.

Common. Mainly Yellow Gum blossom. Musk Lorikeet:

Purple-crowned Lorikeet: Occasional blossoms.

Yellow-tailed Black Cockatoo: Over Chalet, along river and Black Range.

Gang Gang Cockatoo: Near Chalet and along river. White Cockatoo: Mostly with flocks of Corellas. Long-billed Corella: Common. Several flocks.

Galah: Few only.

Crimson Rosella: Common. Many immature plumage.

Eastern Rosella: Common open country.

Red-backed Parrot: Mostly along roadsides. Laughing Kookaburra: Common. Frequently calling.

Sacred Kingfisher: River and near Chalet. Pallid Cuckoo: Many calling. Several seen.

Fan-tailed Cuckoo: Fairly common.

Horsfield Bronze-cuckoo: Odd birds calling.

Golden Bronze-cuckoo: Frequently heard. (Whistling dog note.)

Welcome Swallow: Common Chalet and spillway. Nesting.

Australian Tree Martin: Several flocks in region of reservoir.

Fairy Martin: Breeding near spillway on main wall.

Grey Fantail: Not common.

Willie Wagtail: Frequently seen. Restless Flycatcher: Odd pairs.

Jacky Winter: Lovely songster - occasional pairs.

Scarlet Robin: Occasion in bushland

Flame Robin: A lone male in heath area near Balmoral.

Hooded Robin: A single bird near Chalet.

February 1973

# BIRDS OF ROCKLANDS (cont'd.)

Southern Yellow Robin: Spillway area and along river. Nesting.

Golden Whistler: Occasional. Mostly in tea-tree.

Rufous Whistler: Widespread.

Grey-shrike Thrush: Fairly common.

Magpie Lark: Occasional Balmoral and Reservoir.

Black-faced Cuckoo Shrike: Fairly common bushland areas. Little Cuckoo Shrike: Two birds in Yellow Gum timber.

White-browed Babbler: Several parties near spillway and Black

Range. Nesting.

Spillway area in tea-tree. Blackbird:

White-fronted Chat: A pair drinking at reservoir.

Brown Weebill: Bushland west of Chalet.

Striated Thornbill: Local bushland. Brown Thornbill: Common most areas. Buff-tailed Thornbill: Forest areas.

Yellow-tailed Thornbill: Grassland and lightly timbered areas.

White-browed Scrub-wren: Heathlands.

Speckled Warbler: Two birds on grassy slopes near Chalet. Possibly western extremity of this species in Victoria.

Rufous Songlark: Rich songsters. Forest areas. Little Grassbird: River at Balmoral.

Superb Blue-wren: Common many areas. Nesting.

Masked Wood-swallow: Several flocking with White-browed Wood-

swallows.

White-browed Wood-swallow: Many flocks of considerable size in areas west of Chalet and frequently flying and hawking insects overhead. One large flock had congregated where Yellow Gums were in blossom and many birds were flopping in amongst blossom feeding on insects and possibly nectar. No evidence of breeding was noticed.

Dusky Wood-swallow: Occasional in forest regions.

Brown Treecreeper: Common treecreeper of region. Often seen feeding on ground.

White-throated Treecreeper: Several noted in forest regions.

Mistle-toe Bird: Occasional in open forest.

Spotted Pardalote: Fairly common. Evidence of breeding.

Striated Pardalote: Occasional birds.

Silvereye: Common at Black Range. Breeding.

White-naped Honeyeater: Not common.

# BIRDS OF ROCKLANDS (cont'd.)

Black-chinned Honeyeater: Fairly common in areas of bushland.

Its strong and distinctive call frequently heard.

Brown-headed Honeyeater: Odd parties in forest.

Eastern Spinebill: Frequently seen forest and heathland.

Tawny-crowned Honeyeater: Heathland Black Range,

Regent Honeyeater: Forest north-west Chalet.

Fuscus Honeyeater: A very plain bird. In forests. Yellow-faced Honeyeater: Fairly common most areas.

White-eared Honeyeater: Common.

Yellow-tufted Honeyeater: Few only observed.

White-plumed Honeyeater: Common along river, particularly in Red Gums.

Crescent Honeyeater: Few along River.

Yellow-winged Honeyeater: Very common in shrubs, tea-tree and heathlands. Nesting,

Noisy Miner: Roadside to Black Range.

Little Wattlebird: Common spillway and river-side scrub

Red Wattlebird: Very common. Nesting.

Pipit: Roadside to Balmoral and Black Range.

Goldfinch: Several flocks.

House Sparrow: Few Chalet, Common Balmoral.

Red-browed Finch: Shrubs and tea-tree.

Starling: Few Balmoral.

Little Raven: Mostly open country

White-winged Chough: Scrub east of Chalet Nesting.

Pied Currawong: Several bushland near Chalet.

Grey Curraweng: Odd birds forest.

White-backed Magpie: Frequently seen open country.

Total species - 105. (17 more than the 1965 visit.)

Note: Arthur Chapman, Harry Dunn, Jack and Trix Wheeler remained at Rocklands for four additional days following the departure of the main group. This list includes observations made by them, and also birds of Black Range.

### ROAMING AROUND ROCKLANDS

## by Ted Errey

For the spring Camp-out of 1972 our Club made its first return visit. Our original Camp-out in 1965 was to the Rocklands Reservoir near Balmoral, and last year we decided the area was well worth seeing again. The season, however, was very much drier than that seven years previously, with the result that the floral display was correspondingly poorer, both in quantity and number of species seen.

Before we reached Rocklands on the Friday night, several impressions had already been gained. Perhaps the most forceful concerned the number of young magpies that were falling victim to motor traffic on the road. Fledglings not long out of the nest and not yet aware of the dangers in their environment do not react quickly enough when the parents suddenly fly off. In fact some youngsters don't take flight until a vehicle is upon them, even if the driver toots or slows down, or both. Their judgement and experience are just not sufficient to cope with the situation.

Though these accidents probably have no more overall effect on the magpie population than our steps on the footpath have on the ant population, they are nevertheless regrettable, and every responsible motorist would try to avoid them. Just why these birds make so much use of the roadside and the bitumen itself is not clear. Perhaps they find grasshoppers and similar food more easily obtainable there than in the longer and denser herbage.

Between Dunkeld and Rocklands many cockatoos were seen feeding in the paddocks and on the roadside. Both Sulphur-crested Cockatoos and Corellas were there, but as some of the considerable flocks took wing, the glorious pink glow through the plumage identified a large proportion of the birds as Major Mitchell Cockatoos. These provided one of the most spectacular sights of a very interesting weekend. Such flocks must destroy great quantities of onion-grass bulbs and other weed pests.

After we returned at Balmoral, the bush along the Rocklands road was lit up by the white blossom of the Silky Tea-tree. Many of



Bronze Calad

Red-browed Finch

Photo. Cliff Tingate

Rocklands Party 1972

Photo. Gordon McCar





Photos. Trevor Pescott



Fairie's Aprons

Common Spider Orchid



Fan-tailed Cuckoo

# ROAMING AROUND ROCKLANDS (cont'd.)

these plants were two metres or more in height, in contrast to the form common around Anglesea which is usually about half a metre and sometimes quite prostrate. The coastal plants often have a distinct pinkish color in the blossom, but there was little evidence of this around Rocklands.

When we inspected this area on Sunday morning, the Dwarf Bushpea proved a great attraction. This fine little shrub, often forming dense silky-soft cushions of ground cover, draws attention at all times, but when the rich orange yellow blossom is at its best as it was then, it wins admiration from all.

Saturday morning's pre-breakfast meander was as usual a brief check of the immediate surroundings to see what birds and flowers were on view. The surprise and delight of this session was the finding of Fairies' Aprons flowering in soakage areas overlooking the reservoir. Hundreds of the dainty mauve "aprons" decorated the damper patches where flat rock underlying the shallow few inches of soil held what moisture there was close to the surface.

After breakfast, attention was turned to the shrubs, mainly West Australian, that have been spaced about on the lawns between the Chalet and the reservoir. While some members concentrated on the search for nests of honeyeaters, wrens or thornbills, others were more interested in the inherent beauty of the net-bushes, hakeas, bottlebrushes, honey-myrtles and acacias. But love of nature can't be departmentalised, and whenever something of special interest was discovered, everyone's attention focussed on it, whether it was a Yellow-wing's nest or a Melaleuca in full bloom.

The bushland beyond the river was the next area to be visited. There we found, as during our previous visit, extensive patches of Fringe-myrtle. Not yet at its best, it gave promise of a wealth of white starry flowers set on their fringed clayces. In the bud stage there was a distinct pink coloration which added to the attraction of these densely foliaged shrubs. It was in these bushes in 1965 that Yellow-tufted Honeyeaters were photographed at their nests.

## ROAMING ROUND ROCKLANDS (contid.)

Two pea flowers that we know well in the Geelong district were well in evidence there. These were the Running Postman and the Common Flat-pea. Though not spreading as widely as in moister seasons, the former added its share of color, a bright scarlet, rare enough in the Victorian bush.

Blue is another color that stands out whenever it is met. Two plants that do their best to bring the sky to earth were both in flower, though not together. The Blue Squill, or Blue Star, favored the open damper places. This little lily is seldom over 15 centimetres in height, and only one flower opens at a time, yet such is the depth of color that it is a conspicuous feature wherever it flourishes.

The Love Creeper, twining its slender stems among the lower bushes, is sometimes taken to be a pea-flower, because of its two sky-blue wings folded over the darker keel. However it is not related to the peas. There is not the typical broad back petal forming the standard that is usually a distinctive feature of the legumes. The long loose racemes of flowers are the only conspicuous part of this almost leafless creeper.

There were two other liliaceous plants on the grassland west of the reservoir. Early Nancies, late of season and short of stem, were there in plenty, and the rich yellow spikes of the Bulbine Lilies lit up their surroundings. And across the river were the Milkmaids, that sometimes look so much like Early Nancies, but are more robust plants.

At all camps and excursions, orchids create more interest perhaps than all other plants together, and little wonder, for they are truly a fascinating family. During the weekend we found two orchids of more than ordinary interest. Both were Caladenias, the Spider-orchid genus, with flowers somewhat similar at a casual glance.

First, the Hooded Caladenia, listed as favoring stony ground in dry forest, conditions which certainly applied here. In these flowers the column and the sepal behind it are noticeably arched

# ROAMING ROUND ROCKLANDS (cont'd.)

forward. This position clearly shows the green at the back of the whitish flower. Six or eight flowers on a stem were common.

Next, found rather in sandier terrain, the Bronze Caladenia is well described by its names, both the vernacular and the botanical, Caladenia iridescens. This aspect is very clear if a shaft of sunlight can strike the flower, though this is not easy with the plants usually growing under shrubs of varying density, but the glint of bronze or gold is worth searching for.

Other Caladenias, though more numerous, were equally to be admired. The Fringed or Green-comb Spider-orchid seems to be waiting to greet us at every spring rendezvous, frequently in very extensive colonies. Pink Fingers were there too, in shades ranging from white to almost red. This dainty species is always a favorite.

Another is Caladenia patersonii, with one or two flowers on stems to half a metre high, usually creamy white but often with varied amounts of crimson added. The name "Common" Spider-orchid is neither a strictly true nor a very complimentary epithet, but the adjective is used for many plants whose range of habitat is widespread, even though they may not be particularly abundant.

Sun-orchids also were seen, but proved rather disappointing in that few found it sunny enough to open up for inspection. Rabbit-ears, with two chocolate-brown antennae against a yellow background, and Salmon Sun-orchids were exceptions. Several excellent specimens of Brown-beards were found among the Bulbine Lilies.

The Epacrid family was represented by quite a few genera. Most noticeable was the Daphne Heath. These twiggy shrubs were plentiful in most of the bush area visited, each one liberally hung with its small translucent white bells. Golden Heath was not in flower, but it drew attention by its needle-pointed leaves. Flame Heath was past flowering peak, but most plants still carried quite a number of flowers like long oval scarlet beads.

# ROAMING ROUND ROCKLANDS (cont'd.)

Cranberry Heath had few blooms remaining. The green berries were judged by members who sampled them to be not specially palatable. Perhaps they would be more tasty in a month or so. Common Beard Heath was as attractive as it always is in the Grampians spring, some plants as usual having a definite pink appearance.

Of other genera, Honey Conebush, always eye-catching on account of its lacy foliage, carried many flower heads deep in the lacework. Prickly Grevilleas still had their share of red and green tooth-brush flowers. We were gratified to see numbers of seedlings of this plant thriving in the sandy loam.

All in all, considering the period of drought being experienced, the general feeling was that the bush around Rocklands was looking reasonably well, and members were satisfied with a weekend profitably spent.

## BELMONT COMMON SANCTUARY

## by Trevor Pescott

The rains which broke the drought stranglehold early this month flooded our sanctuary at Belmont, making excavation works impossible temporarily. The swamp which we have on lease until 1999 - we can not at this time obtain a longer tenure! - at \$1 per annum, is the area bounded by Barwon Heads Road, Shire Depot, Steam Preservation Railway and the Golf Course access road.

We plan to enlarge the area of water, develop islands and plant the margins with Red Gum and other native plants - including, hopefully, Lignum and Reeds - with a view to increasing the waterfowl habitat. Nest boxes will also be placed in the swamp to encourage ducks to breed there.

After the flood had receeded - and following the opening of the duck shooting season - it was noted that several small flocks of Black Duck were in attendance.

#### DEATH OF PROMINENT NATURE LOVER - MISS WINIFRED WADDELL

## by Ted Errey and Jack Wheeler

Miss Waddell died in August 1972 at the grand age of 88 years. She had a dynamic personality and achieved much in her active lifetime. It was in 1952 that she established the Native Plants Preservation Society and was secretary of that body until ill-health forced her to retire in 1967. During that period, she was most instrumental in establishing small wildflower reserves throughout this State. She had them established in many different localities along highways, railways, in school grounds etc., and the N.P. P.S. was always willing to provide fencing materials. For many years she wrote her 'Bushland Notes' for the children's page in the 'Age'.

This Club, at her request fostered an interest in one of her roadside Reserves almost opposite the Eumerella Scout Camp on the Great Ocean Road, approaching Anglesea. Mr. Ted Errey recently compiled this plant list for this enclosure measuring 308' x 60'. Acacia dealbata (Silver Wattle); Ac. myrtifolia (Myrtle Wattle); Ac. pycnantha (Golden Wattle); Ac. suaveolens (Sweet Wattle); Acrotriche serrulata (Honey Pot); Banksia marginata (Silver Banksia); Burchardia umbellata (Milkmaids); Caesia parviflora (Grass-lily); Cassytha glabella (Tangled Dodder-laurel); Casuarina pusilla (Shrubby Sheoke); Chamaescilla corymbosa (Blue Star); Comesperma ericinum (Milkwort); Dianella revoluta (Spreading Flax-lily); Epacris impressa (Common Heath); Eucalyptus obliqua (Messmate); Gahnia sp.; Goodenia geniculata (Bent Goodenia); Helichrysum obtusifolium (Blunt Everlasting); Helichrysum scorpjoides (Curling Everlasting); Hibbertia fascicularis ( Bundled Guinea-flower); Hibbertia stricta (Erect Guinea-flower); Hypolaena fastigiata (Tassel Rope-rush); Isopogan ceratophyllus (Horny Conebush); Kennedya prostrata (Running Postman); Leptospermum myrsinoides (Silky Tea-tree); Leptospermum juniperinum (Prickly Tea-tree); Lindsaya linearis (Screw Fern); Lomatia ilicifolia (Holly Lamatia); Pimelia humilis (Dwarf Rice-flower); Pimelea phylicoides (Hairy Rice-flower); Pimelea octophyla (Downy Rice-flower); Persoonia juniperina (Prickly Geebung); Platylobium obtusangulum (Common Flat-pea); Pteridium esculentum (Bracken); Pultenaea humilis (Dwarf Bush-pea); Pultenaea sp.; Patersonia fragilis

# DEATH OF PROMINENT NATURE LOVER (cont'd,)

(Short Purple-flag); Stackhousia sp.; Spyridium parvifolium (Dusty Miller); Tetrarrhena distichophylla (Wire-grass); Tetratheca ciliata (Pinkeye); Xanthorrhoea australis (Austral Grass-tree); Total species 42. Flowering species at time of survey, November 1972 - 19.

#### BIRDS AT PLAY

# by Oonah McHaffie

In mid-January 1972 the two young Yellow-faced Honeyeaters were either fighting or playing in and beneath an Acacia prominens (the Golden Rain Wattle). We were inclined to think it was all in play. They were making quite a noise, one fluttering its feathers and struggling about on the ground and the other swooping at it. We had seen magpies apparently at play but this was the first time we had seen the smaller birds. Since we have had Golden Pheasants in an aviary we have got quite used to the idea of birds "playing", but a visitor who saw them was astonished and said they were playing like kittens. We had young birds at the time but even the older birds will play, especially when it is cold. They crouch on the ground, wings spread, and then make short runs at or around the other birds and in and around the brush we provide for them for cover. When several are doing it all at once it is quite entertaining. Just recently (Oct. '72) we saw a Blackbird with some large object that it was tossing about and catching again and we discovered that it was a dead leaf from a Catalpa.

One day last December (1971) we noticed a Yellow-faced Honeyeater under a tea-tree wrestling with a large tan-coloured butterfly. It carried it up into the lower branches, dropped it and flew down to pounce on it again. We were undecided as to whether it was playing with it or trying to eat it. While my attention was distracted for a moment the bird disappeared. There was no sign of the butterfly so we supposed that the bird had at last got it airborne.



Left:

Close-up of Wandering Albatross.

Photos. by Jack Wheeler.

Gordon McCarthy holds a Giant Petrel for banding. Right:

Below: Boat operational.





#### SEA-BIRD BANDING OFF BARWON HEADS

### by Jack Wheeler

For several years now I have been recording visits of Giant Petrels to the sewerage outfall at Black Rocks between Torquay and Barwon Heads. These birds of the Antarctic regions, commence arriving off Black Rocks about mid-June of each year and remain in these waters until late September and early October, when it is assumed they move southward to breed.

It is only of recent years that scientists working on the breeding habits of this species discovered that there was a difference in plumage and beak coloration and amongst other features, which resulted in another sub-species, so now we have what is called the Southern Giant Petrel (Macronectes giganteus) and the Northern Giant Petrel (M. halli).

In order to find out if representatives of both these groups visit our shores, it was decided this winter to commence a banding programme and to date, two successful trips out into Bass Strait have resulted in 20 Southern Giant Petrels and 5 Northern Giant Petrels being trapped and banded.

The method used for the trapping of these large birds, is similar to that used off Malabar sewerage outfall in Sydney, by the use of large cane hoops with mesh netting, approximately 1-1/2 metres in diameter, which are thrown over the bird as it rests on the water, and in calm conditions these birds which have been feeding, find it difficult to become air-borne.

On our first trip, on 6th August, conditions were perfect with very calm conditions with hardly any breeze and birds were found from close inshore at Black Rocks, to three quarters of a mile off shore. On approach, the birds swam hastily away and it was after several attempts at hoop throwing that our first bird was netted.

Dr. Gavin Johnstone of Antarctic Research gave us instruction in netting, handling and measurements required, particularly of the

## SEA-BIRD BANDING OFF BARWON HEADS (cont'd.)

beak length in order to determine sex. Dr. Johnstone also instructed how to identify the two species, 'giganteus' and 'halli'. The third bird netted happened to be a 'halli' which had a distinctive pale pink upper beak tip as compared with the green beak tip of 'giganteus'.

We had also decided to net any albatrosses which happened our way, and fortune was with us as a Wandering Albatross, the giant of all flight birds, came into view and on the second throw was netted. It was a huge bird and must have weighed in the vicinity of twenty pounds, and its wing span close to eleven feet. Dr. Johnstone was of the opinion that this bird was in breeding plumage. This bird carried band number 150-10296 and as it was released overboard, we wished it good luck and hoped it would turn up some day thousands of miles from our Black Rocks area.

Our first trip total was 13 giganteus, 2 halli and one Wandering Albatross.

Our second trip was on 3rd September, but on this day, even though reasonably calm, there was a heavy swell, and this made the birds more difficult to net. However, we did net 7 giganteus and 4 halli, a total of eleven which was quite pleasing. Two on our party got seasick with the heavy swell, so our outing was terminated early to get them ashore.

The boats which took part in this exercise were provided by the Corio Search and Rescue Squad and we are particularly grateful to Mr. Geoff. Stephens for his part in organising the two trips.

Of the birds banded, we already have a recovery, and that was of the third giganteus which was netted, number 130-60247, on August 6th. It was found dead washed up in the Nadgee Fauna Reserve, south-eastern N.S.W., a distance of over 300 miles from Black Rocks, near Barwon Heads where it was banded. It was found on 23rd September, so had moved that distance in a matter of a little over 6 weeks.

It is hoped to carry out further banding of these birds next winter.

#### VALUE IN BEACH COMBING

### by Trevor Pescott

With the approach of winter, and the arrival of Antarctic birds offshore from Victoria, coupled with the occasional prolonged oceanic gales, the benefits of beach combing by naturalists quickly become apparent.

As a beach comber "addict" of many years habit, I still gain a thrill from the wintertime beach patrol which over the decades has produced for me such rareities as Blue Petrel, Silver-grey Petrel, Mottled Petrel, Sooty Albatross and many others.

So earlier this month, I visited two local beaches seeking the remains of seabirds which have died at sea and been washed ashore - a morbid past-time, perhaps, but extremely rewarding for the enthusiastic ornithologist.

On February 11th, my family joined me and in a mile or so of Collendina collected five Fairy Penguins and one White-faced Storm-petrel - the latter an extremely rare derelict find although locally plentiful (they nest in thousands at Mud Islands and Fort Island in Port Phillip).

Two weeks later - February 25th - I covered the beach from east of Bancoora to Bream Creek mouth and picked up 20 birds; one was an immature Australian Gannet, similar in plumage to another found alive but injured several weeks earlier from the same area but which failed to respond to treatment.

Next was a Fairy Prion - readily identified from its close relatives by the broad (1 inch wide) black tail band; other prions have a narrow black terminal band, whilst the Blue Petrel has an all grey tail.

Three of the twenty were Fluttering Shearwaters, a New Zealand nesting species which can be identified from its "cousin" Hutton's Shearwater by the bill length - Fluttering Shearwater has a beak of less than 35 millimetres (my three specimens all had 31 - 32 mm. beak length) whilst the Hutton's Shearwater has a beak of over 35 mm. length.

The rest of the birds found on the 25th were Fairy Penguins.

## JUNIOR PAGES

Cormorants are waterbirds which are quite common in the Geelong district; there are five different species found here and all except one may be seen in the Bay or on lakes, swamps and rivers.

However, it is unusual to find one in a city street and the story by <u>Lisa Pescott</u> tells what happened to one which was found in Pakington Street, West Geelong

"One day we got a bird, it was called a Pied Cormorant, it was found at West Geelong hiding under a car. Daddy was given the Cormorant to look after. Mummy fed it on fish. After we had him for a week, he flew away and we were happy."

Fishermen and naturalists have different ideas about Cormorants.

Although they do feed on fish, Cormorants do not cause a great deal of harm in good fishing areas; they eat large numbers of the slower moving fish such as Carp, and the stronger, faster Trout and Perch - which anglers favour - are more able to escape the hunting Cormorants.

In areas where channels are needed to take water to irrigated farms, Cormorants are useful because they feed quite often on Yabbies - and Yabbies can be a pest where they burrow into channel-banks and allow water to seep away.

In all cases, Cormorants being a "specialised predator" are important to maintain the balance of nature

#### Cormorants -

- (1) The Black-faced Cormorant is the only one found always in marine areas.
- (2) The other four species Pied, Little Pied, Black and Little Black live on fresh and saltwater areas.
- (3) They have fully webbed feet.
- (4) They have "oily" plumage to keep them waterproofed.
- (5) They are expert underwater swimmers.

February 1973



Top photograph: Lower photograph: An adult Pied Cormorant.

Cormorant nests in dead trees.

#### THE LAST WORD

One of the most important Conservation issues yet to confront this Club is the support needed by the Ocean Grove Nature Reserve Committee in its appeal for funds.

Publicity already given in the daily Press should have outlined the Project quite adequately, however a re-statement of aims of the scheme may be in order now.

The O.G.N.R. has been in existance for several years and consists of 200 acres of natural bushland off Grubb Road north of Ocean Grove.

Between the Reserve and Grubb Road is 157 acres of partly cleared land which is offered for sale - at a price which, considering the location, is not unreasonable.

The Committee has taken out an option, lapsing in mid April, and seeks \$80,000 to "swing the deal"; a public appeal has been launched to raise the money and it is not unreasonable to expect that conservationists should become deeply involved in the fund raising.

Land acquisition is only part of the Project, but of course without land the development of the Reserve can not extend.

The 157 acre site is to be developed as the Geelong and District Natural History and Environment Centre and the project is ambitious yet absolutely feasible in concept.

Layout of the Centre will encompass a large nature garden (60 acres in extent) which will become more of a native plants wilderness than a "domesticated" garden, a 10 acre waterfowl lake where it is hoped Cape Barren Geese, Magpie Geese, Brolgas and other rare waterbirds will be released, a 30 acre walk-through Koala Reserve, a building which will include a Laboratory, Auditorium, Theatre, meeting rooms, dioramas and displays, and herbarium, bunkhouses at which school and other groups can live in, and a nursery where native plants will be propogated for sale.

Yes! It is a mighty scheme. But it is feasible if it is given backing - and the urgent need at this time is dollars!

Once the land is purchased, we can draw breath, and plan logically and practically how the Centre and its environs can be developed .



Ken Jenkin — Print, Geeiong





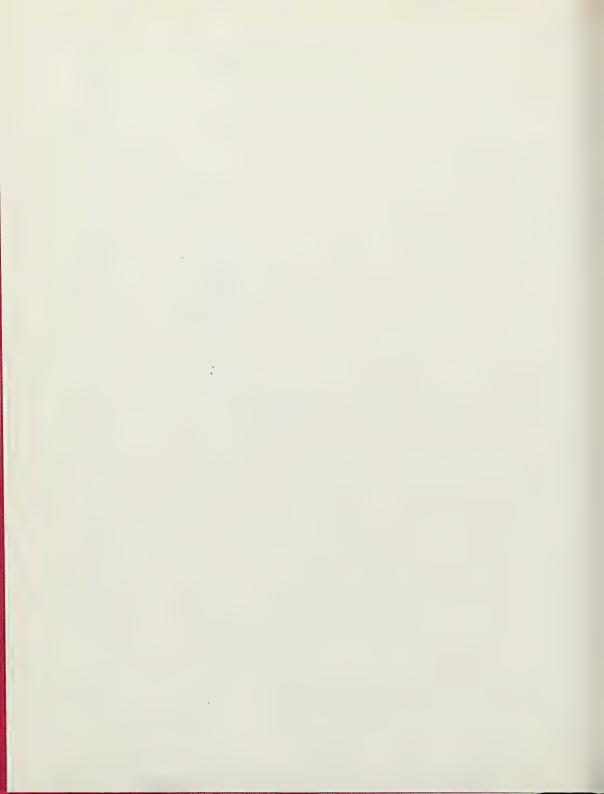
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#### DESTINATION COOPER'S CREEK

(Part 1)

## by Valda Dedman

For years now the name "Cooper's Creek" has had a fascination for my husband and me. Cooper's Creek - that waterway that traverses inland Australia for hundreds of miles yet never meets the sea. and only occasionally reaches its destination in Lake Eyre, fifty three feet below sea level. Cooper's Creek - the stream that. despite its length, does not even boast the title of "river". though it starts as two, the Thomson and the Barcoo, on the western slopes of the Great Dividing Range in Oueensland. Cooper's Creek -that the explorer Sturt, looking for permanent water in the heat of February 1845, missed by only a few miles, so he turned back and had to spend trying months of drought at Depot Glen. Cooper's Creek - where Burke and Wills set up camp LXV, from which they, with Gray and King, set off for their final dash to the Gulf of Carpentaria in December 1860. Cooper's Creek - we wanted to see for ourselves its long deep waterholes, its pelicans and its tortoises.

So, even though time was limited to two weeks in the August school holidays, we set off with high hopes which were marvellously fulfilled, though we were, regrettably, always in a hurry. We were quite an expedition, eight of us this time, in our four wheel drive Toyota Landcruiser station wagon, with the usual caravan, books, cameras, binoculars, and provision for large supplies of extra petrol and water.

In some respects we followed in the steps of the explorers, and truly we felt ourselves explorers, for to us all was new and interesting, with discoveries just waiting to be made. Like Burke and Wills we first made for Mootwingee, eighty miles northeast of Broken Hill. They went via Menindee, but we took the Silver City Highway, through Broken Hill, and then made our way along a rough road across bare plains thinly covered with Mulga (Acacia aneura) and Gidgee (Acacia cambagei).

Today Mootwingee is a National Historic Site, 1200 acres in area, and very well cared for by a residential ranger. It covers the upper drainage basin of Nootumbulla Creek in the Bynguano Range,

an isolated and much eroded rocky massif rising suddenly out of flat sand plains or gibber plains, strewn thickly in places with white quartz pebbles. At the Park there is an impressive new Visitors' Centre whose pleasing architecture blends with its surroundings. Inside are attractive displays of fauna and flora, history and aboriginal life, and a theatrette where the Ranger screened films at night and slides at the afternoon session. Several well marked walking tracks lead to points of interest within the Park, and the camping area is clean and attractive without being overdeveloped. It was refreshing to see public money spent so wisely. The expense has been fully justified judging by the rapidly growing number of visitors to the Park.

We arrived at Mootwingee just before sunset when the evening sun, burnishing the rock walls, imbued them with a glowing golden radiance. How I wished I could paint when I was at Mootwingee! I wanted to capture the changing colour of the rocky gorge walls, orange in the early morning, deep red in shadow, against which the pure white of the gracefully curved trunks and limbs of the River Red Gums (Eucalyptus camaldulensis var. obtusa) in the sandy creek beds showed to advantage. The gums, like dancers lifting up pale arms contrasted with the dense dark green foliage of the Cypress Pines (Callitris columellaris). Rainfall is scant but there is a surprising variety of plant life; a list supplied by the Ranger gives 178 species identified.

A similar checklist of birds of the region showed 113 species. The birds we remembered best were the tame Apostle birds (Struthidea cinerea), large, grey and ground-fossicking. We fed them on stale cornflakes right outside the caravan door. The song of the Grey Butcher Bird (Cractious torquatus) followed us on our walks, with strong liquid notes and rollicking chuckles.

The rocky landscape at Mootwingee is fascinating. Sometimes the sandstone surface looked exactly like dried flaky mud. Dark round pools have been worn into the rock in some places; in others there are grassy hollows with stunted trees. Geologically the area is extremely interesting. The rocks are for the most part of sandstone laid down in shallow seas. The lower layers are up to six hundred million years old, formed in Lower Cambrian times.

Some millions of years later the land was again submerged and large rushing rivers deposited very coarse conglomerate on top, and later still another massive layer of sandstone was built up.

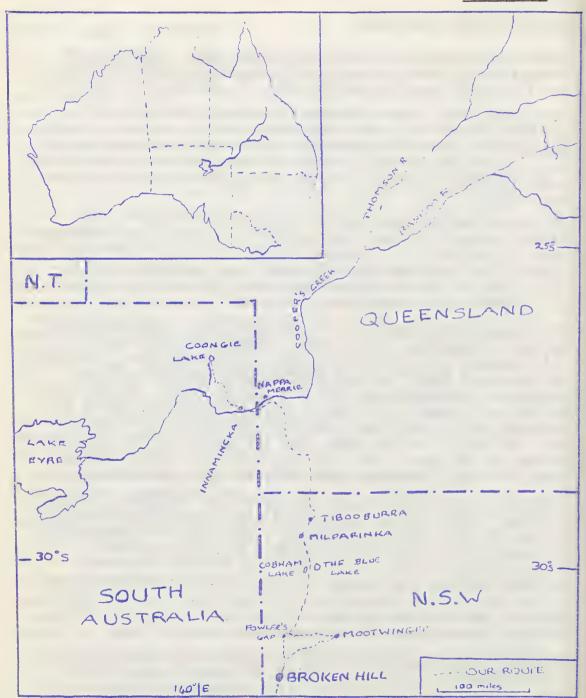
We climbed up to a cave hollowed out high in the valley side. The floor was of the softer sandstone, but the roof was of hard conglomerate from which protruded rounded grey and white rocks the size of melons. And on the floor were fascinating hard chemical growths, giving the cave the appearance of a miniature coral grotto.

But Mootwingee is remembered not only for its beauty or its natural history. The main reason for its existence as a National Park is undoubtedly the preservation of aboriginal paintings, stencils and rock carvings. The aborigines were attracted to the area by the semi-permanent rock waterholes and the shelter of the great rock overhangings or "caves".

Of these the most impressive is the Snake Cave, reached after a walk up a delightful little creek. Painted along the wall of this immense sunny shelter is a thirty foot long snake. Here too are dozens of stencilled and painted hands, and painted feet, goannas and boomerangs as well as a smaller snake; red, yellow and white pictures on the smooth rock. The precise meaning of the paintings is not known, nor their religious significance, if any. Actually, I would guess, from the small size and low position of many of the hands, that they were done by children, perhaps merely in play, something to do while the tribe sheltered.

Even more interesting are the rock engravings on smooth sloping sheets of sandstone beside another little creek. These are said to be much older than the paintings. They have been executed by "pecking" with a harder stone, so that the pictures have a dimpled texture. Many of the engravings are very lifelike, representing kangaroos, emus, goannas, human figures, boomerangs, as well as patterns such as concentric circles. In some places the rock has fractured by weathering long after the picture was finished, so that some figures cover two pieces of rock.

The engravings were hard to find till our eyes became accustomed picking them out. In fact, at first we were walking all over them, without realising it. It is to be hoped that pressure of



numbers does not mean that the pictures will have to be wired off. It was much more rewarding to see the engravings, and the paintings too, without the obstruction of a wire mesh barrier, such as we have found in the Grampians, for instance. Perhaps the presence of a ranger and the fact that the road to Mootwingee could deter all but the very keen will enable us to enjoy these reminders of the early inhabitants of the region. To be able to trace a pecking with one's finger and feel its hollows is to experience some of the aboriginal dreamtime.

There is one rock, however, that has been scratched by a white man, but that was done in 1861-3. Ernest Giles, later to become famous for his exploration of Central Australia, passed through Mootwingee in the days when he was a jackaroo on Kinchega Station, part of which is now Kinchega National Park, near Menindee.

His name and the dates July 61, August 62 and September 63 are scratched on a rock beside the creek that now bears his name, and are said to be authentic. The early pastoralists knew of Mootwingee's rock holes. William Wright, who had been manager of Kinchega Station, joined the Burke and Wills expedition at Menindee, and led the party through Mootwingee, although they did not camp there, and in fact did not like the place. Wills in his field book speaks of "gloomy gullies". I beg to disagree.

Well, like Burke and Wills, we were headed towards Cooper's Creek, though our route led us due west back to the "highway", across what was little more than a sandy track through paddocks. Our going was therefore slow, but enabled us to see Emus (Dromaius novaehollandiae) and Grey Kangaroos in greater numbers and at closer range than at most times on our journey. It also meant we spent the night in this lonely desert area.

By sheer luck we camped by the only clump of trees for miles around, and it turned out that these trees were the roosting place for a variety of birds which provided an early morning chorus. A Willy Wagtail (Rhipidura leucophrys) was awake before dawn, scolding me for lying in bed so long, so I got up to watch the sun rise over the Bynguano Range. A Black-backed Magpie (Gymnohina tibicen) sat in a gidgee bush, dead so long that a

mound of sand had blown round it, and carolled its joy at the day's awakening. A pair of Ringneck Parrots (Barnardius barnardi) awoke, chattered a while, and left to feed in the open country. I heard in the distance my friend the Crested Bellbird (Oreoica gutturalis), while close at hand a Wedgebill (Sphenostoma cristatum) sang loudly. Ravens so black (Corvus coronoides), and Sulphur-crested Cockatoos so white (Kakatoe galerita) flew over, calling raucously, and a musical whirr of wings showed that the Crested Pigeons (Ocyphaps Tophotes) were about their work. A swarm of Zebra Finches (Taenopygia guttata) flitted from bush to bush with a perpetual hum-buzz; such neat little birds these, bright vermilion stout finch bill and dainty legs. The males have a black breast band, white-spotted chestnut sides and zebra barred tail. The females of course are much plainer, as are those of the Mistletoe-bird (Dicaeum hirundiceum), pairs of which were busy in the bushes.

Our little grove of mulga trees also provided the birds with a nesting place. We found three nests, all unoccupied and all strikingly different. The largest and most solid construction had probably belonged to a White-browed Babbler (Pomatostomus superciliosus). It formed a compact ball of heavy twigs loosely but cleverly interwoven so that it retained its shape even when removed from the tree for inspection. It was partly domed with a side entrance, and inside the lining was deep and soft. What a contrast with the frail stick platform nearby, which we thought must surely be that of the Crested Pigeon! The third nest was much more comfortable for baby birds. Cup-shaped and deep, and made of fine twigs, it was thickly lined with sheep's wool. It may have been the nest of a Wedgebill.

(to be continued)

# EXPLOITATION OF THE EMU (DRAMAIUS NOVAEHOLLANDIAE)

## by Ellen M. McCulloch

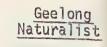
The recent brief T.V. news item on the proposed commercial farming of Emus in Western Australia for their skins started off a search to discover previous exploitation of Australia's largest bird. The current project to produce emu-leather appears to be a work-manlike proposition by an energetic Swiss businessman who has already overcome certain avian diseases, breeding problems and other hazards. He has evidently had advice from scientists of the C.S.I.R.O., and from the T.V. film it would appear that the experimental stage is almost over, and that he is just about in business.

When interviewed, he said that the reason for farming was that leather-making requires perfect skins and in wild-caught birds the skins are imperfect, being torn when the bird; move through shrubs or low timber.

At no time was it suggested that there would be an outcry from anyone against commercial killing of wild emus, and it must be remembered that in the wheatbelts of Western Australia the species is not protected.

In the Emu War of 1932 machine-guns were manned by the Royal Australian Artillery in Western Australia in an effort to kill large numbers of emus invading farmlands and trampling crops and fences. The war was a failure, apart from the space and quality of comments accorded it by the local press. The emu is still declared vermin in parts of Australia, and is currently being studied by C.S.I.R.O. scientists. The birds' diet is fairly wide and includes grass, berries and fruits, and caterpillars and grasshoppers which may occur in plague proportions in the drier areas.

I have seen emus in National Parks and semi-tame individuals in zoos and sanctuaries, but it was not until recently that I saw them in open unprotected country north of Broken Hill. Strangely enough the first noticeable thing about them is how unnoticeable they can be in a landscape of grassland broken by shrubs and low



Left: Carved Emu egg.

photo by J. Hyett

Below: \$1 note.
photo by B. Kloof



#### EXPLOITATION OF THE EMU (Continued)

trees, and until birds move they are often overlooked, in spite of their size. When running they appear to sway along, and those long powerful legs can cover a lot of ground, at speeds of up to 30 m.p.h. (5)

In the past emus were of considerable importance as a food item to the Australian aborigines. (2) They are amongst the commonest of birds depicted in cave paintings, rock engravings and other designs, and dances, ceremonies and totemic legends were woven about them.

They were hunted in various ways. They could be called up, they were sometimes surrounded and driven into pits, drinking water was poisoned, or they were stalked by disguised hunters who either speared the inquisitive birds or entangled them in strong nets set up beside pools. As well as eating the flesh and eggs, and using the fat, sinews and bones, the plentiful feathers decorated a number of ornaments. Some of the womens' head pads contained emu feathers, and Kurdaitcha shoes incorporated feathers either stuck together with blood, or woven with human hair into a springy moccasin-type of footwear.

European settlers soon thinned out anything which could be eaten or which was considered a food competitor with their domestic animals.

G.M. Mathews (3) states - "From the account given by Leichardt it would appear that his expedition would have been unable to reach Port Essington had it not been for the supply of Emu meat. The Emus, he says, used to come up in their inquisitive way, and on November 24th, 1844 the black boy struck at one with his tomahawk, another was shot with dust-shot later on."

Other early explorers and travellers likewise eked out their stores, farmers legally destroy the birds, and "sportsmen" appear to need no reason to test their aim. To-day emus are only at all common in the less frequented parts of Australia.

It is the male bird which incubates the eggs and looks after the chicks when they hatch. Eggs are deep green and have a thick shell, and in the past delicate cameo-like designs or less

# EXPLOITATION OF THE EMU (Continued)

sophisticated but interesting patterns were carved into the layers of shell. (Some such carved egg-shells of modern vintage are currently sold at handsome profits as tourist souvenirs.) Other Victorian bric-a-brac included eggs incongruously mounted in silver settings incorporating grapeleaves and other classical vegetation unknown to emus. The National Library in Canberra holds some fine examples, part of the Rex Nan Kivell collection.

In earlier times the large eggs were used for cooking, particularly for baking, by settlers and on station properties.

There are some records of body oil being extracted and used in various ways, but it does not appear to have been done on a large scale.

The soft feathers were little used by the settlers except for feather dusters. Emu feathers made the hat plumes of the Australian Light Horse Regiment in the 1914-1918 War.

One rather odd utilisation of emu products is the report of White-winged Choughs (Corcorax melanorhamphus) building a nest of emu dung when mud was scarce. (4) There are a number of records of birds of various species using emu feathers when building their nests, particularly in the lining of them.

Since I have become interested in tracing the ways Australian animals (including birds) and wildflowers have been used as decorative motifs since European settlement, many designs have been brought to my notice, and I would welcome comments on others. The emu is used widely as a decorative Australian motif on articles ranging from eggcups, stamps and tapestries to wroughtiron gates (at Flinders Naval Depot) and numerous trademarks. Dozens of versions of the Commonwealth of Australia coat-of-arms exist - compare the emu on the 50¢ coin with the attractive modern rendition on the \$1 note.

The journal of the Royal Australasian Ornithologists Union, first published in 1900, is called "The Emu". The species appears in several ways on both corporate and personal Australian heraldic arms. (1)

On the face of things it would not appear that the proposed

## EXPLOITATION OF THE EMU (Continued)

economic exploitation of emus will have any detrimental effect on the species. We must remember, however, that if overseas visitors to south-eastern Australia with limited time wish to see either animal which supports the Australian coat-of-arms, the kangaroo or the emu, naturalists are placed in the embarassing position of having to suggest a zoo. Remember, too, that the island forms from Tasmania and from Kangaroo and King Islands have been extinct for many years.

Some scientists tell us that we should not become emotional about our "unique" Australian animals, because in reality every animal everywhere is unique. While it is true that an emu is neither more nor less unique than a hummingbird or a woodpecker the fact remains that it is found only in Australia and nowhere else on earth.

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#### THE BAW BAW EXPEDITION

(January 19,21,22, 1973)

#### by Rolf Baldwin and Jack Wheeler

Veterans of our previous expedition had always thought of the Baw Baws as a place of rain. To reach their goal they had had to struggle up a fearsome, winding road, in imminent danger of bogging irretrievably or of slithering over the edge of a precipitous cutting into the dense forest below. Once on "the tops" they found a watery land of weeping skies where the snow gums on the slopes loomed mysteriously through the mist and the distant view was veiled in clouds.

This time all was changed. The road still wound crazily so that the huge, yellow, full moon first shone on the windscreen and then through the rear window and then through either side indifferently. Instead of mud, dust was the bugbear, so that cars had to run at wide intervals to avoid the clouds, while the main danger was from boiling. The last trouble, however, affected only the machines. To the humans the mere name of Icy Creek brought relief from the stifling heat of the lowlands and each hundred feet of altitude gave purer, fresher air, until at the village there was a mildness and a sparkle worthy of Spring. The full moon cast a calm, brilliant light over range-top and snow gum and granite boulder, the air was calm, the sky was clear and it was hard to realize that we were on the same world as sweltering, smog-bound Melbourne. In these encouraging conditions it took the Friday people very little time to explore the kitchen and the common room, to have their various meals and then to settle down in such nooks as Adam's Den or the Flue Room or simply in the open air on Baw Baw Flat. Even the mosquitoes almost spared their attentions in this idyllic country.

Saturday came in full of encouragement. Clear skies and gentle breezes were the order, with a heat that was intense in the sun but was purged of vindictiveness by the freshness of the mountain air. Strangely, though, there were very few birds, even in that hour round about dawn when they are most active. In the end there was a respectable bird list, but the total numbers seen were far

#### THE BAW BAW EXPEDITION (Continued)

fewer than would be expected of this country. Birds or no birds our members were early astir, with Anna leading the way with the first of her many assaults on the surrounding high points. From then on there was continuous movement, with parties walking all about, so that no moment of our precious time should be wasted. Prying eyes were everywhere and in the end all either saw for themselves or heard of most that was of interest concerning plant, insect, bird, reptile or mammal. Not that there was very much in any particular field, but there was at least something for everybody and over all there was the magic of the "high country".

The first venture was a climb to the summit of Baw Baw itself. Here our way was diversified by Candle Heath and Leek Orchids and the great richness of varied shape and muted colour in the trunks of the snow gums. It was most interesting to notice the splendid regeneration since the holocaust of 1939, to speculate on the age of the huge dead trunks that were left behind by that disaster and to examine the strangely flattened and contorted roots which embraced the granite boulders on which some of them were growing. No snake was seen, but tiny green frogs gave a touch of life to the pools which dotted our gully whilst skinks basked on the rocks or whisked into the crevices. From the summit there is no commanding view, because of surrounding bluffs and knolls but one feels particularly strongly the fascination of the rolling high plains with their heaths and dwarfish Snow Gums.

Saturday afternoon saw our next common activity. This was a walk up the South-east Valley, a typical piece of high plains country where a shallow, wide valley is bordered by granite tors and thickets of Snow Gums. Characteristically the valley floor is well covered by heathy undergrowth, but much of it is also covered by great, damp masses of sphagnum moss. In this valley we saw clearer examples than those we had noticed in the morning of what can be done to this precious, protective covering of moss by the grazing habits of the cattle which are still, apparently, allowed to depasture in these parts. In Nature's scheme the moss acts as a sort of balance-tank absorbing, sponge-like, great amounts of rain as it falls and then releasing, gradually and gently, the entrapped water. Cattle upset this neat arrangement.

Geelong Naturalist

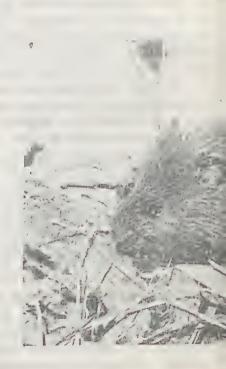
Right: Our group resting at tow-lift near summit of Mt. Baw Baw.

by J.R. Wheeler

Far Right: Mountain G. Gentian.
by Frances Poole



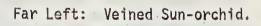




May 1973







Right: Swamp Rat.

photos by Frances Poole.

## THE BAW BAW EXPEDITION (Continued)

Grazing and trampling they obliterate whole areas of sphagnum along the lowest parts of a valley, so that the place of the absorbent moss is taken by clay-pans which shed their rain rapidly and then dry out, leaving a serious erosion hazard where none was before We wandered slowly along the valley, examining these and other features, till finally we penetrated the Snow Gums at the end and came to McCarthy's Lookout where, from granite boulders in the scrub, we could look out to the South. In the foreground were mountain ash with a few young beeches, exquisitely bronze in foliage. Beyond, lay range after misty blue range, in diminishing perspective, with Yallourn visible and Moe and the hazy outline of the Strezleckies in the pale distance. Later, a grace note came to this in the discovery, late in the afternoon of a Flame Robin's nest on a beam underneath the chairlift landing.

In the evening, with the full moon rising superb above the eastern range, high drama came unexpectedly from an ordinary, impromptu spotlighting expedition. An excited "there he is!" from a lady member signalled the catching of a possum in almost the first beam. Very Agilely he shot down the trunk, then moved rapidly to others, but he could not escape the probing light and gave all spectators a very clear view of himself so that all were sure that it was the rarely seen Leadbeater's Possum. Having granted us that favour 'Chance' withheld her hand for the rest of the spotlighting and nothing else was seen. Later, however, she relented. As the mammal trappers were examining their finds, an Eastern Swamp Rat and an Allied Bush Rat, which would normally prove a sufficient reward, they saw and gave chase to another possum. Finally he was caught and, to his captors' amazement, proved to be another Leadbeater's. At least that is what they, and we, regard as certain.

Official confirmation is awaited but, meanwhile, all who were there are sure of the authenticity of the two remarkable finds - with proof from the many cameras.

Strangely enough, with two such excitements behind us, Sunday morning did not seem an anticlimax. There was sadness in striking camp after such a harmonious and interesting stay, but it was still a great pleasure to wander again for a while in the South-

## BAW BAW EXPEDITION (Continued)

east Valley and to yarn about all that we had seen. There were inevitable comparisons, of course, but in a way they were irrelevant. To the naturalist each of the many moods of the bush is but another aspect of the one picture and all of us were content, as we finally dispersed, to regard this campout as an experience "of itself" where, in congenial company, we had been very happy and had seen the High Plains in another garb than that of weeping mist.

All of us feel very grateful to the Mt. Baw Baw Ski Club for allowing us the use of their fine facilities which are so peculiarly suited to our requirements. We also feel that we owe particular thanks to Ian Oakley who so amiably acted as host to us and gave us the benefit of his wide experience of the area.

As a final nostalgic note here are the names of the members and visitors who attended, arranged according to the lairs that they occupied:

Lilac Room
Betty Quirk
Edna Yeoman
Susan Mann
Sally Mann

Adam's Den
Jack Wheeler
Ian Woodland
Jack Primrose
David Nelson
Glen McCarthy
Gordon McCarthy
Bert Keith
Ian Oakley

Hall's Gap
Diana Primrose
Beryl Campbell
Flora Singleton
Anna Martin

Flue Room
Dorothy Primrose
Trix Wheeler
Eileen McCarthy

T'Other Room Elsie Keith Carol Nelson Jenny Nelson Open Air
Frances Poole
Elsie Poole
Geoff Mathison
Jessie Harley
Rolf Baldwin

## BAW BAW EXPEDITION (Continued)

Bird List - Mt. Baw Baw Plateau Area covered - lower chair lift station to summit.

Common Bronzewing Australian Snipe Wedge-tailed Eagle Brown Hawk Nankeen Kestrel Yellow-tailed Black Cockatoo King Parrot Crimson Rosella Kookaburra Spine-tailed Swift Grey Fantail Flame Robin (nesting) Yellow Robin Golden Whistler Olive Whistler Grey-shrike Thrush

Mountain Thrush Brown Thornbill White-browed Scrub Wren Pilot Bird Superb Blue Wren White-throated Tree-creeper Spotted Pardalote Eastern-striated Pardalote Grev-breasted Silvereve Eastern Spinebill White-eared Honeveater Red Wattlebird Pipit Raven (sp.) Pied Currawong Grey Currawong (feeding young)

Total species - 32.

#### Botany

No complete list made but reference may be made to Geelong Naturalist Vol.8 No.2. (Wheeler)

One particular plant of note found on the flat east of the chalet - Ecocarpos nanus (Alpine Ballart).

Owing to the dry drought conditions, flowering plants were nowhere near as abundant as on our wet 1971 visit.

#### MACEDON NOTES

#### by John Incoll

Following suggestions by writers in Geelong Naturalist that we should record feeding habits of birds, the following notes may be of interest.

SEED EATERS - Canary seed has been spread daily on a cement area in the back yard over past years for the Red-browed Finches which are common in the Nursery grounds.

Needless to say the Sparrows were quick to take advantage of our bounty, but surprisingly are not quite as fearless as the finches when we move about the yard.

Numbers of Sparrows vary from 5-15 and Finches from 2 or 3-40, the numbers being higher in winter. Blackbirds, which are already regular foragers in the garden were quick to take advantage of the regular food supply, which rather surprised me.

A greater surprise was the regular participation of Magpies and an occasional Currawong - the thought of a Currawongs beak picking up a small seed verges on the ridiculous. Regulars, but more shy of humans are the Brush Bronzewings, and we enjoyed the opportunity to study these beautiful birds at close quarters.

The Grey Shrike Thrush is an intermittent visitor to the "table" but does eat seed. Blue Wrens and Scrub Wrens are regular visitors to the garden and occasionally eat the seed.

The Olive Whistler has only been noted once, but joined the Finches and Sparrows to eat seed, Green Finches are regular feeders in summer and concentrate on flax seed, which other birds do not eat.

We have noted two visits by a Collared Sparrow-hawk, which had apparently noted the concentration of feeding birds but was cheated by the abundant low cover.

When first seen the hawk was walking on top of the privet hedge, in which dozens of chattering Sparrows were sheltering, apparently in the hope that a rash bird would fly out and be "picked off" before reaching other cover.

## MACEDON NOTES (Continued)

It was noted that the young Red-browed Finches have the red patch on the tail as soon as they are fledged, but do not develop the red brow until much later - possibly nearly a year later.

GROUND FEEDERS - Olive Whistlers are seen feeding on the ground here, more often than in the trees, but this may be that they are more noticeable on the ground.

The Yellow Robin and White-browed Scrub Wren are regular feeders on the ground and Golden Whistlers are also seen occasionally feeding on the ground.

Scarlet and Flame Robins and Yellow-tailed Thornbills are regular feeders on open areas of ground as well as in the bush.

Crimson Rosellas periodically move over the lawn eating seed heads of Dandelion and Flatweed.

Blackbirds, Magpies and Currawongs are regular feeders on the lawns where they appear to obtain worms or grubs from the ground.

HONEYEATERS - Spinebill and Yellow-winged Honeyeaters are here most of the year, and part time visitors are the Crescent, White-naped, Yellow-faced and White-eared.

The Wattlebird is visible and audible whenever there is blossom on eucalypts, bottlebrush or Angophora.

KOOKABURRAS - In relation to a query on Kookaburras and goldfish I am unable to answer, but they apparently feed on tadpoles in the ponds on Cameron Drive, and occasionally come to grief.

We have removed several in a half drowned condition, and others are noted too late to rescue.

#### SOME NOTES ON THE GOLDEN BOWER-BIRD

by Eric Bound



Top: Golden Bower-bird at bower with a beak full of some white substance. Note lichen decoration on bower.

Golden Bower-bird on its favorite perch showing lichen decoration.

photos by Eric Bound.

# SOME NOTES ON THE GOLDEN BOWER-BIRD (Continued)

The Golden Bower-bird (Prionodura newtoniana), the smallest of our bower birds and an inhabitant of the dense rain forests of North Oueensland is never-the-less of great interest to ornithologists probably because firstly is beautiful colouring of rich golden vellow right down the front even to the end of its tail with a light mantle of cinnamon brown on the shoulders and back, dark area around the face and bright golden cap, and secondly because of the quite large and interesting bower generally built between two trees which may be for feet or more apart and joined by a "rail" which could be a fallen tree trunk or a branch or even a jungle creeper, and often three feet or more in heights. The bower is then built up by the application of a huge quantity of small sticks and twigs and finally decorated with the green lichen that abounds in the rain forest which is the bird's natural habitat. The final result is a bridge or causeway between the two trees on which the male can work and play.

He is maybe just a little larger than a Mudlark in size, but presents a beautiful picture when seen against the dark interior of the rain forest.

Recently I had the opportunity as one of a party of Geelong Field Naturalists, to visit an area on the Atherton Table-land which is a known haunt of the Golden Bower-bird. The site was the National Park known as Hypipamee Crater, and thanks to some valuable assistance on the part of Mrs. Billy Gill, a noted Queensland birdo, who drew us a simple but very effective map pinpointing a bower known to be in use, we were able to proceed to the location of same with a minimum of trouble.

The following morning bright and early an observation post was established, cameras set up on the bower, and we settled down hopefully to await developments. The morning broke very dull with a hint of rain, and in fact there were several light showers during the morning, but fortunately they did not seriously inconvenience us. After a wait of approximately 3/4 of an hour we got our first sighting of a magnificent male, and what a thrill it was the bird was quite fearless, and sat quietly on what turned out to be a favorite perching place for some minutes before flying off into the forest. It soon became obvious that there was a regular approach pattern, so camera positions were quickly changed to

### SOME NOTES ON THE GOLDEN BOWER-BIRD (Continued)

cover the favorite perching point. The procedure was that after an interval of perhaps quarter of an hour he would return to occupy the same position where he would sit quite motionless with wings drooped in a relaxed looking attitude for some minutes before flying off from the perch which was a thin horizontal branch about six feet up on a thin sapling. Sure enough he continued to approach at regular intervals and occupy the perch, enabling us to get a good selection of photos, the bird taking no notice whatever of the flash only 5-6 feet away, while we also were in full view only about 12 feet from the perch site. Then about 10a.m. the approach was varied and the bird flew to another perching point about 10 feet up and almost over the bower. He was carrying a beak full of pale green lichen, and after a short interval flew directly to the bower where the lichen was placed in a selected spot after which a certain amount of tidying up was done in which beaks full of lichen were shifted from one spot to another, before the bird flew away. An interval of about 15 minutes and he returned with more lichen and repeated the previous procedure. He sat on the "bridge" for about a minute and again flew away. positions were quickly changed in anticipation of further visits to the bower, and he soon obliged with another trip, but unfortunately instead of a beak full of lichen he was carrying what appeared to be a small pellet which was stuffed into the bower somewhere among the other decorations, and after changing positions several times, flew off. Three occasions this happened, the bird bringing in a pellet each time, then about lla.m. activity practically ceased, the bird came back and sat on a perching point for about 20 minutes, then flew off and ofter a wait of a further 40 minutes, we gave up and left the area.

Observations made over the period of approximately 4 hours that we were photographing the bird, revealed a number of interesting items. Twice the male left what we will refer to as his no.1 perch and moved to a small tree about 6 feet away, which had a small cup shaped hollow 7 feet above ground level. On both occasions he took up a beakful of something which he ate. Later on in the morning he alighted on the ground not far from the bower with a round fruit of some sort and after eating several beakfuls, he picked it up and flying to a nearby tree deposited the partly eaten

# SOME NOTES ON THE GOLDEN BOWER-BIRD (Continued)

morsel in a crevice formed by the junction of a dead spout with the main trunk of the tree. This would seem to indicate a practise of storing food for future consumption. The only call heard was a long drawn out shirring note on a descending scale which had a musical tone. There was no harshness of tone, and after a soft beginning, the sound gradually increased in volume until it concluded. Another point of interest was that no. i perch was decorated with a small tuft of the green lichen of the type that had been used in the bower. This was placed in a small horizontal fork about 12 inches out from the main trunk and on one approach this tuft was dislodged and fell to the ground. Although he made no effort to retrieve it, he peered anxiously at the ground apparently searching for it, and this action revealed the rich golden crown of the head. At no time did we see any sign of a female, nor did the male at any time display any extra excitement or activity, so it is doubtful whether the female was in the vicinity at any time.

All in all it was a memorable experience, and after having previously read various articles, including Dr. Chaffer's very interesting account, together with color photographs, to see and photograph it for oneself was a real highlight of our trip.

#### SUBSCRIPTIONS

At this time of the year, our Club's "coffers" are nearly dry, and it is important that if we are to continue to be a financial body, annual subscriptions must be paid early.

Could you assist please?

Your subscription should be sent to the Club Treasurer, along with your name and address, so that our records are kept right up to date.

Our Treasurer is: Mr. J.R. Wheeler, 72 James Street, Belmont. 3216.

#### AN HOUR COUNT - No.5

## O'Reilly's "Green Mountains", Q'ld.

# by Roy Wheeler

During our visit to O'Reilly's "Green Mountains" in the Lamington National Park in south-east Queensland in October and November, 1972 we were fortunate enough to be there for their 60th anniversary festivities.

In May 1912, the first of the O'Reilly boys arrived on Roberts Plateau, a part of the McPherson Range country near Beaudesert, to carve out their selection in the dense rain forest which covered the area. The then government of Queensland had promised that if twenty selections were made they would build a road into the area. But there were only eight selectors all O'Reillys, five brothers Tom. Herb. Norb. Mick and Ped and three cousins Pat, Luke and Joe. The boys on clearing their land ran dairy farms and their only access to the valley below was by horseback along the Stockyard Creek track to Kerry. In 1915 the area around their farms was declared the Lamington National Park. The interest in naturalists of this area became more and more known as the O'Reilly's made provision to look after them. In 1924 they decided to build a quest house and the then road ended four miles short of the house and was known as "The Dump". From here all guests, provisions, etc. had to be brought in by horses. Finally in 1937 the road reached the Guest House and now although not bitumen for most of the way, is a good all weather road and used by thousands of motor vehicles each year.

Mr. Mick O'Reilly the only survivor of the first eight settlers was a leading figure in the anniversary festivities. Twenty-seven horsemen and horsewomen with pack horses rode up the original Stockyard Creek track on the big day of the celebrations, November 5, 1972. The Beaudesert Historical Society supplied many pioneer relics, a replica of the first bark hut built near the top of Morans Falls and many other exhibits were on display. A real page of Australian History was re-enacted that day. Amongst the many of the O'Reilly family there was the most famous of them all, Mr. Bernard O'Reilly who in February 1937, by an amazing feat of bushcraft found a wrecked Stinson plane and two survivors. The

# AN HOUR COUNT (Continued)

story about finding the plane, the rescue and all other events relating to it, is graphically told in the book "Green Mountains and Cullenbenbong" by Bernard and commemorated in the Orchid Sanctuary near the guest house.

"Green Mountains" is now quite a settlement with the guest house now with modern self-contained units, the store, the church, the cottages, and the Forestry Department picnic area. The wildlife of the area is fantastic and the tameness of the birds and animals has only been achieved after years of tolerance and perserverence. Mrs. Wheeler and I have visited O'Reilly's many times over the past twenty years and we like so many others feel the urge to return there, time after time. It is so unlike other wildlife areas throughout Australia. You are at an altitude of 3000 feet with magnificent views to the north and south, a rain forest right there with its amazing assortment of plants and trees including the famous Antarctic Beech, the oldest living trees in Australia and the abundance of bird and animal life to see and enjoy and above all the good old Australian outback hospitality.

Our favorite spot for doing an hour count is on the hillside just south of the famous O'Reilly pine (hoop pine) tree, overlooking Castle Craig and the Morans Falls area with Mt. Lindesay and Mt. Barney in the distance. We sit on a rock and count all the birds we hear and see within binocular range within the hour. Here is an example.

O'Reilly's "Green Mountains" via Canungra. Q'ld. November 3rd,1972. Fine and hot, no wind. 4.25p.m. to 5.25p.m. Birds in order of sighting. Topknot Pigeon, 16; Paradise Riflebird, 3; Golden Whistler, 12; Golden Bronze-cuckoo, 6; Brown Warbler, 9; Lewin Honeyeater, 13; Superb Blue Wren, 4; Brown Thornbill, 7; Green Catbird, 2; Grey Thrush, 3; Fantailed Cuckoo, 9; Brown Pigeon, 5; Noisy Pitta, 1; Regent Bowerbird, 7; Wonga Pigeon, 1; Satin Bowerbird, 5; Crimson Rosella, 12; Eastern Whipbird, 7; Black-faced Cuckoo-shrike, 3; Grey Fantail, 10; Eastern Spinebill, 4; White-browed Scrubwren, 8; Welcome Swallow, 7; Eastern Silvereye, 21; Pied Currawong, 4; King Parrot, 1; White-throated Treecreeper, 2; Yellow Robin, 6; Yellow-throated Scrubwren, 2; Crow, 4; and Black-backed Magpie, 1.

Total - 31 species and 195 individuals.

## JUNIOR PAGE

As winter draws on, our thoughts so often run on to the spring and perhaps even the warm days of summer.

Winter, with its cold winds, rain storms, mud and short days seems to have few things to be happy about - unless it is to be able to warm ourselves in front of a glowing heater, or to be able to enjoy a mug-full of hot soup!

Our native birds of course can not enjoy any of these luxuries, and so many do what we would like to be able to - they travel north to the tropical areas where the warmth and sunshine provide an ample supply of food.

These birds we call migratory species, and they include such birds as cuckoos, swifts and rainbowbirds - can you think of any others?

Occasionally, some get left behind, and it is not too unusual to see during the winter a Fan-tailed Cuckoo, a bird we usually think of as a migratory one.

When the spring arrives, these birds fly south again, and stay with us throughout the summer.

Those birds which do not migrate we call <u>stationary</u> species and these include magpies, plovers and many others.

Yet other species come and go as the food supply comes and goes - these include many honeyeaters which fly from one area to another as the trees flower and then lose their blossom. These birds are called nomadic species.

Can you make a list of some other Migratory, Stationary and Nomadic bird species?

\*

#### THE LAST WORD

"The price of conservation is eternal vigilance".

This quotation is not new, but its implication is evergreen, only with a total awareness of the activities which move often so quietly in their contra-conservation way can we protect from devastation those things and places we must protect.

Too easily, dealings can be made which will forever destroy places we have thought to be safe from destruction, and it is only if we as conservationists keep our "ears to the ground" and speak out when development projects are first mooted.

Not all developments need be bad - but much of it is - nor should we expect that there should be no habitat alteration.

But we can expect to be made aware of these plans, and speak out against them if there is reason to do so.

I wonder if, for example, the Bald Hills near Anglesea and Gum Flat would have become part of Alcoa's lease if we as conservationists had been astute.

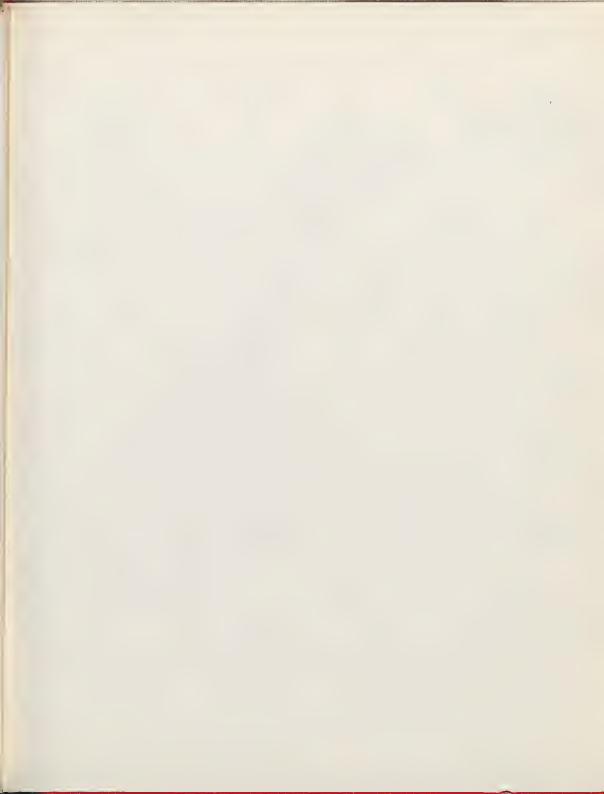
True, the conservation "climate" at this time is excellent, and 10 or 15 years ago it may not have been possible to stop the land alienation deal to be made.

But we should have at least tried very hard.

Is there now to be a second chance of recovering this area as there was at Ocean Grove?

The L.C.C. is to study all Crown Lands in the Melbourne area - and this includes the Bald Hills area - no doubt the lease will be reviewed, and we must make sure that any chance of a change in the extent of the lease must be explored.

TREVOR PESCOTT, Hon. Editor.



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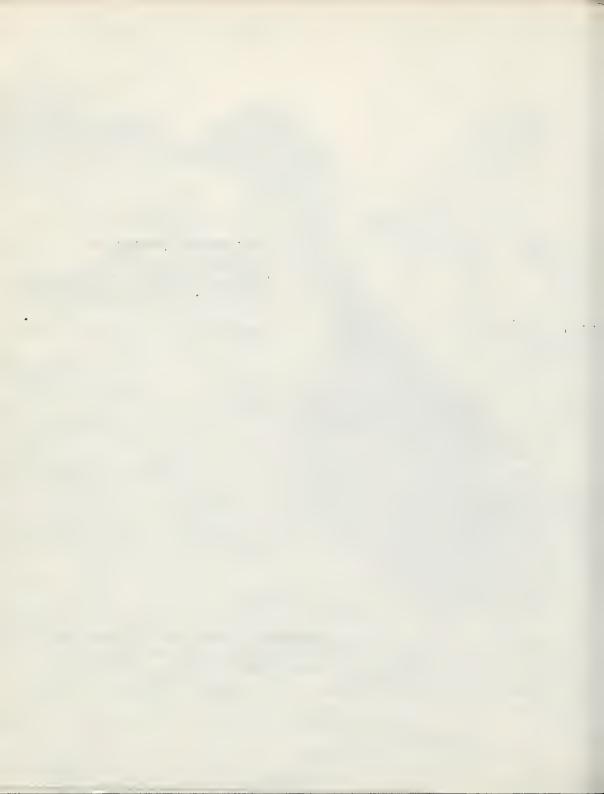
The G.F.N.C. meets on the first Tuesday in the month, at 8 p.m. in the McPhillimy Hall, St. George's Church, La Trobe Terrace, Geelong.

Visitors Welcome

All papers submitted for publication in this journal should be sent to the Hon. Editor.

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#### DESTINATION COOPER'S CREEK

(Part 2)

## by Valda Dedman

So we made our way westwards, the Barrier Range in front of us blue and shimmering with heat, through sandy paddocks and round tanks with tall windmills. We passed an ancient waggon, relic of former days when men had high hopes for this land, and we came out to the corrugated dirt highway not far from the experimental research station at Fowler's Gap. Here scientists are experimenting with rain making and with soil conservation and regeneration. Overstocking and the consequent eating out of natural pastures has led to a nitrogen deficiency in the soil which makes regrowth doubly difficult.

The vegetation gradually changed as we went north: Saltbush gave way to dry yellow grasses, and there were more and more stony plains, completely treeless and bare of practically all vegetation. Emus were very common, but kangaroos were scarce. We caught but one glimpse of the big red plains kangaroo (Macropus rufus).

Trees beside the road were few and far between and lunch was taken beneath a ragged tree in a dry sandy creek bed. Yet a Black Honeyeater (Myzomela nigra) was singing in its branches, and I added to my memories the song of the Diamond Dove(Geopelia cuneata). This is a finely made delicate soft grey bird, prettily spotted with white on the wings, with a neat small head and eye ringed with orange. Its gentle musical cooing, soft yet penetrating, was answered by another dove some distance away.

Soon after this we came upon two lakes, one on either side of the road. That on the left was smaller, brown in colour and fresh, but the one on the right was as blue and as salt as the sea. We went down to the edge of the fresh one, Lake Cobham, and found ducks and swans, and a flock of twenty to thirty Black-tailed Native Hens (Tribonyx ventralis) fed among the grass, flicking the upright fan of their dark tails.

And so on to Milparinka, in ruins and almost deserted save for the hotel - and the open-air screen of the "drive-in" theatre. In the 1880s Milparinka was the scene of a gold rush and in those

days it had a school, hospital and court house.

Not far from Milparinka is Depot Glen, where Sturt and his party were forced to spend several months at the beginning of 1845, waiting for the drought to break. We did not have time to go out to the waterhole, but we could see Mount Poole, and the cairn eighteen feet high, which Sturt had his men build on its summit, to give them something to do during their forced inactivity. This later became a memorial to Poole, second in command, who died of scurvy.

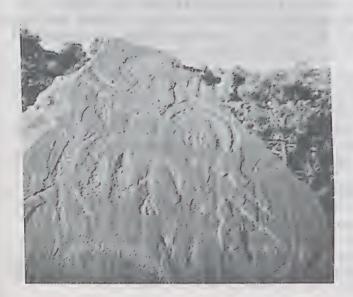
Twenty five miles further on, suddenly, we were in the midst of granite tors, piled up in great heaps, and set amongst these huge rounded stones was Tibooburra, also once the centre of gold mining operations, and still alive today, the only real town we met after Broken Hill.

We crossed into Queensland through Warri Gate in the six foot high wire fence. The fence was originally built in 1887 by Queensland in a bid to keep rabbits out of that state. In 1912 it was extended in height and became a dingo fence, and maintained as such by Queensland till 1919. Now New South Wales has this responsibility and the fence serves as barrier to both rabbit, from the south, and dingo, from the north. Later, beside Cooper's Creek, we found an old dingo trap, similar to a rabbit trap, but much larger.

In Queensland the "highway" did not claim to be more than a stock route, and as we progressed its condition deteriorated until we were lucky to make twenty miles per hour. The landscape changed and soon we were in sandhill country, quite different from anything we had met before.

This was the very fringe of hundreds of square miles of parallel ridges, the longitudinal dunes so characteristic of Australian sandy desert. The dunes are wind formed, their direction being dependent on prevailing wind direction. Longitudinal dunes are generally found where strong winds blow from two directions at different times. Sturt just could not believe that the sandhills were not laid down beneath some ancient sea. He writes:





Above: Giles

Rock at Mootwingee

Left: Rock engraving
Mootwingee

Photos by Valda Dedman

"No! winds may indeed have assisted in shaping their outlines, but I cannot think, that these constituted the originating cause of their formation. They exhibit a regularity that water alone could have given, and to water, I believe, they plainly owe their first existence." \*

In fact there had once been an inland sea over what is now the Eyre Basin, but that was long ages before. Way back in Cretaceous times, some 90-80 million years ago there was a great body of fresh water known as Lake Winton, which later dried into many smaller lakes. In Pliocene times, about two million years ago, the centre country of Australia was traversed by two great ancestral rivers, one draining from the MacDonnell Ranges to Spencer's Gulf, and the other, known as the Frome, was the forerunner of the Diamentina and Cooper's Creek and entered the sea near the head of St. Vincent's Gulf. A large scale earth movement led to the upwarping of the land just north of Adelaide and the rivers, now cut off from the sea, filled another great inland sea, Lake Dieri, 40,000 square miles in area. It was a much wetter age in the interior of Australia. Great forests grew, and fossil wood that we found so readily beside the Cooper is evidence of this.

Five thousand to ten thousand years ago, at the end of the Ice Age, the climate became warmer and drier and the inland sea began to dry up till all that is left is a string of depressions that are usually dry. At this time the sandridges began to form.

The sandhills themselves are composed almost entirely of quartz grains, the larger grains being found on the crests, with up to five per cent clay. The further the sand grains have been blown the redder they become, acquiring a coating of iron oxide in the absence of water, this coloration probably coming from the clay particles in the dune sand.

The sand is derived from the surrounding countryside. The lighter particles of weathered rock are caught up directly by the wind, or washed away first, later to be transported and formed into dunes. The heavier stones, the gibbers, have been left behind, forming bare stony desert plains or plateaux of rounded iron oxide-coated stones, varying in colour from yellow

brown through the dull reds to blackish brown. Burke and Wills found them "terrible to walk on", to which we might add, "terrible to drive over". Only where the surface has been protected by a capping of siliceous duricrust so the hills remain, typical flattopped mesas such as we saw when we approached the Cooper.

In general the more closely spaced dunes were lower than those further apart, and between them the soil was often washed and greyish. Usually only the crests were mobile, the flanks being stabilised with grasses such as Spinifex (Triodia sp.), Canegrass (Zygochloa paradoxa) or the very prickly, many spined Bassia bushes. These last were dry and yellow, sometimes broken off into tumbleweeds that were best avoided. On the sandhills we came upon plants that we found nowhere else, such as Desert Cassia with its golden blooms, or the very unusual Bird Flower (Crotolaria cunninghamii) so named because its flowers resemble birds roosting along its stem. These greeny-yellow, dark-veined, wing-shaped flowers are followed by large soft pods. The Spinifex is the perfect hiding place for lizards. We encountered a large Bearded Dragon (Amphibolurus barbatus) sunning himself on the red sand in the shelter of such a bush.

There were few large trees, but bushy acacias of various sorts were in bloom, some with very dark golden round flower heads hidden among long thin phyllodes; some spiny and sparsely covered with blooms; some pale, fluffy and strong smelling. One spectacular tree was a specimen of Eucalyptus terminalis, commonly known as Bloodwood. It grew beside a tiny dry creek, and although its outline was scraggy, its foliage was a mass of dense creamy blooms and pale rounded buds. Another interesting tree found along the creeks was the Curly Barked Mulga (Acacia cyperophylla), so named because the outer bark peels back in extremely fine curls to reveal dark red wood beneath. The aborigines called this tree "Minnareetchie", and its wood is very, very hard.

Our first view of the Cooper was disappointing. We arrived after nightfall at Nappa Merrie Crossing and camped on hard stones

overlooking what appeared to be a shallow waterhole with low stony banks. No great trees overhung the milky liquid. The whole scene looked rather barren.

Next morning, though, all was different. We found we were at the very end of a long permanent waterhole. When I looked out the caravan window I could see wading birds in the shallows. Two Yellow-billed Spoonbills (Platalea flavipes) and a Royal Spoonbill (P. regia), black of beak and legs, swung their bills from side to side as they sieved the mud for small creatures. Herons, both White-faced and a White-necked (Ardea novae-hollandiae and A. pacifica) waited, observant, and then pounced, spearlike, on their prey. A Black-fronted Dotterel (Charadrius melanops) darted over the stones, and a small flock of Black Ducks (Anas superciliosa) swam peacefully on the still water or waddled out on to the bank.

The river had just stopped running and its load of clayey sediment had not yet settled, hence the milkiness of the water. We even came to enjoy its distinctive flavour and grew very fond of the "Cooper tea". The weather was hot and thundery and we appreciated a swim, but the water was surprisingly cold.

We moved camp upstream a little, under the shade of a Coolabah Tree (Eucalyptus microtheca), with a patch of Withered Nardoo (Marsilia drummondii) just outside the door. The Coolabah is the predominant tree beside the river at Nappa Merrie Waterhole. The trees are very gnarled and twisted, rather sombre, with dark bark enclosing the trunk and persisting nearly to the end of the limbs. Another common tree was one we called the "Rattle Pod Tree" on account of its long brown dry seed pods. trees were frequently parasitised by a very interesting mistletoe whose seeds were dispersed by an efficient "propellor" formed of the twisted seedcase. This shape ensured that they would drop stright down and so have a good chance of landing on a lower branch of the host tree. Here and there along the creek were wide drooping Paperbarks (Melaleuca glomerata), their narrow leaves downhanging, often caressing the water, their skinlike bark peeling away from their creamy branches. Some stretches were bordered with tangled spherical masses of Lignum

(Muehlenbeckia cunninghamii), all wiry interlacing stems.

How pleasant it was to sit in the hot sun, beside the creek, and watch the Fairy Martins (Hylochelidon ariel) at work. Such a constant dazzle of movement to and fro as they refurbished their bottle-shaped nests with mud from a damp patch at the water's edge! Their colony of about twenty nests clustered together was on the side of an old Coolabah tree, and many of the nests had a resting platform beside the opening to the mud chamber. Overhead dozens of Black Kites (Milvus migrans) soared on flat wings. Scavenger birds, they reminded us that we were not far from Nappa Merrie homestead. Way above we might see a Little Eagle, perhaps the mate of the bird that peered at us so regally from over the top of its large stick nest (Hieratus morphnoides). A flock of Galahs (Kakatoe roseicapilla), all lovely pink and grey, might fly by, with high pitched noisy calls. Or Little Corellas (K. sanguinea), white with bare blue eye patch, might settle on a branch, chuckling noisily. A Crested Pigeon, with singing wings, might fly to a Coolabah, and on alighting, up would go its tail. Smaller relatives, Diamond Doves or Peaceful Doves (Geopelia cuneata and G. placida) were sure to be busy in the trees, as were the White-plumed Honeyeaters (Meliphaga penicillata), the only species of honeyeater we saw here. A glimpse of brilliant green and dull grey-green meant a pair of parrots, Red-rumped probably (Psephotus haematonotus). Grey Thrushes (Colluricincla harmonica) sang of spring, while the Raven with its long-drawnout "ah-ah-aaaah" told of hot bare plains.

Or we might go off in our little boat and get even closer to wild life which seemed less shy than at home. We could float a few feet away from an Eastern Swamp Hen (Porphyrio melanotus), a large handsome black and royal-blue bird with strong bright red legs and vivid heavy bill. Now we could understand why these parts of the body were so powerfully built. Using its bill, the bird would grab a reed stalk low down near its base, then pull vigorously, often almost toppling over with the effort. Then very quickly it would hold the stalk in one foot, strip off with its beak the outer green sheath and eat the soft juicy white pith. The stalk would then be abandoned, and the swamp hen would move

on to another.

As we rounded a bend in the river, a Pelican (Pelecans conspicillatus) would take off, leaving a long white feather on the water. Dozens of round black knobs sticking out of the water would silently disappear. These were tortoises, and they seemed to be prolific, particularly in the shallow backwaters. The water was too milky to see the whole animal, but I did surprise one about twelve inches long sunning itself on the bank, Quick as a flash it flopped into the water, giving me the barest glimpse of it. Little is known of the Cooper tortoises; it is assumed that they are relatives of the Boofhead (Emydura australis).

\* Sturt, Charles: Narrative of an Expedition into Central Australia - entry for 28 August 1845, quoted in "Australian Explorers" ed. Kathleen Fitzpatrick, p.291-2.

#### HOW: MUCH: VALUE?

## by Trevor Pescott,

The long-awaited controls on off-road vehicles are due to come into force in September - and time will then tell if they will be effective:

Personally, I am pessemistic about the value of the controls, for I feel that in some areas vehicles, no matter if registered and ridden by adults, must not be allowed.

No amount of fees will alter the fact that trail-bike tyres will cause conditions condusive to erosion at the You Yangs for example - just as registration of four-wheel vehicles has reduced their devastating impact on the desert areas or mountain slopes.

#### THE MAKING OF A BIRD LIST

#### by Roger Thomas, Ballarat.

As a regular and frequent visitor to Lake Wendouree in Ballarat I became interested in making a list of birds recorded there. After ticking off the birds that I had personally had seen at the Lake, I surprised myself with a total of 105. There were at least half-a-dozen more that I knew had been recorded and concluded that other people would have seen thirty or so that I did not know of.

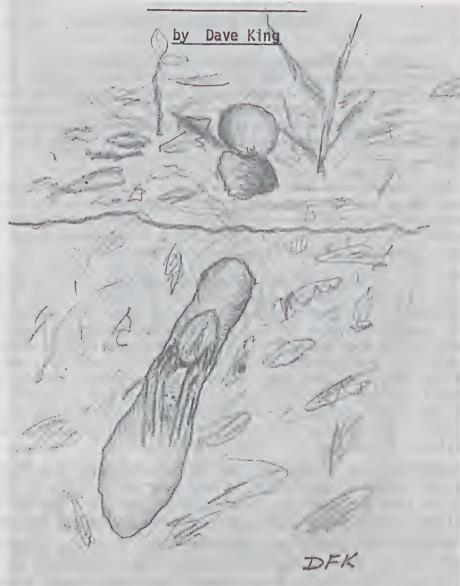
I set about asking everybody for their notes of birds they had seen there and this way added about forty more to the list; some being quite unexpected - birds such as Regent Honeyeater, Red-capped Robin, Gull-billed Tern, Little Wattlebird, Brush Cuckoo, Brown Tree-creeper and Black-chinned Honeyeater.

One lady who has lived near the Lake most of her life gave me many interesting notes, especially of the 'bush' birds she had recorded in her garden. Her father was also interested in birds, and together we went through his bird book seekin g notes he had made. (The book was a first edition Australian Bird Book by J.A. Leach.) I was able to add 24 more birds to the list, and learnt at the same time that many birds which were then residents or regular visitors at the Lake are now very rare and could almost be labelled "Extinct at Lake Wendouree". These birds include Redbrowed Finch, Mountain Thrush, Scarlet Robin, Blue Wren and Restless Flycatcher.

Another mine of information was Mr. Jack Wheeler who lived for several years in Ballarat. He had made many counts of the birds on the Lake and gave very interesting water-bird numbers and without his help the list would have been thirteen species less.

I intended to compile a small list giving only the names of birds occurring at the Lake and the status of each species, but because of the people whom I had contacted had given me such a wealth of information I decided to make a booklet giving brief notes on each species. It is available from me at 23 Gillies Street South, Alfredton, 3350, for 50 cents posted.

SCHOOL BADGE SPIDER



O. diana in the burrow

## SCHOOL BADGE SPIDER (Continued)

During a recent visit to the Flinders Ranges, South Australia, and whilst fossicking around for anything of interest, I came across a female specimen of the School Badge Spider, or to be more specific, Olios diana. This was not particularly unusual as it is not a rare species of spider, but I have never before found one in an earth burrow. This was approximately 100 mm, in depth, almost vertical and about 10 mm, in diameter, increasing slightly at the lower end.

What was of great interest was an almost perfect disc of stone standing vertically on the edge of the burrow entrance to which it was attached by a number of silk threads and was obviously used as a trapdoor with silk acting as the hinge.

So far I have found no reference to Olios diana using an earth burrow for a retreat although some other members of the genus Olios are known to have this habit. It is, therefore, not certain in my mind that this specimen constructed the burrow itself or was merely utilising one constructed by another species.

The location of the burrow was in lightly timbered country with the ground consisting of sand and gravel, some 10 miles south of Wilpena.

These spiders belong to the family <u>Sparassidae</u>, commonly known as huntsman spiders. They do not snare their prey by spinning a web but ambush and pounce upon their prey. There are about twenty three species of <u>Olios</u> in Australia, the <u>O. diana</u> being distinguished by the markings on the underside of the abdomen of similar appearance to a school badge. The upper section is a velvety black with two distinctive white dots decorating it and the lower part of the 'badge' is an orange colour. The rest of the spider is generally of a yellow-brown colour.

## WHAT'S IN A NAME?

## by Bill Fitzpatrick

Birds, like Shakespeare's rose, would be as charming whatever the name. But communication is impossible unless there is an agreed name. Recently I began to look at names used for scientific communication, and decided to try to learn them as I met the birds themselves. At first I was surprised by the wild mixture of myth and legend, external characteristics, personal and place names, and so on. But soon I was beguiled by the overtones, indicative of the manner in which the attractive and mysterious ways of birds, or their striking beauty, have always fired the imagination.

I had experienced scientif nomenculture to indicate structural content, as in a science such as chemistry. But what chemist would name a new compound Mottled Nymph (Poecilodryas: a Robin) or Tasselated Pavement (Emblema: Painted Finch) or Dawn Harpist (Eopsaltria: Yellow Robin)? There are many names of this kind; a few are Plunderer (Sula: Gannet, Booby); Pebble-marked (Psephotus: some small parrots); Goatsucker (Caprimulgas: a Nightjar).

Many names are descriptive, indicative of a distinctive feature of the bird, and evocative at the same time. No one would quarrel with Mighty Tail (Menura: the Lyre-bird), Dawn Crest for the Galah (Eolophus), Tongue-parrot for some nectar-eating Lorikeets (Glossopsitta), or the reference to a staircase for the Treecreeper (Climacteris). Of course, I give approximate meanings.

A quotation from Gilbert White's "Natural History of Selbourne" highlights the antiquity and also the difficulty of translation of some names. Himantopus himantopus is the White-headed or Black-winged Stilt. White in 1780 says "The old name Himantopus is taken from Pliny; and by an awkward metaphor, implies that the legs are as slender and pliant as if cut from a thong of leather".

Often Traditional names seem strange to us, for example Rock-house for some of our Robins such as the Scarlet and Flame;

## WHAT'S IN A NAME? (Continued)

Lid-mouth for Babblers; Voice-marriage for the Manucode, Warming for the King Quail - the list is long. Because the first naming of a new species takes precedence over others, some completely wrong names remain. An instance of the latter is "Flat-tail of New Caledonia" for the Green Rosella, which does not occur in New Caledonia, but is a Tasmanian species.

I mentioned "agreed name", but complete agreement has not yet abeen reached, so that different publications may give different names for the same bird; but the number of these variations is comparatively small.

Within a family of birds, the binomial naming system is generally used, the first the genus, the second, the species. The scientific names used above are all generic. Each of the two names may be enriched by combining several elements from Greek or Latin; for example Hirundo (swallow) - a (not) - pus (foot) becomes Hirundapus, Swallow-without-feet; cauda (tail) - acutus (sharp) becomes caudacutus, and Hirundapus caudacutus is thus a delightful name for the Spinetailed Swift.

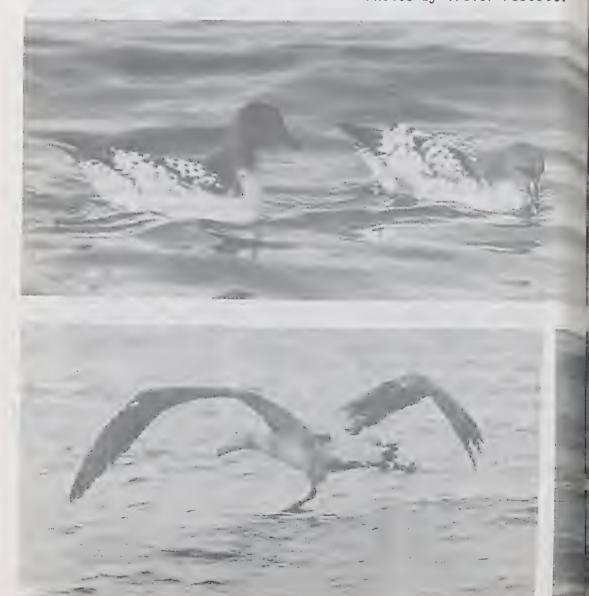
Very many birds are named in a more direct manner. Knowing that Stem-tail, Soft tail (Stipiturus malachurus) is the Emu-wren, the meaning of Stipiturus mallee is plain; the Black Falcon is Falco subniger; the Spotted Pardalote is Pardalotus punctatus, both names meaning Spotted. Barnardius barnardi is a direct reference to E. Barnard, and so on.

But I am especially attracted to such names as Song-parrot, marked-with-little-waves (Melopsitticus undulatus: the Budgerigar), or Rejoicing-in-flowers; with-small-pieces-of-flesh (Anthochaera carunculata: Red Wattle-bird). And I sympathize with him who named the Wampoo Pigeon Megaloprepia magnifica: Magnificent, magnificent!

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The photographs show four species of seabirds found locally.
They are: Top left - Cape (Spotted Petrel) Top Right - White phase of Giant Petrel
Lower left - Wandering Albatross Lower Right - Black-browed Albatross.

Photos by Trevor Pescott.







#### SOME MERIT IN AN OVERFLOW

## Reprint from "The West Australian", April 12, 1972

Thomas I. Fletcher (member of the Royal Australasian Ornithologists Union), Port Hedland: There is concern over the smell and mosquito breeding resulting from the sewerage overflow at Cooke Point, Port Hedland.

I do not advocate that these conditions are good for the community, but it is apparent that this small patch of water does have some merit.

I recorded the following birds feeding at the overflow on March 31 after only 30 minutes of observing:

Australian Coot (4), White-winged Black-tern (1), Gull-billed Tern (1), Caspian Tern (2), Silver Gull (70), Turnstone (11), Red-kneed Dotterel (2), Eastern Golden Plover (1), White-headed Stilt (30), Common Sandpiper (3), Curlew Sandpiper (10), Little Stint (12), Sharp-tailed Sandpiper (36), Great Knot (5), Snipe species (2), White Ibis (1), White-faced Heron (3), Mountain Duck (4), Grey Teal (25), Pink-eared Duck (8), Pipit (3). Total: 21 species.

No other locality near Port Hedland holds such a diverse collection of water birds and with further effort the list could be increased.

Positive identification of the snipe was not possible, but all of these species are rare to Western Australia.

It should also be noted that 43 per cent of the birds listed came from Siberia and other parts of Asia to winter at the Hedland sewerage outlet.

(Is there a parallel with Werribee here?

Mr. Fletcher is a foundation member of the G.F.N.C. 
Hon. Editor.)

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#### THE BLACK-TAILED NATIVE HEN RECENT INVASION

## by Roy Wheeler

Alfred J. North in his "Nests and Eggs of Birds Found Breeding in Australia and Tasmania" says "The Black-tailed Native Hen (Tribonyx ventralis) is widely distributed over the greater portion of the Australian continent. While, however, in some districts it may be regarded almost as a resident, the greater number of these birds are nomadic in habits. Ever since Australia was first settled accounts have from time to time appeared of the visitation of countless numbers, sometimes in places where they were never observed before, nor seen again since. Large flocks appear suddenly in a district and cause much destruction, eating all kinds of grain and vegetable foods, and quite denuding it of every vestige of anything green."

One such invasion occurred in western and northern Victoria and in parts of South Australia in 1972. In Western Australia Serventy and Whittell in "Birds of Western Australia" record invasions in May 1833 and the winter of 1853 in the Perth district, Geraldton and Perth in 1886, Geraldton again in 1897 and Perth in 1919. In Adelaide in 1846 the hens invaded the streets of the city. In Northern Victoria a large invasion occurred in 1909 whilst minor invasions were reported at Melton west of Melbourne in 1889 and 1892. The Riverina in New South Wales had big invasions in 1939 and 1969 both occurring after heavy autumn rains.

The Black-tailed Native Hen is a species not represented in other countries of the world, it is purely Australian. It walks and runs very much like a bantam hen with the erect blackish-brown tail. It varies from 12 to 15 inches in length and has a wing span of 25 inches. The upper parts are dark bronze-brown, breast bluish-grey, abdomen black and spotted white on the flanks. The iris is golden, beak, upper mandible and forehead shield pea-green and lower mandible orange-red and legs brick red. It prefers to walk and run rather than fly but it has a fast strong flight almost duck-like in appearance. In correspondence with Police-Sergeant John Hobbs of New South Wales he says that its main food seems to be sprouting vegetation such as crops and he has known

birds to walk from one waterhole to another at night sometimes covering up to ten miles.

In Victoria the species has been reported over most of western, northern and central parts of the State; to mention a few Hattah Lakes, Colac, Nelson, Jeparit, Mystic Park, Altona, Nagambie, Lake Albacutya, Lara, Laverton, Portland, Gheringhap, Horsham, Beeac, Wyperfeld National Park, Emu Creek, Mildura, Barmah Forest, Boort, Lake Mokoan, Little Desert, Inglewood, Bendigo, Ballarat, Hamilton, Port Fairy, Maryborough, etc. The only record I have south of the Divide and east of Melbourne is at Somers, one bird on December 12, 1971. It has not been recorded in Gippsland to my knowledge.

Sir Charles Belcher in "The Birds of the District of Geelong, Australia" says "In Western New South Wales in areas subject to drought which correspondingly blossom as the rose directly good rain falls, the Native-hen comes in thousands from no one knows where as soon as creeks begin to run, to breed and then disappear magically when dry days return. I do not think we have had them on the Barwon, certainly not in numbers, since 1892, nor do they breed south of the Dividing Range. Specimens in the Geelong Museum were shot about Connewarre in the early nineties".

Breeding records in Victoria are not plentiful and possibly many have not been recorded. Keartland says in North's "Nest and Eggs of Birds, etc." ... "The only parts of Victoria in which they appear regularly are near the Murray River, and about Kerang and Swan Hill. On two occasions they came as far south as Melton. I think it was in 1889; heavy rain fell in October, and formed a number of small pools in the crops on Mr. C. Raleigh's farm. Within a week hundreds of these birds arrived and soon started laying. The nests were scattered round every waterhole, and in one afternoon two boys gathered a bucketful of eggs. This species seems to follow heavy rain, and when the water dries up in one district they move to another." At Mystic Park, Vic. Mr. Vic Lowe wrote me to say they bred there after the floods of 1956. They nested in the blue-bush and saltbush in the flooded Mystic Park State Forest and other shallow flood areas in the



Above: Black-tailed Native-hens.

Below: Close up.

Photo by L. Millar

Photo by Trevor Pescott



district and hatched their young. In 1964 they nested at Inglewood in October, were reported building at Spring Gully in November, 1967 and with young at Langkoop near Edenhope in November, 1970. The nest is saucer-shaped and made of grasses and rushes and well hidden in bushes, grasses, etc. usually over or near water. They lay from five to eight green coloured eggs.

In other States it occurs in western and southern parts of New South Wales and is moderately common, in Queensland occuring over most of the State with the exception of Cape York, in South Australia it is regarded as common, occurs over a large section of both Western Australia and the Northern Territory and is a vagrant to Tasmania and New Zealand.

The 1972 invasion began in May and the figures gradually built up to reach the peak in October and November and finally disappeared from most areas by early February, 1973. The first State report came from Henry Hobson of Rosebery in the Mallee region near Beulah. On May 15 three birds appeared on the farm dam, on August 25 they were joined by a fourth bird which left on September 9, whilst the original three stayed until October 5. Mr. Hobson saw twelve birds near Beulah in mid-June and David Noonan saw a single bird at Last Hope Tank west of Ouyen about the same time. On June 23rd the first birds were reported in Western Victoria by Mr. Kevin McQuinn when some birds were sighted at Tandarook east of Cobden and they remained in the district for a month. In July Mr. Claude Austin of Coleraine reported a major invasion in Western Victoria and adjoining parts of South Australia. Most dams and swamps in the area embracing Horsham, Natimuk, Hamilton, Balmoral, Casterton, Coleraine, Hamilton and Edenhope districts had varying numbers of Native Hens from two to 100 plus. These numbers gradually built up to over 1000 birds in some areas including the Kaladbro Swamp in November. From August birds were reported at Charlton, Mystic Park, Bendigo, Inglewood, Raywood, Hattah Lakes, Connewarre, Willenabrina, Sheep Hills, Anakie, Altona, Lake Purrumbete, Darlington, Jancourt East, Peterborough, Wool Wool, Bambra, Mildura, Boort, etc. Mr. Jack Wheeler's count of 35 birds at

Reedy Lake and reported in the Geelong Advertiser in late December was the first report on the Barwon since 1892 - a period of 80 years. A pair according to Roger Thomas's booklet "Birds of Lake Wendouree, Ballarat. Victoria" arrived at the lake on September 12, 1972 and stayed until mid-January 1973. Whilst I was in Mildura in early January, 1973 there were many hundreds of birds on all the large and smaller swamps such at Ryans, Wrens, Lake Cardross, Kings Billabong, Hollands Lake near Dareton N.S.W. etc.

Mr. Claude Austin states in the news letter of the South Australian Ornithologists Association No 65 of March, 1973 after referring to the invasion says "that on February 4th, 1973 he realised that the two birds on one of his dams were not present and he started ringing people he knew had been hosting them for some time. From what he could gather the Native Hen invasion finished in the district on February 2, 1973. He says that this date corresponds with the big rains in Central Australia and much of the north of the continent."

I have no records of the birds in western Victoria after that date but Mr. Vic Lowe writes that a flock of 150 birds were on Kangaroo Lake and in small numbers in the Kerang District on March 31, 1973.

I received no reports of the birds breeding during this invasion. Most other invasions were triggered off by heavy rains or floods just prior to their arrival, but on this occasion it was a winter movement and in to many areas effected by drought conditions.

In South Australia the pattern was much the same as that in Victoria. According to reports in the S.A.O.A. newsletters 63, 64 and 65 of September, December 1972 and March 1973 the first birds were seen in early June and reached Kangaroo Island in July, the second record for this species. Numbers built up in the Spring to 1000 plus along the Murray at Mannum, Lake Alexandrina and Berri. The Berri total finally reached 5000 birds prior to January 20, 1973 when the total had declined to 1000 birds. They did considerable damage to lucerne crops. They reached the Gawler Ranges, Yorke Peninsula and the Coorong. They were seen in suburban Adelaide and the Adelaide Hills.

Altogether a most interesting invasion by Black-tailed Native Hens. In Victoria they lived in dense reed beds, dense growth of Club Rush, in lignum, in box thorn hedges and in thick undergrowth. They feed around open dams, in open pastures green or dry, they appeared in mallee scrub, in sand hills, on lakes, rivers, swamps and creeks. Near Geelong their appearance on Reedy Lake was the first for 80 years. Will we have to wait a similar period for the next invasion?

#### GREBES CAUGHT IN OIL

## by Trevor Pescott

The oil slick which on July 17th swept across Corio Bay from a ship moored at the Shell wharf caught up a flock of Hoary-headed Grebes, causing the death of many.

Workmen claimed to have buried "dozens" although the actual number is not known.

The oil spill was not the fault of the Refinery, but one wonders if it is not possible to prevent oil pollution of this type by enclosing the mooring area in a floating boom enclosure similar to that used to hold spilled oil on open waters.

The idea is not new of course, but in Corio Bay, and indeed in many enclosed waters where oil spills so quickly hit shore, it has great merit.

The cost would not be small, but the benefits would be immense.

The loss this time, apart from the clearing up cost, was a few grebes; would the authorities have been more stirred if the slick had come into Western Beach where valuable craft are anchored?

#### AN HOUR COUNT - No.6

## Mystic Park, Vic.

#### by Roy Wheeler

Mystic Park about 200 miles north-west of Melbourne, has over the past twenty years become a mecca for bird watchers and all because of the hospitality and guidance of Mrs. & Mrs. Vic Lowe, their son Tom and his wife Margaret.

A bird list of over 100 species is always a possibility at Mystic Park with its variety of habitants, the citrus orchards, the lakes, the marshes, the river with its box and lignum flats and the open mallee-type plains. Mystic Park is on the far side of Kangaroo Lake from the Murray Valley highway about 20 miles from Kerang. A few years back, Mr. John Gorton lived on a citrus orchard at Mystic Park and he later became Prime Minister of Australia and the lake road is now named Gorton Drive. Along this drive in summer it is most picturesque with the Jacarandas in bloom. In the spring the air is full of orange blossom and in the winter the climate is dry and warm.

Over the years the Lowe family has amassed a total of 264 species for the district, easily an inland record for southern Australia. As Mystic Park is just north of the Loddon River which is the eastern boundary of the Mallee District of Victoria many species listed at Mystic Park are the only ones listed for the Mallee. It is the northern extrmity for such birds as the Rufous Fantail and the Rose Robin and a whole group of honeyeaters the Whitenaped, Fuscous, Yellow-faced, Yellow-tufted, Crescent and Yellowwinged. It is undoubtedly the inland wader area within Victoria and some of the highlights include such birds as Turnstone, Eastern Curlew, Little Whimbrel, Black-tailed and Bar-tailed Godwit, Long-toed Stint, Buff-breasted Sandpiper, Great Knot, Pectoral Sandpiper and the Ruff. The full list with notes of the Birds of Mystic Park is published in "The Mid-Murray Field Naturalist" Fifth Report - 1972 and available for 60 cents from the Secretary Miss G. Willoughby of Nyah West, Vic. 3595.

Mrs. Wheeler and I have been visiting Mystic Park for just on

## AN HOUR COUNT (Continued)

twenty years and I have always topped the 100 species on each visit. The last one was in March 1972 when we spent a very pleasant three days with Mr. and Mrs. Vic Lowe. We made a couple of one hour counts during our stay from a point overlooking Lake Kangaroo opposite the Lowe residence. The best of two was as follows:

Mystic Park, Vic. March 10, 1972. From point overlooking Lake Kangaroo Fine and mild no wind about 60°F. (15° C.). 6.56a.m. to 7.56. Birds in order of sighting. Dusky Moorhen, 12; Musk Duck, 8; Coot, 54; Crested Grebe, 4; Little Grassbird, 4; Black Cormorant, 120; Superb Blue Wren, 25; Starling, 21; Black Swan, 10; Raven, 10; Blackbird, 22; Reed Warbler, 4; Welcome Swallow, 70; Willie Wagtail, 25; Magpie Lark, 4; Spiny-cheeked Honeyeater, 2; House Sparrow, 12; Caspian Tern, 1; Little Black Cormorant, 230; Singing Honeyeater, 23; White Egret, 5; Little Pied Cormorant, 74; Tree Martin, 3; Black-backed Magpie, 4; Pelican, 1; White-faced Heron, 4; Whistling Eagle, 2; Black-faced Cuckoo-shrike, 1; Eastern Swamphen, 2; White-plumed Honeyeater, 2; Little Raven, 14; Scissors Grinder, 1; Red-backed Parrot, 2; White Ibis, 20 and Little Egret, 1.

Total 35 species and 807 individuals.

During this count Vic and Tom Lowe were with us and they listed four species not seen by me Striped Honeyeater, 1; Silver Gull, 4; Black Duck, 5 and Yellow-tailed Thornbill, 2. Making 39 species and 819 individuals for the group.

The rules are simple record all birds heard and seen within binocular range without moving from one seat within the hour. Tried it yet?

\* \* \* \* \*

## OCEAN GROVE NATURE RESERVE APPEAL

by Jack Wheeler, Appeal Chairman

This appeal - authorised by the Committee of Management of the Ocean Grove Nature Reserve - was launched early this year for a sum of \$80,000, in order to purchase 157 acres of adjoining land with frontage on Grubb Road.

The Committee prepared a modern brochure depicting an oiled Silver Gull in hand. Inside, the brochure gave details of the proposed overall plan if this land could be purchased, and included in the final stage a complex to be known as the Geelong and District Natural History and Environment Centre.

The appeal is now in its final stages and has been successful in that this land has now been secured at a cost of approximately \$70650.00.

The submission to the Victorian Treasury, strongly supported by Mr. Aurel Smith, M.L.A. was successful in getting a 4 to 1 grant, and without this excellent grant the appeal would have failed.

Total cash donations to date (July '73) stand at \$19191.

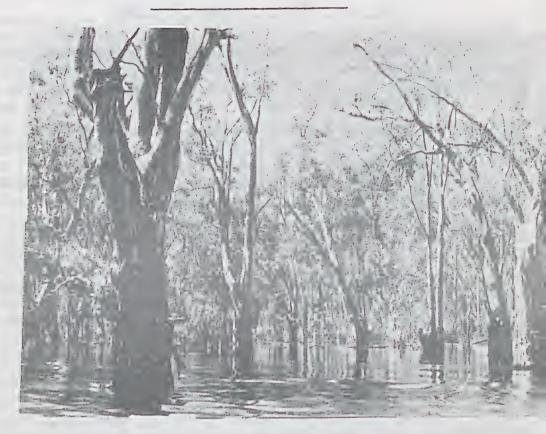
Government Grant (4:1) 57000

Total: \$76191

Niel Douglas, well known Melbourne artist, has donated to the Committee one of his paintings (size 6' x 4') titled "Top of the World" and depicts sunrise in a Red-box forest. It is valued at \$3,000 and is now on view at the Balmoral Galleries, Fyansford, and is for sale.

Outstanding appeal donations are - M.A. Ingram Trust Bellarine Shire Council Alcoa of Australia Ltd. Shell Co. of Aust. (Refinery) Mr. & Mrs. H. Moller The Rotary Club of Belmont Birdsey, Dedman & Bartlett Bird Observers Club Apex Ocean Grove	1.500	(over	4 years)
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## JUNIOR PAGES



What could be more typically-Australian than our gum trees?

There are about 600 different species of gum trees in Australia, and they vary from the giant Mountain Ash which may grow to over 300 feet tall, to the dwarf mallees of the dry inland areas.

The name "gum tree" originated as far back in history as 1642 when the explorer Abel Tasman wrote of "gum-lac" in some tall trees during the voyage which took him to Tasmania.

Other explorers also noted the resin in the trees of Australia, and so the name has become generally accepted to mean all eucalyptus trees.

## JUNIOR PAGES (continued)

Naturalists usually call only the smooth-barked eucalyptus "gums" - we have red gums, manna and swamp gums and so on - but call other groups which have rough bark "peppermints", or "stringybarks", or "ironbarks", depending on the nature of the bark.

All are eucalypts - a word meaning "well covered" and which refers to the firm covering over the bud and which is shed when the flower opens into blossom.

Some of these bud covers are quite large, and one tree is even called in some areas the Finger-stall Gum because the bud covers would fit over your fingers.

Eucalyptus trees are used for many purposes, and it is from the large forest trees that we get most of the timber used to build our houses.

Gum trees have what is called "hardwood" timber, and this is quite distinct from the "softwood" timber of pine trees.

There are few native softwood trees in Australia compared with hardwoods, and so we grow in huge pine plantations much of the softwood we need.

Gum trees are also used to give us eucalyptus oil which is used amongst other things for relief from colds; leaves from certain types of gums contain the oil which is removed by heating the leaves to evaporate the oil.

Around Geelong, the early settlers found very little timber and it was not long before most of the trees were cut down to make houses and to provide fuel for the settlers fires.

The Geelong district, before white men came, was a "woodland" where scattered gums, wattles and sheoaks grew; there was dense tussocks of grass, and small native plants flourished beneath the trees.

\* \* \* \* \*

#### THE LAST WORD

A proposal to develop a marina at the south end of Swan Bay has been discussed recently and many conservationists are concerned that the scheme could adversely - and inevitably - alter the entire ecology of the Bay.

The area under consideration is mainly the land excavated by Mr. Laker when he removed shell grit, and it involves some 700 acres on both sides of the Queenscliff Road near the St. Leonards turnoff.

The scheme shows a 2000 metre rowing course from near the existing Queenscliff tip south-westerly into the old shell grit quarry, whilst on the south-west side of the Queenscliff Road, a multilegged small yacht sailing course is planned.

On surrounding "dry" land, a large number of home sites are planned.

Even at this early stage, when the feasibility of the project is being considered, assurances have been given that there will be no environmental problems created; the developers have engaged a firm of conservation consultants to investigate this aspect of the plan and to confer with local conservationists.

One very "touchy" area lies where the rowing course reaches Swan Bay; it is planned to slightly alter the shore line around Burnt Pt. and Tip Island, and the rowing course would receive its water supply at least in part through a tide gate onto Swan Bay.

A question which to me is the most vital of all is this - will there ever be a channel dredged from the existing one at the Fishermen's Co-op. wharf to the proposed development?

If the proposal goes ahead, I am sure that eventually this would be done, regardless of assurances given now that it will not. And if the channel is dredged, will it affect Swan Bay's tidal flow?

Again, no satisfactory assurances are available.

I believe the Swan Bay ecology is too valuable, and too fragile, to allow the gamble.

TREVOR PESCOTT, Hon. Editor.



## TELON TRALL

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#### PUFF BALLS & THEIR KIN

#### by George Crighton, Croydon

This interesting group of fungi was given the name Gasteromycetes because its members retain their spore-producing tissues within a memberane while the spores are maturing.

The common Puffballs of our roads and pastures are classical examples of the group but it also includes the striking Earth-stars and the sometimes gaudily coloured Stinkhorns with their putrid odours.

But most species are small and inconspicuous and are seldom seen, unless scratched from the soil or leaf mould by birds or animals, accidentally or in search of them as food. It is even possible that most of these depend upon their being eaten by birds or animals and voided in their dung for their continuance and distribution.

Some species have quite distinctive odours which no doubt attract animals to their whereabouts. One rather rough shelled genus, Mesophellia, is much sought after by feral pigs as well as wombats in the Strathbogie Ranges where they both occur.

Australia has its share of members of the group, many of world wide occurance but some, so far, appear to be exclusive to this region. It is possible some of these endemic species live closely linked with certain of our native plants and trees. There may even be a delicate balance of spores, animal and plant for their continuance. The disappearance of one of these links could possibly consign another species to that limbo of lost species we have to our national discredit.

But nothing is really known of their life histories, for they are of no known economic value or nuisance.

The wide distribution of fungi which eject their spores into the atmosphere or expose them to be blown about in the wind, is to be expected, but subteranian ones, depending upon an intermediate host, would appear to face insuperable difficulties. Nevertheless many of them are widespread and although modern man with his

## PUFF BALLS & THEIR KIN (Continued)

penchant for carting his plants, useful or otherwise, about with him has contributed much to the spread of fungi, this cannot be the whole explanation:

The last comprehensive work on the Gasteromycetes of Australia and New Zealand was carried out by the Late Dr. G.H. Cunningham and published in 1944. In this work he describes over 100 species and 3 genera endemic to this region; but it is evident from collections since made that many more species and even genera are present in Australia and that many are widespread.

Collections from as many areas as possible are important if a picture of their distribution is to be obtained. This is particularly urgent in view of the rapid destruction of so much of the habitat of our native flora and fauna before the all-destroying bulldozer and defoliant sprays.

The collection of fungi fruiting bodies in no way harms the plant itself for this consists of the finest of threads or bundles of threads throughout the soil particles, fallen leaves or wood tissue. In any case even one single mushroom or puffball may produce many millions of spores and of these countless millions it is unlikely that even one or two will fall upon a substrate suitable for its germination, growth and production of its appropriate fruiting body. Not much of the fungal world is vacant.

Scratching over leaves or soil appears to have no ill effects upon fungi. Lyrebirds, scrub fowls and other birds of ancient lineage have been doing this for countless ages but each suitable season never fails to produce its crop of spore producing bodies.

Unlike mushrooms or "toadstools", the puffball family of fungi are relatively easy to preserve by drying. Placed upon a piece of paper in front of a sunny window they dry out in a matter of days and although many of them shrivel unmercifully this detracts little from their value for identification or description, if of a new species. Then placed in an envelope with a piece of napthalene (moth ball) they will keep indefinitially. As with all specimens of natural history, write on the market the date and place of collection.

November 1973

## THE STORY OF CELANEA

#### by Valda Dedman



Celanea and five of her egg sacs. She is clinging to the newest sac in the bundle. The first sac (on the left) is hatching - note the small round hole. The 'blob' below the second sac is a newly emerged baby spider. (About twice life size.)

In some respects she was like a family pet. Often of a morning the children would say, "I wonder what Celanea was up to last night", and run out to the garden to investigate, she lived among the smooth green leaves of the grapefruit tree, seemingly

secure and sheltered, and she would stay perfectly immobile by day and often for large stretches of the night.

What was Celanea? How could she intrigue us so?

Celanea was a spider - Celanea excavata to give her her full title - and called by some "death's head spider", "orchard spider" or even "bird dropping spider". We did not think she deserved such names with their suggestion of unpleasantness, so we stuck to the musical "Celanea". It was her appearance which gave rise to Celanea's common names, for she was splotchy brown and white for camouflage, and her normal hunched position with her legs folded up tight against her humped and hollowed body suggested a skull shape. She was, I suppose, interesting to look at, rather than beautiful. Her body was wider than it was long, with dark humps on the back resembling protruding eyes; her legs were rather thick and banded in brown and white, and she had a slightly moist look, like a frog.

I first noticed her when she was nearly mature, and her abdomen was about 8mm across. She was sitting absciutely still, all folded up so that her general shape was squarish, on top of a bright green shiny leaf, and until she produced her first egg sac, by day she was always to be found in the middle of the same leaf. Her first two pairs of legs were folded vertically, and the back two hidden away, folded underneath across her abdomen.

She was a creature of the night. During the day she seldem moved. It was only after dark that Celanea came to life. She reached the peak of her activity late; around midnight was her hunting time. And how did she capture her prey? She had no web worth speaking of, just a tangled bit of silk at the end of the leaf, which served as anchor or larder shelves rather than trap.

One of the myths to which we are often exposed as children is that all spiders spin large webs where they sit waiting for their prey to entangle itself in the sticky threads. Some do, of course, and most spectacularly. The garden (Araneus sp.) spins a traditional symmetrical wheel-

beautiful vertical fan-shaped web, at the top of which she hides in her leaf shelter, with one leg holding a silken thread, feeling for vibrations; the lovely Mephila spider spins an immensely strong golden orb, often yards across. Other spiders make a specialised web: Dinopsis weaves a net which she holds between her front legs till a hapless insect passes, then she tosses it over him; the hairy imperial spider (Dichrostichus forcatus) holds a fishing line with a sticky globule as bait at the end and when an insect approaches, she whirls it round at great speed till a "catch" is made.

And what of Celanea? She used neither web, net nor line - merely her outstretched legs. At night we would see her patiently waiting, one leg anchoring her to a strand of silk at the end of the leaf, all legs now outstretched so we could see their long tapering ends. Indeed she performed an amazing balancing act. Her whole body was taut in the air, and her anterior legs were curved forward ready to pounce, mantis-like, around some unfortunate night-flying moth.

We do not know how Celanea attracts her prey, but she is eminently successful, judging by the numbers of moths that found their way into her larder. It has been suggested that she attracts moths to her by some special odour, simulating the scent of a female moth to lure the male.

She caught only moths and these were nearly always of the same species, a light brown noctuid moth about two centimetres long. A couple of times she captured a slightly larger dark brown species. Time and again we found the shell of a discarded moth on the grass beneath her hideout, and sometimes there were one, two or even three others suspended ready for the next meal. It took her up to two hours to suck a moth dry, sucking through the head end. She always finished off a night's catch within twenty four hours. There were many nights, though, when she caught nothing. Late summer and early autumn (when moths are most numerous) was her most successful hunting period.

I was never lucky enough to see her actually catch a moth. The nearest I got was to see her binding one up. After a wet thundery night I came out about 9 a.m. on 2 March, 1972, to

find that Celanea had been extremely active. Not only had she made a new egg sac, but she had sucked one moth dry, had one hanging ready for later, and had just caught a third, which she was in the process of killing and wrapping up. To bind it, she turned the moth round and round, while she hung by one leg to a strand of silk. At times she spun more silk, drawing it out with her fourth pair of legs. The operation took place on a separate thread about two inches below her leaf, and when she was satisfied that all was secure, she heaved her bundle up and fixed it beside the other. She then proceeded to clean her legs which were covered with moth scales.

Celanea was also remarkable for the egg sacs she made. These were spherical, dark brown and marbled in appearance, quite hard to the touch. They varied in size from eight to thirteen millimetres in diameter. Altogether she made sixteen, over several months, the first on 23rd November, 1971, and the last on 7th June, 1972. She kept them all together with silk mesh. in a kind of "string bag". Actually, by the end there were two groups, of four and twelve. The "bag" had come apart and she never bothered to repair it. After heavy rain in April she protected the sacs with a screen made by drawing a leaf across in front of them and securing it in place with silk. This was done in the daytime, but as she had been busy in the night producing her thirteenth egg sac, under unpleasant wet and windy conditions, perhaps this was the only time left to her. With the making of the sacs she abandoned her leaf and always clung protectively to the newest sac in the bundle.

For the few days preceding each new sac, Celanea's abdomen was enormous. I estimate she reached double her previous width. As her pregnancy advanced, so did her colour change; the white became cream and dirty looking as her abdomen swelled. Afterwards she was shrunken and wrinkled.

I always watched her carefully when she was gravid. Many times a night I would go out, hoping to see her start an egg sac, and always she eluded me. As with moth-catching, I only managed to see the final stages.

At 10.45p.m. on 19th March, 1972, I saw her finishing off her eleventh egg sac. The sac was suspended below the others by a thread to which Celanea clung for support with her right anterior leg. The left anterior leg held on to another thread, attached like the first to a strong "cross-bar" of several thicknesses. She was holding the ball-shaped sac with her third and fourth pairs of legs, and rocking it back and forth against her spinnerets. At the same time her abdomen was moving from side to side in the opposite direction, thus doubling the length of the silken stroke. Thus she built up the surface of the ball. sac, a large one, was almost finished, at this stage much paler brown than the others, with little indication of darker marbling. It had a lovely sheen, but later it too, would become dull and matt. She was rotating the ball, as far as the suspending thread would allow. All available legs, and even her palps were helping to keep it balanced. Celanea worked on regardless of the torch light, sometimes moving almost frenziedly, and stopped only if the tree was bumped. I left her still hard at it at 11.30p m., and next morning the sac was up with the others,

I did see various egg sacs hatch and the spiderlings emerge. The first hatched on 29th January, 1972, just over two months after it was made. I first noticed a round hole. Imm in diameter, just large enough for a spiderling's abdomen. I do not know if Celanea helped to make this, but I doubt it, as she took no other part in the hatching process and even seemed unaware of what was doing on. She just remained hunched, motionless as usual, and did not even stir when her babies climbed over her. I saw the first spiderling, a tiny replica of its mother, about 10.30a, m. The legs of another were wildly waving through the hole, but the baby did not, or could not, emerge just then. Some piderlings were still around at 8.30p.m. and at a guess I would say 120 came out of that egg sac. Some spiderlings would get through the opening without any difficulty and scuttle quickly away. Some had more trouble, and their legs would rotate round the edge till finally out heaved the rest of the body.

Generally the spiders would quickly move a few centimetres away, then rest, hunched, on a strand of silk, or under the egg sac, to regain strength, then one by one they would make off, often

first exploring a thread which anchored the sacs to the leaves. They were such active little creatures, so unlike their passive mother. Usually they went up (never down) a strand very rapidly, sometimes they hung tentatively for a few moments on their own silk. One was deluded and scuttled along a thread leading straight to the hideout of a different species of spider. Quick as a flash the baby was caught and bound.

I expect most of the other spiderlings would not survive, either The high birth rate would presuppose a high mortality rate in the harsh world of nature. I estimate that each sac contained more than one hundred eggs, and none was parasitised. Spiders emerged from all except the last sac, which I still have unblemished, but I have never discovered another Celanea in my garden.

I opened several of the sacs after they had hatched. The case was tough, dry and papery, like a seed pod, and was filled with a tangle of soft but strong white silk. Embedded in this were the empty white egg cases, and pale pink shells from the babies' first moult. One sac also held shells from a further moult, twenty five of them. These had been shed from much larger and more fully developed spiders, and were brown and white in colour. It is usual for young spiders to moult once within the egg sac. It is only after the first moult that they are able to produce silk, and therefore lead an independent life. When first born they have no spinnerets and the mouth parts are incomplete. But why did the twenty five stay so long in the sac? From what source did they obtain their nourishment? Does the number twenty five indicate that they were cannibals? There were many more empty egg cases than this.

It always amazes me that Celanea was able to produce such an anormous family at all. I never once caught a glimpse of her husband. The male is, according to my references, very tiny, only slightly over 2mm long and about the same width as the iscale. I think he must be a very queer looking creature.

morning, Celanea was gone. It was the 17th the other, 1972, and I had been watching her for sixteen months.

For a spider, she had had a long life, and it was time for one of her babies to continue the family line.

I certainly found her life story fascinating. If you would like to read more of the doings of one of these spiders, I can recommend to you "Spiders of Australia", by Keith McKeown. The chapter on Celanea excavata contains some of the best nature writing I have read, the observations of Mrs. W. Rowan Lowry in particular. She is a patient and meticulous observer, as well as gifted and sensitive writer. Let her continue for you the Story of Celanea.

MAGPIE-LARK'S UNUSUAL FEEDING BEHAVIOUR

by Mrs. O. McHaffie, Park Orchards

I was intrigued by an observation made in 1972 of the feeding method of a Magpie-lark.

A party of five or six were on the lawn outside a window which is about three feet from the ground. We noticed one of the birds making several jumps up before managing to capture a fairly large Ghost Moth which was adhering to the fly-wire screen on the lower half of the window. It proceeded to eat it. There is nothing special about that, but what really astonished us was the way it went about it. It ate the moth by placing its foot on it and tearing it with its bill. In a few moments the moth had vanished. It was the first time we had seen a bird, other than a bird of prey, or a parrot, hold its food steady with its foot. (We have often remarked that our pheasants have not enough sense to hold green food or fruit steady so that they can pull pieces off!)



Above: Red-browed Finch Below: Spotted Pardalote

Photos - Trevor Pescott



#### AN HOUR COUNT - No.7

#### Wattle Glen, Vic.

#### by Roy Wheeler

How many people who sixty or more years ago, attended a country school within a little over twenty miles from Melbourne can still find the two miles of bush track along which they romped to school, much the same today as it was then?

Within the close proximity of any great city and Melbourne is no exception, all land within a twenty mile radius comes slowly but surely under development as the years roll by. The natural bushlands are gradually whittled away with only pockets remaining, but unfortunately in many areas not even a pocket of native bushland is retained.

Mrs. Wheeler (then Vera Kendall) went to school at a place called Upper Diamond, between Diamond Creek and Hurstbridge before the railway went through. The one roomed school served the children of Panton Hills, Hurstbridge and Upper Diamond districts about 20 miles north-east of Melbourne. Later after the railway had been built the school was moved to Hurstbridge. The first railway station near the school was called Ballee but later it was changed to Wattle Glen. The district then was mostly orchards growing apples, pears, peaches and cherries and the families which used the bush track were the Eaglands, Larsens, Wadesons, Roberts and the Kendalls. Only a small section of the track has been made and is known as Wadeson Road.

Over the years Mrs. Wheeler and I have often had picnics on the old bush track and it has remained much the same, well wooded, quiet and with plenty of bird life. Mrs. Wheeler's most vivid childhood memories of the old track include that of Jimmie the pig-tailed Chinaman who panned for gold in the Diamond Creek over which they crossed on a log twice a day, and the rabbit trappers camp about half way along the track when the rich aroma of fried sausages and fried bread cooked over an open fire amongst the gum trees filled the afternoon air. This was a time of leisure and contentment, before motor cars and aeroplanes, and radio and

# AN HOUR COUNT No.7 (Continued)

television weren't even dreamed of, when the horse was the main means of transport in the country districts, in short the good old horse and buggy days.

Only recently we visited the old bush track again and there seated on a log overlooking Sheehan's paddock we made an hour count and the details are as follows:

Wattle Glen, Vic. Wadeson Road off Glenhaven Road. April 12, 1973 from 2:10 to 3:10p.m. Weather fine, sunny and warm with a light south breeze.

Birds in order of sighting - Red-browed Finch, 42; Brown Thornbill, 22; Brown-headed Honeyeater, 19; Crimson Rosella, 2; White-backed Magpie, 8; Willie Wagtail, 6; Blue Wren, 16; Magpie-lark, 7; Red Wattlebird, 3; Rufous Whistler, 2; White-naped Honeyeater, 19; Welcome Swallow, 9; Grey Thrush, 3; Spotted Pardalote, 8; Eastern Silvereye, 5; Little Raven, 3; Brown Weebill, 10; White-plumed Honeyeater, 5; Scarlet obin, 2; Grey Fantail, 6; Buff-tailed Thornbill, 2; Yellow-ailed Thornbill, 11; Starling, 15; Jacky Winter, 4; Indian dyna, 2; Eastern Rosella, 2; Golden Whistler, 2. Total 27 species and 244 individuals.

## A REQUEST FOR MATERIAL

As usual we are short of articles and photographs for our Geelong Naturalist' and the Editor again asks for these for Future issues.

noth brief notes and longer articles are needed, and remember that we are not necessarily looking for literary masterpieces; our aim is to record observations and to this end, reports of field sightings are particularly welcome.

#### A VISIT TO THE "WALLS OF CHINA"

#### by Peter Fry, Ballarat

The "Walls of China" are an ancient geological feature on the east side of a dried up lake on Mungo Station, about 75 miles north east of Mildura. After leaving Mildura the road runs through mulga country and salt pans of the ancient drainage system which flowed south west into the Darling River towards Wentworth. In recent geological times when the Pinnaroo fault occurred the drainage changed to flow by the Willandra Creek into the Lachlan River in an easterly direction.

At the Homestead on the west side of the dried up lake is a 100 year old shearing shed built of Murray pine with hand made nails still in a remarkably good condition - a tribute to the value of Murray pine and the builders.

Originally a 30-stand blade shed it is still in use as a 4-stand machine shearing shed.

On the east side of the lake about 4 miles away is the Sand Hills known as the "Walls of China" built by wind action between 40000 and 16000 years ago. The winds are now eroding the sand hills again uncovering traces of the most ancient habitation by a small statured race of aborigines. Numerous artifacts, fish bones and shells and baked earth patches have been exposed as the winds have carved the sand dunes into a lunar landscape. The most interesting find was the skeleton of a young aborigine woman dating back to about 30000 years ago.

The Australian National University, Canberra, has done a lot of research in the area, particularly with reference to evidence of the second most recent known reverse of the earth's magnetic field.

Although the visit was at the end of a recent very dry spell some interesting flora was seen while amongst the birds seen were very vocal Rufous Songlarks, Red-capped Robin, Royal Spoonbill, Mulga Parrots, Chestnut-crowned Babblers, Grey-crowned Babblers and Avocets.

#### SOME OF ANGLESEA'S ORCHIDS

Below are some of the native orchids found in the Anglesea district. Destruction of the bushland here has reduced the available habitat quite dramatically over the last decade, and it seems inevitable that much more will follow. The only real hope is that the L.C.C. will realise the need for the preservation of adequate tracts of bushland to offset the rapid decline of the past.

1. Redbeak

- 2. Bearded Greenhood
- 3. Elbow orchid

- 4. Horned orchid 5. Fleshy-lipped Spider 6. Rabbits ears



#### DESTINATION COOPER'S CREEK

(Part 3)

## by Valda Dedman

The Nappa Merrie Waterhole where we were camped was just upstream from Booloo Booloo Waterhole, site of Depot LXV of the Burke and Wills expedition. Half the party, under Brahe, were left behind at this camp, to wait three months till Burke. Wills, Gray and King returned from their south-north crossing of Australia. They waited four months, then, as supplies were running low and they really presumed the leaders dead, they set off south again, on the morning of the very day Burke. Wills and King (Gray having died and the others having spent a whole day digging a grave for him with their hands) were destined to return. These three were on the point of exhaustion and felt too weak to follow after Brahe, and in their ignorance they decided to follow down the Cooper and Strezlecki Creeks towards Mount Hopeless in South Australia, where there was a police station. They were helped by the aborigines, but only King survived. The ironic part of the story is that Brahe did return to the camp, but failed to notice the others had been there. Before leaving the depot he had left a blaze on a tree with the words "DIG 3ft NW" and had buried provisions, which Burke had found, but he did not check this.

The famous Dig Tree is a very large and spreading coolabah, its hollow trunk shored up with concrete and its blazes coated with fibreglass resin, to protect them, not from the weather, but from souvenir hunters! The "LXV" surmounted by a "B" are clearly visible on the larger blaze, but no letters remain on the smaller "DIG" one. The outer bark has thickened and grown in round the smooth area on which the letters were inscribed.

It was on our way to the Dig Tree that we saw the Brolgas, four of them - tall grey birds feeding in the open grassland in the late afternoon.

Burke, Wills and King survived for quite some time by pounding the spore cases of nardoo and mixing the resultant "flour" with water to make a kind of paste. Nardoo is in fact a very

interesting fern whose leaves superficially resemble a four-leaved clover. Its spores are borne on a separate stalk in a rounded case. Any spore cases we found were very hard and dry, but we did taste them and found them pleasantly nutty. But what a laborious task gathering hundreds of them by hand and then grinding them! I rather think the effort would not have been worth the nourishment gained.

The aborigines of course made use of many plants. They gathered the coolabah seeds, they found the bird flowers tasty, as well as the seeds and leaves of mistletoe, and they used various roots, nuts and fruits.

The aborigines used to dwell along the Cooper in great numbers. At one stage in Sturt's explorations in this region he was greeted by three or four hundred of them, and he wrote that the men of the tribe were the finest he had ever seen; all of them appeared to be over five feet ten inches in height. King owed his life to the kindness and generosity of the aborigines. Today there is still plenty of evidence of aboriginal life in the country around the Cooper. Mrs. Carol Bauer of Nappa Merrie Station showed us her collection of aboriginal artifacts - spearheads, message sticks, grooved sharpening stones, grinding stones worn hollow - all these and more picked up in the last eighteen months on the property.

The tribes chose to camp, or rest, on the sandhills. We easily found our own aboriginal campsite, a sandhill overlooking a dry billabong beside the river. Here the wind had exposed piles of Mussel shells, dozens of stone chippings and hand knives, whose sharp rippied edges had perhaps opened the shellfish. A fist-sized stone, rounded on top, smooth below, had been left not far from its matching large grinding stone where nardoo and grass seeds had probably been pounded. The most intriguing find of all was pieces of bone, parts of human skulls. We pieced together several fragments which left no doubt as to their human origin, but why had they been left there? Had there been a fight and the bodies abandoned and the pieces later scattered by dingoes? Or could the skulls have been used as drinking vessels? Aldo Massola in his book, "The Aborigines of South-East Australia As They Were",

has a photo of a skull so used, but these had a totemic significance also. Bones of relatives were often carried about We wondered, but we do not know the answer to these fascinating questions.

We wanted to go on and camp at Coongie Lake, for we had read about multitudes of waterbirds there, but we had to limit ourselves to a day trip. The road took us through Innamincka, a ghost town no longer. The concrete shell of the A.I.M. bush nursing hospital with its tall chimneys and wide verandahs is still there, and across the road the ruins of the hotel with the stump of a date palm and the famous bottle dump, but a new Innamincka is arising. A petrol station and store is in operation, and a motel is nearly completed, both built to suit the climate, with wide verandahs all around shading long narrow windows. We crossed the Cooper at Innamincka and noted with surprise that the water was clear, and overhung with river red gums.

Coongie Lake is part of the overflow of the Cooper, one of a series of permanent or semi-permanent freshwater lakes. We passed through a desolate landscape for much of the way, but even when seemingly bleakest there was plenty of interest. The black smoke of an oil well (Moomba-Gidgeaipa) on the horizon. The fluffy pale yellow round flower heads and twisted seed pods of the Gidyea wattle (Acacia georginae), a taller gidgee, dangerous to cattle, but fine fencing timber. Hakea bushes with long narrow leaves and winged seed pods split open. Whole fields of nardoo, reminding us that the surface could be marshy and impassable. Hundreds of gidgee bushes hung with processionary caterpillar bags, firmly woven of delicately soft silk of purest white. Moss-like cushions of green carpeted with tiny, tiny white or mauve star-flowers. We crossed numerous low sandhills, creamy in colour, often separated by bare flat claypans.

After fifty miles of corrugated road we came upon the end of a fifteen mile long waterhole which led into (or out of) Coongie to The water here was still clouded, but instead of dark



Above: Coolabah tree, Cooper's Creek Below: Cooper's Creek, Nappa Merri waterhole Photos - Valda Dedman



coolabahs, large red gums lined the banks. Mottled white branches leaned out over milky-green water, twisted roots were exposed. We surprised a flock of pelicans that moved off on great wings round to the next bend; a flock of corellas blossomed along a branch, and a pair of Caspian Terns (Hydroprogne caspia) flew upstream, hunting with dark capped head watching the water, beak pointing straight down. No mistaking this bird, because of its large size and massive red bill. Bronze-wing Pigeons (Phaps chalcopters) sought out seeds in the dry prickly grass.

Eventually, in the late afternoon, after mistaken detours into weird sandhill country, desolate as remote coastal dunes, we reached our goal, the lake itself, ringed with low dunes, except where it meets the waterhole. Waterhens were feeding on the grassy flats and other birds were swimming on the water. The really beautiful part was where the waterhole joins the lake and is split up into several channels separated by tree covered islands.

How frustrating not to be able to stay and explore: We did not even have time to launch the boat, cause of many delays when U-bolt after U-bolt, which held the roof rack to the car, simply sheared off with the shaking. Although we would have liked to, we could not stay, as we had no camping gear or food with us, and the journey in had taken eight hours, so after the briefest inspection we reluctantly headed back, vowing to return some day.

We made good time on the homeward journey, speeding over the top of the corrugations at fifty miles an hour, a much more comfortable ride. As the sun sank lower the sandhills deepened to beige and tawny gold, and the clear sky was suffused with the subtlest mauve.

Next day, sadly, we had to leave the Cooper and retrace our way southward. Although we were following the same route there were still plenty of surprises, such as the Wedge-tailed Eagle (Aguila audax) that rose right in front of the car, struggling to become airborne with its prey in its talons. Then there was the right of the emu drinking, kneeling down at a shallow runteench at a sub-artesian bore, scooping up a mouthful of

water with a splash and tilting back its head to swallow. This was the spot where corellas decorated the tall windmill like white flags.

Best of all was the Bustard! (Ardeotis australis) I spotted him suddenly crouch by a fallen log not far from the car. We stopped, and while the family waited, hardly daring to move or speak, I quietly got out. Then, holding the camera, complete with telephoto lens, to my eye, I advanced cautiously, feet feeling the way through the dry grass and prickles. The bustard watched me carefully over his shoulder and when he thought it time enough, he slowly raised himself, and stretching to his full height, walked slowly and unconcernedly away until he merged with the sand, the dead mulga and the yellowish spinifex bushes. It was a masterpiece of camouflage. He was a handsome bird, three feet tall, with a long white neck and flattened head crowned with black. His back was grey brown and his sides spotted black and white. His legs were strongly built, made for walking.

We rested up for a couple of days at our favourite spot on the Murray and here, too, were unexpected bonuses. We added several new birds to our list for the area, delighting in the brilliant blues of the Rurple-backed Wren (Malurus assimilis) and the song of the Rufous Whistler (Pachycephala rufiventris).

The red-backed parrots were courting; the males wooed their lady loves with much tail wagging and offered them presents of redgum nuts. When on a "bird walk" I encountered a six foot goanna (Varanus varius). On seeing each other we both froze, and after several minutes he was the first to slink off. Quickly I went and collected the camera, determined to have his portrait, and my luck was in for he had climbed a dead tree trunk which gave him no opportunity to escape my lens.

Even at our very last lunch stop, near Ouyen, a Yellow-plumed Honeyeater (Meliphaga ornata) sat in a mallee tree right beside us. This bird is confined to mallee districts around north-west Victoria, and we would not have seen it elsewhere. It was new to us, though - one more discovery - and sighting it made a fitting end to a magnificent holiday.

## A WESTERN AUSTRALIA TRIP

## by Stephen Garnett, Corio

This bird list was compiled on a family trip across the Nullabor, around the south-west corner of West Australia and back, via the Eyre Peninsula, to Adelaide.

Apart from the birds there were three notable mammals seen. On the way over we camped in the middle of the Nullabor with only saltbush covering the ground, not a tree in sight, and a lifeless place if ever I saw one. But as we got out of the car large brown "lumps" started to bounce away from us. and when we looked more closely we discovered we were in the middle of a whole colony of Hairy-nosed Wombats. Almost as far as we could see there were little piles of pale earth which marked their burrows and bulky, snuffling, ginger-brown wombats blinking at us.

The second mammal we saw was the Quokka, a small marsupial about the size of a hare, that is found almost exclusively on Rottnest Island where we saw it. It used to be relatively common throughout the south-west and on the offshore islands, but with the predations of the introduced fox and feral cats and competition from rabbits, it is now very rare anywhere other than Rottnest where none of these evils exist. Another predator on the mainland was probably man, because Quokkas are ridiculously tame, breaking away from beneath ones feet and then hopping but a few yards.

The third notable mammal, there were of course many common ones like grey kangaroos, rabbits, etc., was the Australian Sea Lion which we could see far below us from the cliffs of Pt. Labbat on the Eyre Peninsula. This is, apparently, the only mainland breeding colony of the creatures. They were not particularly spectacular to look at, long grey "sausages" which occasionally lifted a flipper or rolled in the sun.

It was the birds, however, which drew most of our attention.

(Editors Note: the complete list has been divided into two parts; the first covers the non-passerine species and these are listed in the order of families following that adopted by Peter Slater, his book "A Field Guide to Australian Birds - Non-passerines", possished 1970. This part will be continued in Vol. 10 No. 4.)

# A WESTERN AUSTRALIA TRIP (Continued)

6/9/72 5

Expedition	to	Western	Australia	20/8/72	ran'	7/9/72:
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Expedition to	Western	Austr	alia 20/8/72 - 7/9/72 :					
Emu	23/8/72 24/8/72		3 miles west of Esperance on farm land adjacent to coastal scrub of predominantally Banksia sp.					
	26/8/72	1	l mile below Bluff Knoll Car Park, running into burnt scrub.					
Yellow-nosed	Albatross 27/8/72	1	King Georges Sound gliding close to rough water although one gliding high as 200 ft. from sea. Never settling.					
	31/8/72	11	Between Perth and Rottnest Island, Some sitting on water.					
			getting off water and approaching boat, Singly or in pairs.					
Cape Petrel	29/8/72	7	dead beach washed in Bunker Bay, east of Cape Naturaliste.					
Little Grebe	24/8/72 29/8/72	2	Fanny Cove 35 miles west of Esperance, singly on dams west of Pemberton.					
	30/8/72		in lagoon adjacent to coast road north of Bunbury.					
Hoary-headed Grebe	4/9/72		in the sea next to jetty at Fowlers Bay.					
Australian Pelican	24/8/72 30/8/72	9	feeding Fanny Cove, in one flock, feeding in lagoon north of Sunbury.					
	5/9/72 6/9/72	5 7	feeding in bay parallel to Pt. Labbat.					
B	7/9/72	2	flying south close to water at Pt.Lincoln					
Australian Darter	31/8/72		drying wings on Pile at Fremantle with Pied Cormorants.					
Black Cormorant observed in numbers at Albany, Fanny Cove & Fremantle.								
Pied Cormorant observed on most bodies of water particularly "Little Pied Cormorant not as numerous as Pied Cormorant, tending								
Little Fled (	or morant		to dams and small lakes.					
White-faced	23/8/72	2	in swamps at Esperance.					
Heron	24/8/72 30/8/72		along the shore of Fanny Cove. flying across Lake View Caravan Park, 18 miles south of Perth.					
	31/8/72	1	Government Lake, Rottnest Island.					

on shore of Bay parallel to Pt. Labbat.

# A WESTERN AUSTRALIA TRIP (Continued)

feeding in reeds mouth of King River, 27/8/72 White Egret Albany: feeding in river at Denmark. 28/8/72 flying over Lake View Caravan Park. 31/8/72 Straw-necked This Common throughout south west and on lakes in Black Swan Southern Eyre Peninsula. Mountain Duck Common throughout south west, particularly Rottnest. " not observed on Rottnest. Black Duck Seen only between Esperance and Albany. Grey Teal seen next to dam near Ravensthorpe, 25/8/72 Maned Goose 3 near a dam 120 miles south of Perth 30/8/72 on main highway. Fairly common near Esperance and southern Eyre Black-shouldered Peninsula. Kite Port Germein, south of Port Augusta, 20/8/72 Black Kite Port Augusta. 7/9/72 Junction of Bluff Knoll Road, Stirling Square-tailed 27/8/72 Ranges, being mobbed by Aust. Goshawk, Kite Cape Naturaliste flying acorss Bunker 29/8/72 Bav. Fraser Range gliding over road mobbed 2/9/72 by Convids. 30 miles east of Fraser Range, flying up from side of road. Whistling Kite Common everywhere except the Nullabor Plain. flying up from rabbit killed on road 27/8/72 Australian and mobbing Square-tailed Kite at Goshawk Bluff Knoll turnoff. Mundrabilla Motel. 3/9/72 Pallinup River, chasing each other 25/8/72 Little Eagle through Creek Casurinas. Wedge-tailed Eagle Common as far west as Stirling Ranges. 15 dead on a fence of property next to Ranges, Often observed on roadside kangaroos Liste-breasted 6/9/72 flying low over scrub at Pt. Labbat. Sea-eagle 50 miles north of Adelaide over wheat reed Harrier fields. 20/8/72

Crested Tern

# A WESTERN AUSTRALIA TRIP (Continued)

Swamp Harrier Moderately common on Eyre Peninsula, not observed in West. Rottnest Island, 2 pairs nesting on 31/8/72 Osprey rocky outcrops at western end of island, on rugged coastline at Pt. Labbat. One nest on rocky offshore islet. Common everywhere. Nankeen Kestrel Moderately common east of Ceduna, not observed in Brown Hawk West. in open grassland north of Fanny Cove. 24/8/72 Brown Ouail crossing road just west of Pemberton. 28/8/72 in wooded grasslands next Pallinup River. 26/8/72 Painted Ouail running off road 3 miles north of Port Black-tailed 20/8/72 Pyrie. Native Hen Fairly common on swamps and on city lakes. Dusky Moorhen in swamp 2 miles west of Esperance. 23/8/72 Swamphen on a marshy field below Guildford 1/9/72 10 Grammar School. on a village pond near Pemberton. 29/8/72 Coot In small numbers in most coastal places, Pied Oystercatcher 5/9/72 6 on a rocky islet adjacent to Ceduna Sooty Oystercatcher Jetty. Spur-winged Plover Common east of Ceduna. Common west of Cocklebiddy. Banded Ployer on beach 3 miles east of Fowlers Bay. 5/9/72 Hooded Dotterel 5 Seen on Fanny Cove amd Rottnest Island in Red-capped small numbers. Dotterel Feeding on bay adjacent to Pt. Labbat, 6/9/72 Greenshank on a swamp 60 miles N.W. of Port Lincoln. 6/9/72 White-headed Stilt Following ships at King Georges Sound and Fremantle. Southern Skua Moderately common as far west as Albany, Pacific Gull Very common but only near the sea, not seen on inland Silver Gull lakes. at the mouth of Fanny Cove. Caspian Tern 24/8/72 on the coast of Rottnest Island, 31/8/72 12 fishing off Ceduna Jetty. 5/9/72 Fairy Tern Common on all coasts, some juvenile birds (8 weeks)

on Rottnest Island (to be completed)

# JUNIOR PAGES



Above: White-faced Storm-petrel Below: Short-tailed Shearwater



## JUNIOR PAGES (Continued)

Two of the Club's activites held each year are a Mud Island campout, and a visit to Port Fairy; both of these trips are arranged so that we can band birds, and you may wonder why we do this.

Bird banding - or ringing as it is called overseas - has been well organised in Australia for about 18 years; banders are registered with the C.S.I.R.O. who supply all the material, bands, pliers, notebooks and so on, and they store the records.

It is the banders duty to catch the birds, put a metal ring around the bird's leg, record all the information including place, date and band number, and send this to the C.S.I.R.O.; and of course let the bird go immediately after banding.

Each band has an individual number, like the number plate of a motor car, and there are no two the same.

The aims of banding birds are to find out where the birds migrate to, how long they live and other complicated things like plumage changes, how long birds stay as pairs, at what age they breed and so on.

At Mud Islands, we are studying the little seabirds called Stormpetrels; we have banded nearly 10,000, but so far we have not gained a great deal of information about this species.

Muttonbirds (Short-tailed Shearwaters) are the birds we band at Port Fairy, and there have been many hundreds of thousands of these banded; results from the study of these birds have shown us their migratory habits, breeding and other aspects of their life cycle.

At some future time, we will tell you more about the Muttonbird and its life.

#### THE LAST WORD

The recent re-election of State Government and allocation of portfolios has been viewed with interest by conservationists.

The re-appointment of Mr. W Borthwick as Lands and Conservation Minister is applauded, for the many contacts between conservationists and Minister over the last three years have, on the whole, been with satisfactory result.

There seems no reason to suggest that this co-operation will decrease during the ensuing term of office of the Minister, and we have reached a stage where we are confident that any valid appeal to the Minister will be heard and assessed without bias.

The success of the appeal to State Government for a grant towards purchase of land at Ocean Grove was no doubt attributable to many factors - but the outcome (a grant of \$4 to \$1) must be acredited directly to a sympathetic receipt of our submission by the Premier and the Lands Minister.

Our Geelong area contains a large amount of Forest Commission land, so that the appointment of Minister of Forests is of particular concern to us.

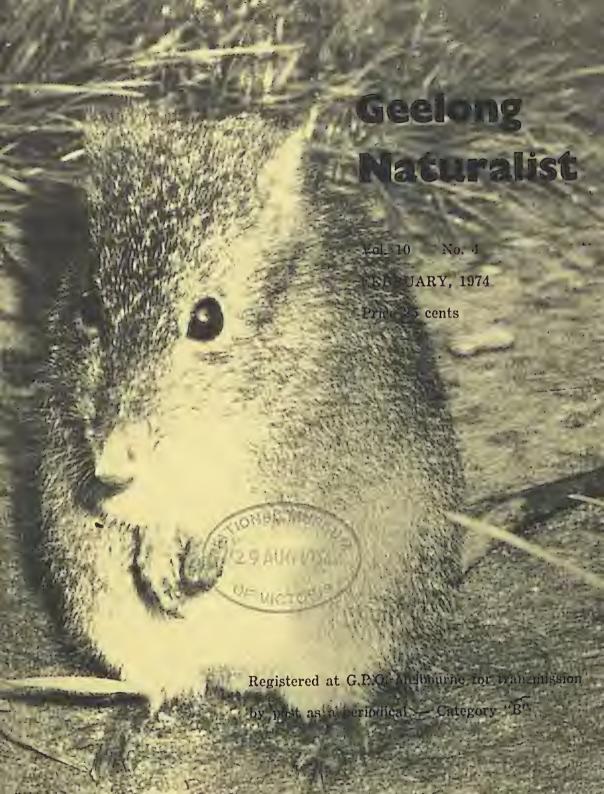
Previously, Mr. Meagher has been the responsible Minister, and conservationists have had a far less receptive ear there than with the Lands Minister; perhaps the alleged conflict of interest between foresters and naturalists has made decision in favour of the latter, sometimes at the expense of visible forest income, more difficult.

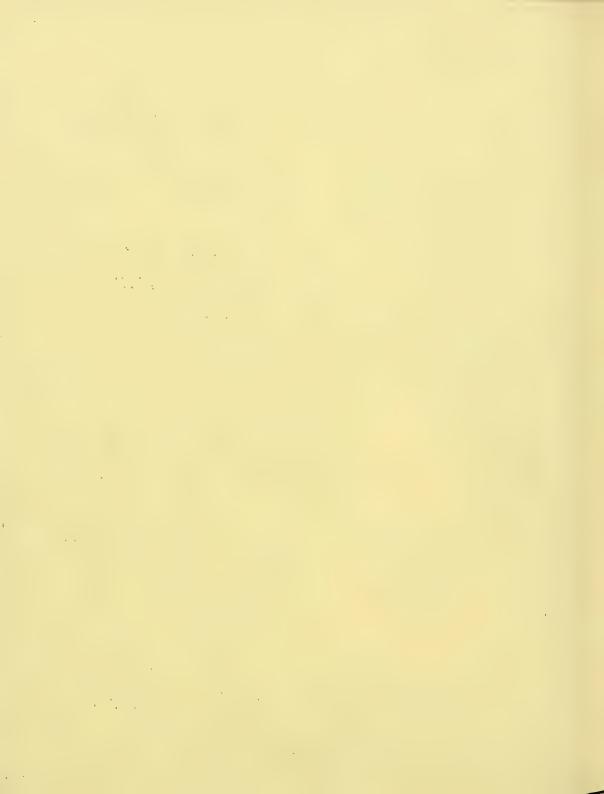
A "new" man, Mr. Granter, has received the Forests portfolio, and we wait with interest the outcome of submissions made to him which may reflect a leaning towards one or other aspect of forest management.

TREVOR PESCOTT, Hon. Editor.



570.5





#### - AN OBSERVATION OF SWIMMING EMUS

## by Stephen Guest, Geelong

About the middle of January, 1973, I camped for one night on the West bank of the Snowy River at its junction with Pinch River, a few miles North of the NSW/VIC border on the Jindabyne-Buchan Road.

I arose early in the morning to a very still and already oppressively hot day and headed for the river for a morning swim. This was about 5 a.m., from memory.

There I was splashing happily about with the whole river to myself, debating whether there was any real argument in favor of returning to "civilization", when I noticed a movement on the opposite bank.

Five adult Emus marched purposefully, but not too quickly, from the dense bush on the opposite side (which was still in shadow, as the sun had not yet risen sufficiently to clear the hills to the East) and headed straight for the river.

The river at this point - and at this time of the year - was about 20 to 30 yards wide. On the West bank is a white, sandy beach about the same width, and above the beach the dry sclerophyll forest stretches away into the high country surrounding the river valley.

I watched with interest as the Emus approached the water, and to my surprise they just kept walking! They waded more than half way across, heading almost directly towards me (I was swimming about 10 to 20 yards out from the bank). By the time they reached the deepest point they were more than half way across and in water up to their flanks.

On reaching the deep channel they began swimming, in single file, with only their necks and heads above water. They swam powerfully, and did not appear to be troubled by the reasonably strong current.

I had hardly moved since I first spotted them, and they did not see me until they were already more than half way across and

## AN OBSERVATION OF SWIMMING EMUS (Continued)

swimming rather than wading. When they saw me they changed direction slightly to avoid coming too close and continued making for the West bank.

They were not swimming rapily and I was able to swim to within 15 or 20 feet of them; what appeared to be the solicary male kept a baleful eye on me and once or twice I heard the familiar grunt or soft booming sound of the Emu (I can's say whether it was the male or the females or both making the sound)

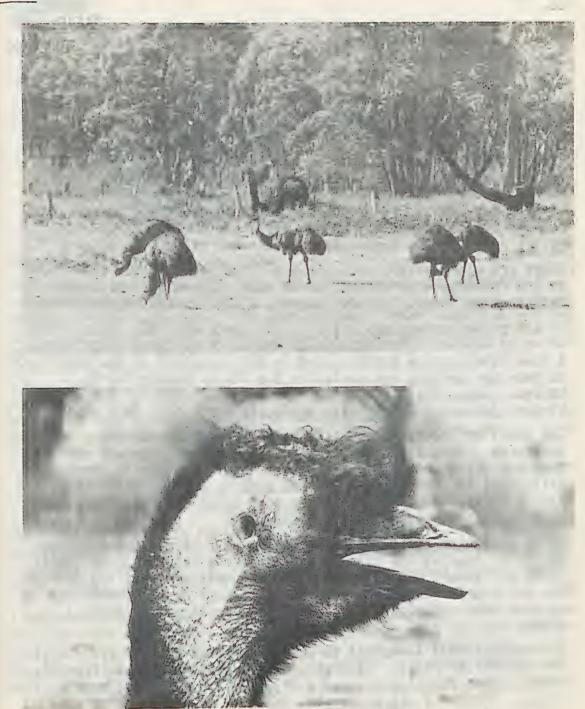
When the group reached the West bank I stayed where I was - in the water - and to my surprise they hade no attempt to put some territory between them and me — For about 11 ve or ten minutes they scratched around in the edge of the forest just above the beach and only about 20 feet from my car. When they did leave, they did so without haste.

While they were scratching about after their swim I had time to observe that there was one male and four females, assuming they were all adults. Is the immeture male recognisable from the mature female?

I cannot recall having heard of Emus swimming before - it was quite a surprise to me to see them take the plunge, especially as they were obviously not being chased either by a predator or fire.

I believe Emus are still quite numerous in this area. I have travelled this road twice now (the first time was Easter, 1972) and each time I have seen Emus. My first sighting was about helf a mile from the Pinch River area, nearer to the border. On this occasion I saw three adults (I was unable to distinguish sexes) and several chicks still with their distinctive striped plumage.

On this same stretch of road (Jindabyne to Buchan - I think it's about 107 miles) I have seen echidnes, grey kangaroos, gliders, possums, wallables, numerous species of snakes and lizards and an abundance of bird life. It is a pretty nerve-wrecking drive for the most part, but worth making the effort if one is contemplating a motoring trip in that part of the world. In dry weather the road is adequate for conventional vehicles, but I wouldn't go near it in winter without a four-wheel drive with chains and a winch handy - some of the bends are pretty tight and I imagine they're slippery after rain or snow.



Emus photos, by Trevor Pescott

#### SOME NOTES ON THE STARLING

## by Roger Thomas, Ballarat

Starlings are well-know: their mimicry of other birds and my observations suggest that these calls are picked up at the roosing place. My home is about three-quarters of a mile from a large roost at Lake Wendouree, Ballarat, and many times I have looked up in surprise when hearing Lake birds near our back-yard: Black Swans, Silver Gulls, the sharp whistle of the Musk Duck, the scream of the Swamphen and occasionally a Spur-winged lover - all coming from a cypress tree or television antennal

There are other birds which our Starlings imitate, but they occur at the roosting area as well as at home. These include Grey Butcher-bird, House Sparrow, Magpie, Blackbird and Magpie-lark

In the north-western part of Ballarat there are many houses, most of which are fairly recent and so there are not many large trees. I have never seen a Butcher-bird in that area and so was surprised to hear one calling and wanted to see it; my Butcher-bird, however, was a Starling doing a splendid imitation of the Butcher-bird's rich notes. That bird obviously roosted on Lake Wendouree.

The Starlings roost on two islands well offshore at Lake Wendouree. They fly over our place in many small groups each summer evening on their way to roost, and occasionally about fifty will congregate in a cypress tree in our backyard before flying on to the Lake. There are many other congregating points like this in other parts of the city.

Being a regular visitor to Lake Wendouree I have often seen the Starlings leaving the islands just before sunrise in huge flocks (they all depart within a couple of minutes) and settling down for the night when they arrive in parties of up to about sixty or so birds, although the average group would number about a dozen.

In February 1973 I decided to count the birds as they arrived at the islands to roost. Both islands are easily observed from the shore and so counting was not difficult. To help me I took along a counter I use especially for bird counting and clicked it each time twenty earlings settled.

#### SOME NOTES ON THE STARLING (Continued)

Here are my notes of the evening count - 17/2/73.

7.52 First Starlings flying over, 8.01 About 40 perched high in trees on island. They flew off for a while and were joined by another 40 or so.

First birds settled. 8.10

8.14 Arraving thick and fast.

8.18 Slowing down.

Last of the main group. 8:27

8.34 Only odd single birds arriving now.

8.48 last bird.

The total birds counted was 2220.

The common Starling is more interesting than most people think. If you have nothing to lo on a summer evening - follow your Tocal Starlings as they go to roost and then watch them take off in a black cloud just before sunrise. I would be interested to hear of any other birds the Starling has been heard imitating, and also to hear of any details of other moosts and numbers. I have been asked where the Queenscliff Starlings go to roost apparently large flocks fly out to see near the fishermen's wharf. I hope somebody will find out and publish their notes in the "Geelong Naturalist",

#### STARLING MIMICRY

## by Trevor Pescott

The comments above, by Mr. Roger Thomas, relating to the introduced Starling revive an occurrence of some years ago.

In Bell Park, I heard overhead the call of the Banded Plover coming loud and clearly.

I had not seen them over that part of Geelong at that time, so began to search for the Plovers flying over. Of course it was not that species - but instead the calls had come from our friend, the Starling which was comfortably settled on the cross-bar of the television antenna.

#### INVERLEIGH COMMON ABORIGINAL CAMPSITE

The loss of Aboriginal Campsites to gravel extraction and other causes - including vandalisation by unscrupulous artifact collectors - is a real threat.

The location and value of one such campsite is listed by Aldo Massola in his excellent book "Journey to Aboriginal Victoria" (Rigby Ltd. 1969) Page 13, and the reference reads -"Returning to the inland camps, a very large one is situated on the Common overlooking the Leigh River at Inverleigh. Access to this camp is difficult, but it is rewarding because of the number of implements which can be collected from it. It is reached by taking the first track (about three-quarters of a mile west of Inverleigh Township) which is in reality a backroad to Teesdale. Drive along it past the bridge over the Leigh, then take the first track to the left, and continue for about a mile. This is the nearest one can drive to the camp, and to reach it one must walk a good mile to the cliffs overlooking the river, which, of course, is on the left of the track. Wind erosion has removed the sand from this site and deposited the camp debris on the clay bottom, where implements can be seen easily. This site is large, being about 100 yards wide and over half-a-mile long, and continuing over several of the gently sloping spurs around its edges.

"The importance of this camp is due to its position overlooking the swamps, through which the Leigh River meanders at this point. These swamps, of course, were a source of food and water, while the elevated position of the camp guarded it from a surprise attack.

"To the east of Inverleigh there are several small sites along Native Hut Creek, especially on the north side of the road between Inverleigh and Murgheboluc. There is probably a large site along the creek, but the sand covering it has not yet been moved by the wind. There are good indications of sand movement taking place on a bend of the creek just south of its junction with Stoney Creek. This spot should be watched."

Our interest in this area warrants a much closer look at this site than we have in the past.

Hon. Editor.

## BIRDS IN OUR GARDEN - SOME NESTING OBSERVATIONS

## by Mrs. O. McHaffie, Park Orchards

Although 1971 was the first time that native birds showed signs of nesting in our premises, we knew they had nested not far away as we had witnessed the collection of nesting material. One spring we saw a small Striated Thornbill plucking at a piece of rope attached to a fence, and a White-eared Honeyeater was seen on the back of a pony in the paddock tugging vigorously at the hair without success as far as we could judge. At the end of August, 1970, a Spotted Pardalote alighted on a pile of wood about four feet from where we were. It seemed quite unperturbed by our presence and flew off with a small piece of bank, We were very surprised to see it at such close quarters as we had only seen one or two are and occasionally and mainty on the bird bath In September of the same year a pair tunnelled into a heap of sawdust beside our drive. It was very exciting to watch the two small birds arrive at the heap and, after looking around to see if they ware observed, disappear into one of the tunnels. There were two holes a foot or two apart and we could not quite decide whether there were two tunnels to the one nest or whether they had abandoned one as not satisfactory and had made another. The position was very vulnerable being so close to the driveway. There was also danger from our cat, or a visiting one. In order to give some protection, while they were absent, we placed some large-mesh wife-necting over the site, then waited hopefully to see if the bands would ignore the netting. It did not seem to worry them at all. They perched on the wire while ensuring that it was safe to enter levever, a day or so later we were disappointed to find they had deserted the nest. It is probable that they had discovered the insecurity of the cunnels. The soft material tended to cave in. We hoped that was it and that nothing had happened to the little birds. In anticipation of the nesting continuing and young birds hatching I had wasted two slides photographing the holes in the sawdust heap!

The Eastern Spinebills nest somewhere in the vicinity as young birds are seen about. A few years ago we were particularly

#### BIRDS IN OUR GARDEN - SOME NESTING OBSERVATIONS (Continued)

interested to see a young bird in a Grevillea juniperina rubra. feeding from the few remaining flowers. While we watched, an adult bird flew over from another grevillea and, without alighting, fed the young bid. The were quite accustomed to seeing the adult birds getting heats which hovering but it seemed quite a feat to feed its young without a ighting. We could not see any insect pass between the birds so supposed it had carried nectar Is it usual for a honeyeater to carry nectar in its bill to feed its young?

1971 was the first time that we had discovered honeveaters nesting in the garden. In mid-October a Yellow-faced Honeyeater was on the ground tugging at a piece of twine tying the grevillead to a stake. We later found a pair of these birds making regular trips between the grevillea where they fed and a Leptospermum laevigatum (Coast Tea-Tree). When we approached the tree one or both birds would fly out and alight in a eucalypt not far away and would not return until we moved away. Apparently building was still going on as, according to some authorities, a Yellowfaced Honeyeater incubating tends to stay on the nest despite the presence of humans. This particular project came to an untimely end. One day I heard a great fluttering and fuss taking place and out flew a Yellow-faced Honeyeater and, to our disgust. we found it had been ousted by a Blackbird who then finished its nest above the little one vacated by the Honeyeater. The small nest was wedged in a fork of the tree above eye-level and a foot or so below that of the Blackbird. The honeyeaters evidently built in another site on the other side of the garden in either the Callistemon or the Brush Cherry. We did not discover the nest. There was a small nest suspended from a branch of the Eugenia, which we found later after it had been vacated. It was the frailest housing accommodation imaginable - like a small basket - and so small that we thought it would be impossible for any bird to be hatched in it. The only description of a nest that seemed to fit it was that of the Eastern Spinebill, which is suspended from a branch. In due course the two Honeveaters reappeared accompanied by two immature birds.

We had a lot of trouble with blackbirds during the last nesting season, as they would persist in nesting in the native trees,



Above - Yellow-faced Honeyeater Below - Striated Thornbill

Photos by Trevor Pescott



## BIRDS IN OUR GARDEN - SOME NESTING OBSERVATIONS (Continued)

1, ...

and were inclined to be aggressive to the honeyeaters. Next Spring we feel we must harden our hearts and destroy the nests as advised by Mrs. Barbara Salter in her book "Australian Native Gardens and Birds". Journal also are troublesome. They are in plague proportions in our analysis and trees for food or nesting sites but swarm into the shrubs and trees for resisting and occupy far too much space.

The young birds (Spring 1971) were delightful. In December we found two baby Grey-backed Silvereyes sitting close together in a Cootamundra Wattle. Young birds seem to like this close proximity. After the confined quarters of the nest it must be a big frighteneing world outside. Two young Brown-headed Honeyeaters were also about - very tame - but we were disappointed that there were not larger parties as in other years, when we were amused to see how even these adult birds sat close together when preening after using the bird bath. Four five or six would sit jammed together in a nearby Cootamindra. They almost had to be contortionists to attend to their toilet under such cramped conditions.

#### MUD ISLAND MARINE LIFE

#### by Trevor Pescott

The Mud Islands campout held over the long weekend of January 26-28th, this year proved to be very successful.

As the weather was hot, we were able to explore in comfort some of the shallows offshore at low tide, and the use of our fisherman's dinghy made it possible to float over the water without disturbing the bottom mud.

The keen eyes of Glenn McCarthy and Geoff Taylor were responsible for the initial discovery of some Sea-hares, large marine slugs up to 6 inches long; the name refers to two large ear-like appendages, and certainly not to their speed.

Another interesting find was of a small Port Phillip Pipe-fish, and the sea-horses and Sea-dragons which are more families to most of us.

#### MY FIRST INTRODUCTION OF BIRD BANDING BY MIST NETS

#### by Ira Savage, Herne Hill

I was thrilled to have been asked to join the Australia Day weekend campout, and after meeting at Queenscliff we eventually sailed out to Mud Islands in Port Phillip Bay; my first surprise was the largeness of the group and many unfamiliar faces.

I always enjoy a sea cruise whether long or short, and this one took approximately one hour.

Arriving then at low tide we managed to wade ashore, 500 ft. being the nearest point to which our craft was able to negotiate. Using two small boats we had then to ferry the camping gear ashore. It was extremely hot and the lack of tall vegetation surprised me.

We established camp at the point of disembarkation. I chummed up with Roger Wyleman and his wife and once settled in we decided on a tour of the island. Starting off by skirting the lagoon on the easterly side, we used it as our main guide, and we walked around this amazing bird sanctuary.

My first nest discovery was a Silver Gulls' in the saltbush shrubbery; it held one egg with a second about to hatch out. Our second nest a deserted Black Swans with numerous smashed eggs. Birds of many species typical of this type of environment were observed by us - Cormorants, Plovers, Dotterels, Godwits and Terns.

But my big surprise on circumnavigating the lagoon perimeter was the discovery of nets attached to long bamboo poles neatly folded up and approximately 40 feet in length.

I returned to camp by crossing the lagoon which at no time appeared more than 6 inches deep, for my evening meal, stopping occasionally to photograph the Sooty and Pied Oystercatchers going about their business.

I made enquiries about these nets from members in the camp, and was informed that Vincent Yeoman and his helpers had erected them to trap for banding the White-faced Storm-petrels. I

## MY FIRST INTRODUCTION OF BIRD BANDING BY MIST NETS (Continued)

approached Vin and asked him if I could join his group in this forth-coming event.

I had to sumit that on's my first venture into this aspect of bird-banding - in fact lever seen mist nets before - and was looking forward kee by to this operation. Vin said he was delighted to have a volunteer and asked me to meet him at the nets about 10.00p.m., cunningly not telling me what I would be in for.

Arriving there after dark I heard many voices and I quickly noticed by the aid of the city light reflections from the far distant horizon that the nets were extended approximately 9 reet high ready to catch the birds. I found Vincent and his helpers relating in the bushes - he explained that this particular species will not arrive at their nests till the moon disappears and by now it was low in the sky. It did not occur to me then that this bird was arriving back to a nest with a young chick in it, waiting to be fed by its parent.

The time spent waiting until the first Storm-petral collided with the mist net appeared very drawn out, and I felt I was in for a disappointing evening; but the experienced bird banders assured me this would not be the case, a fact I was soon to find out.

A voice rang out - "there's one down there". Shadowy figures appeared from nowhere, lights from strong torches switched on and things from then on became hection I espied a struggling form in the net, focused my torch and then had my figures sighting of the White-faced Storm-petrel.

I gently retrieved it from the net pocket. It gave me quite a thrill to handle such a gentle looking bird, grey and white in color and with webbed feet; my knowledge of this bird at that point was nil.

I placed the Storm-petrel in the hands of the bird bander, watching him carefully manipulating the special pliers, closing the now-open numbered ring placed around the leg of the bird. The number was recorded by a lady by the name of Gracie Bowker. This

#### MY FIRST INTRODUCTION OF BIRD BANDING BY MIST NETS (Continued)

was my second surprise of the evening, a lady I've heard so much about in banding the Mutton-birds at Port Fairy. And what better place to be introduced to her.

The Storm-petrels were by now coming in on low sweeps over the lagoon and in great numbers. The group of about 8 persons were kept busy in short bursts retrieving, banding and recording numbers. To my surprise, I occasionally removed a bird which already had a band attached; most of these had been banded the year before. During one of the quiet moments I noticed activity further along the lagoon, and on investigation I found another group engaged in similar work, under the leadership of Geoff Gayner with his wife Eliableth as assistant. Sometimes they appeared busy when our nets were quiet, so I also helped there a little. On other quiet moments I lay back in the bushes listening to voices of the night life; some or the bird whistles heard were most unusual and made the evening feel very eerie. It occurred to me towards the final stages of the first evening how silent these White-faced Storm-petrels were, even when handling.

Vin finally decided to call it a night at about 3.30a.m. and we assisted in folbing the nets, so that no further birds of any species would be trapped until we returned the following evening.

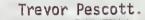
We wended our weary way back to camp skirting the edge of the lagoon, and I was thankful to "hit the hay", too tired even for a night-cap. This same procedure was followed on the second evening, only this time we stayed till 5.30a.m., using all the bands allocated for this nesting site.

On this second evening, as we relaxed in the bushes near the nets, we wtinessed an odd event. Those present in our group noticed an increase in bird noises, and then heard a roaring noise from the lagoon, at about 3.30a.m. Investigating by walking to the edge of the lagoon we saw a rush of water like a tidal wave; it appeared to really upset the bird-life and we were unable to explain its cause.

On the final count, for those two nights work, the total was This was my first introduction of bird banding by mist nets and I really enjoyed the company of all those present on this occasion.

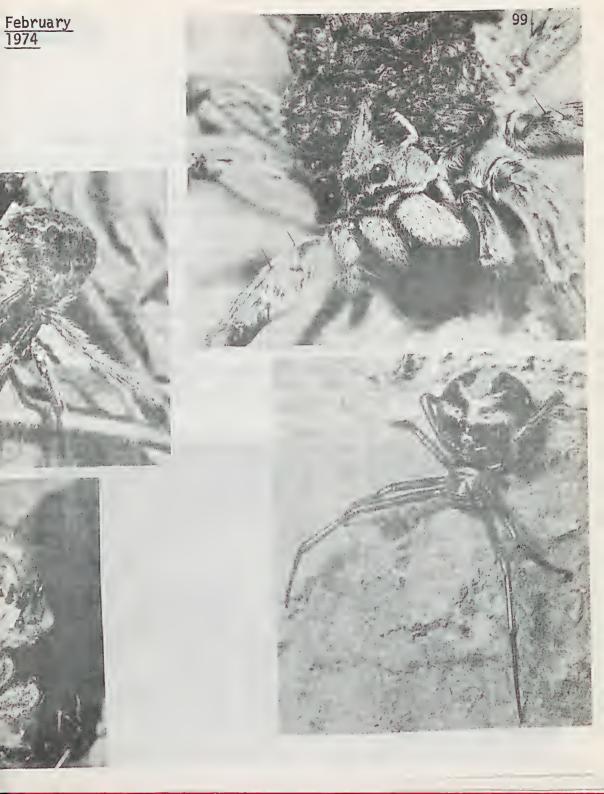
Below are some of the spiders which have been found in our Belmont garden this year.

They are 1. Orb-weaving Garden Spider 2. Tailed Spider 3. Orchard Spider 4. Wolf Spider with her young 5. Red-backed Spider









#### HERONS AND PESTICIDES

### by Trevor Pescott

The photograph below shows the horribly twisted legs of a young White-faced Heron found i Highton a few years ago.

Apparently the bird had been fed by its parents with food contaminated by some poison which had produced soft bones in the legs, so soft that under the weight of the youngster they bent like soft plastic.

I kept it for several days before finally consigning it to the Fisheries and Wildlife Department, for there was no possible hope that it would ever survive.

Each day I watched the legs becoming more and more bowed so that the youngster could hardly stand, the toes were completely non-functional, and walking was almost impossible.

Some time before this, I had seen specimens of young Night Herons from Queens Park with the same "green stick" legs as my bird had; Mr. Wheeler's comment in the following article illustrate this problem in other species.



#### A VISIT TO AN ISLAND ROOKERY

#### by Jack Wheeler, Belmont

Over 4,000 years ago, when the river Nile flooded, spreading its rich silt over the river flats, great flocks of ibis appeared annually and when the locusts swarmed the crops, the ibis descended on them and devoured the pests.

During World War II, I had the opportunity of visiting the tombs of the Pharachs in Egypt and the ibis was one bird which was stylised on the walls of tombs and the ibis-headed human-bodied God known as Thoth ruled from his seat of office. There was no doubting the reverence in which this remarkable bird was held, a bird which to me has something ancient and singular about their character, and the very name by which they are known, "Threskinormis" - which literally means - "sacrad-bird".

I have never had the opportunity of visiting a full scale breeding rookery of Ibis over my many years of bird study, until recently.

I have observed them breeding on islands from a distance in northern Victoria, where they breed in swamps of thick cumbungs and lignum and even though accessible by wading and the use of punts and boats, one had to be specially equipped to visit such habitats.

I have on occasions also visited small rookeries of spasmodic breeding by these birds, once by using old Black Swan's nests on open flat ground on islands in large lakes.

However, this recent visit to an island in mid-western Victoria, is something I shall always remember, a breeding rookery of considerable dimensions of some 15,000 Straw-necked Ibis together with a breeding colony of Pelicans. The accessibility of the breeding area amazed me; the journey by boat took the best part of an hour, but the breeding area covering several acres, was more or less on flat ground, mostly that with pasture coverage, which gave out to sandy banks.

## A VISIT TO AN ISLAND ROOKERY (Continued)

There were other distinctive features about this rookery and this was the collaboration between the pelicans and the ibis teach appeared to completely accept the other in which case they congregated together, and so the little mortality noted, amongst the various stages that be a little mortality noted.

For both species, nesting was on the ground and nests in many cases only a foot or so apart, and in many instances not even that, and to see pelicans lists and ibis nests mixed up together was something I had not anticipated, a clear indication of mutual acceptance, yet one, the pelican so much larger than the ibis, and in fact looked rather comical to see the huge bulk of a pelican completely surrounded by nesting Ibis just as if it was king of the castle with armies of attendants.

It certainly was an amazing sight, here on almost flat ground, masses of birds, some areas had just been freshly selected for nesting and many birds were noted to be still carrying nesting material for their structure. In most cases, just a few dry stems of thistle stalks and rye grass were used as nest material, but there were odd birds that went to much more trouble and elevated the nest structure several inches by the use of more substantial sticks, but such material was not easy to obtain as the nearest bushland was some distance away and on this particular island only the remains of several dead cypress trees.

Eggs were pure white and as large as king-size hen's eggs, but those of the pelicans were goose size. Numbers of eggs varied, pelicans each had two eggs, whilst those of the ibis, from one to three eggs.

In the central areas of this rookery, breeding was well advanced and chicks massed together in nurseries, the pelican chicks in their particular groups and the ibis in theirs, and here most chicks were well feathered or at an advanced stage of feathering.

As the rookery expanded, nesting appeared to have extended outwards in all directions amongst the vegetation of pasture grasses, thistles and other exitic herbage until several acres were eventually covered.

## A VISIT TO AN ISLAND ROOKERY (Continued)

The outer ereas, all being in stages of nest building or early incubation.

I was on the watch for any deformed birds or any with cripples and unable to walk, but only one three-parts grown ibis was so effected. This could be a symptom of pesticide poisoning and with the free use of many brands of pesticide for agricultural purposes today one would have anticipated more victims at this early stage of development.

Overseas reports are rather frightening about the future of the pelican and in many countries is gravely threatened,

A recent visitor to this country, Dr. MacInnes, senior lecturer at the University of Ontario, Canada, has publicly stated that chemicals used by man ned levere side effects and that eggs of the pelican in America had revealed him DDT residue.

There was serious decline in pelican populations in most countries today and this includes Australia, and in some areas overseas, the pelican has disappeared entirely. Could this happen in Australia?

Breeding rookeries of the pelican have dwindled to a very low level in Australia, due mainly to the development by drainage of swamplands and damage to rookeries by fishermen who naturally look upon this species as in the same category as cormorants, both birds being stringent fish eaters.

This pelican rookery would undoubtedly be one of the largest established rookeries in this State, and has been only functional for less than twenty years. This in itself is a clear indication that the pelicans intend to remain. The position however, is that this breeding rookery is on privately owned land but fortunately the present owner is a person of understanding and tolerates this annual breeding influx.

The Fisheries and Wildlife Department is fully aware of this and are watching the matter closely. Plans will be implimented eventually to have this area fully preserved as a Wildlife Refuge or some similar category.



Above left - Royal Spoonbill
Above right - Straw-necked Ibis
Below - Nesting Pelican



Photo by Eric Bound Photo by Eric Bound Photo by Jack Wheeler



#### A VISIT TO AN ISLAND ROOKERY (Continued)

The Straw-necked Ibis has bred previously very spasmodically in the area and this present season is considered the best yet, and the number of young reared already could run into many thousands, as areas during my visit were just a moving mass of young flightless chicks in dark coats of brown chocolate down and others dark feathers.

Only very few White Ibis were seen and two runner chicks noted of this species on the western section of the rookery. Black Swans were still nesting and several nests were still in occupation, and I had the pleasure of photographing one cynet just out of the shell, something I had not had the opportunity of seeing previously.

Also present were six pairs of Royal Spoonbills, their magnificent white breeding plumes, their black beaks and legs made them regal creatures indeed.

They were the only birds which had elevated nests and in this case had chosen dead cypress trees for their platforms of sticks, crudely put together, but sufficient for their needs.

Apart from the spectacular scene of thriving activity throughout the rookery, nothing was more spectacular than when countless thousands of ibis, intermixed with pelicans and spoonbills, rose in flight to circle the island in a great mass, that blotted out the sun, until they came in to settle, and to again resume their chores of responsibility.

The pelican is what I call one of nature's freaks, but despite being a freak it is possibly one of our most unique birds on this earth today. Its great power of flight, magnificent as it circles to gain height, something I will always stop to admire, its astute method of feeding by cunning herding of shoals of fish and then coming in for the catch, and the power of food storage in crop and beak. Perhaps not so beneficial directly but still a bird we must preserve.

On the other hand, the ibis, just as in biblical days saved the crops, so today in our own land is regarded as the "farmer's friend", and one which does an enormous amount of good in saving pasture land and crops from the scurge of pests.

#### A WESTERN AUSTRALIA TRIP

#### by Stephen Garnett, Corio

(This second part completes the list of non-passerines seen in . . South West Australia Juri - a trip in August and September 1972)

Domestic Pageon

Common in most cities and also in South

Australian country areas.

Spotted Turtle-dove Senegal Turtle-dove

Observed in Perth, Kalgoorlie and on Retinest. Observed in Bunbury. Perth and Kalgoorlie and Rottnest.

Common Bronzewing Brush Bronzewing

Numerous on south coast and on Eyre Peninsula. 27/8/72 3 2,500ft. up Toolbrunip observed at 20ft. with 10 x 40 glasses in good light.

Crested Pigeon

Common in wheat belts of Western Australia and and South Australia.

Musk Lorikeet

7/9/72 3 flying through Red Gums, Clare. Purple Crowned Lorikeet 25/8/72 300 roosting in river gums beside

Pallinup River.

· 27/8/72 40 flying in pairs through taller forest at Bluff Knoll turnoff.

White-tailed Black Cockatoo 24/8/72 30 flying in a flock over Melaleuca Swamp 5 miles west of Esperance.

Red-tailed Black Cockatoo 28/8/72 5 feeding in Kerri at Carey Brook west of Pemberton.

> 2/9/72 70 feeding in Casuarina 20 miles west of Marridin.

Pink Cockatoo 20/8/72 3 Smiles north of Pygery in medium roadside mallee.

> 5/9/72 20 feeding in sand dunes on grass seeds and in dwarf mallee 5 miles east of Fowlers Bay.

Little Corella 2/9/72 3 flying by the car 20 miles east of Southern Cross .--

Long-billed Corella 20/8/72 20 feeding in a paddock in the Adelaide Hills.

Galah Common in Western Australian wheat belt and most of South Australia

Adelaide Rosella 20/8/72 5 seen in gardens of the Adelaide Hills.

#### A WESTERN AUSTRALIA TRIP (Continued)

Western Rosella Seen from Pallinup River around south coast of Perth.

2/9/72 2 seen 20 miles east of Merredin in casuarina scrub.

Twenty-eight Parrot Common throughout west and also seen as far east as Eucla.

Red-capped Parrot Seen in northern Stirling Ranges (1500ft, up Bluff Knoll, Bluff Knoll turnoff) and roosting in a melaleuca swamp at Esperance.

Red-backed Parrot 7/9/72 5 in small groups at roadside south east of Port Augusta.

Mulga Parrot Occasional pairs seen between Norseman and Mundrabilla Motel.

Rock Parrot 4/9/72 6 flying from sand dunes to low mallee scrub in evening.

5/9/72 3 flying up from roadside towards dunes at Pt. Labatt.

Pallid Cuckoo Fairly common in wheat growing areas.
Fantailed Cuckoo 24/8/72 On wire 25 miles west of Esperance.
Black-eared Cuckoo 2/9/72 1 20miles east of Merredin in casuarina scrub.

Horsfield Bronze-cuckoo Common in all habitats except Karri and Jarrah.

Barn Owl 6/9/72 l dead by side of road 2 miles east of Coffin Bay. Boobook Owl 2/9/72 3 heard calling 20 miles east of Norseman. Tawny Frogmouth 24/8/72 l perching in Banksia 30 miles west of Esperance.

1 dead by side of road 35 miles west of Esperance.

Laughing Kookaburra A record of an adult and three juveniles from local garage proprietor at Ravensthorpe.

Common around coast from Pallinup River to Perth.

Red-backed Kingfisher 2/9/72 l in low mallee scrub 40 miles east of Merredin.

Sacred Kingfisher 23/8/72 l perching on wire 2 miles north of Esperance adjacent to Melaleuca Swamp.

Welcome Swallow Common in all habitats.

Tree Martin Common in most wooded or partially wooded areas.

Fairy Martin Seen only near water.

#### AN HOUR COUNT - No.8

#### Bribie Island, Queensland

## by Roy Wheeler

Brible Island is 39 miles ....th east of Brisbane via Caboolture on the Bruce Highway. The island is 25 miles long and covers an area of 59 square miles and is connected to the mainland by a modern toll-bridge.

The island is a wildlife sanctuary and is visited by thousands of holiday makers each year. It is noted for its fishing, swimming and boating facilities. The Pumicestone Passage between the mainland and Bribie Island is most picturesque with a backdrop of the Glasshouse Mountains. The Pacific Ocean beaches provide the closest surfing beaches to Brisbane. Skirmish Point at the southern extremity of the island overlooking Moreton Island and Moreton Bay, was where Capt. Matthews Flinders landed in 1799, to receive fierce opposition from the island aborigines. At that time the estimated native population for Bribie was 600 but by the year 1897 the last of the race had died. Her grave—the Halmakuta Memorial is near the main road to Toorbui Point. The Joondoburri tribe had lasted less than 100 years after contact with the white man.

The island abounds with wildlife, kangaroos are plentiful and the Emu is there and as far as I know it is the only island off the Australian coast with its own Emu. The bird list for Bribie Island is just over 150 species and the wild flowers are most abundant in the Spring months. Their own native pine the Bribie Island Pine is a feature. Massive areas of banksias, paperbanks and casuarinas and eucalypts are there. The A.P.M. (Australian Paper Manufacturers) hold extensive pine plantations in the northern section of the island and their policy of retaining wide strips of native vegetation to divide the plantations, has meant that their bird population flourishes and are not ecological deserts as are the pine forests in the other states, particularly Victoria and South Australia.

#### AN HOUR COUNT (Continued)

In October, 1970, Mrs. Wheeler and I visited Bribie Island for the first time and stayed at the Bellara Motel. From the rear of our motel room we overlooked a nice patch of native bushland and during our stay I made several hour counts. The rules are simple, just sit on a chair and count all birds heard and seen within binocular range within the hour. By the way I understand that the patch of bushland is now a caravan park, nothing ever remains the same for long in such places. Here are details of one such hour count:

.... it is not the

Bribie Island, Queensland Bellara Motel. October 18, 1970, 3 30 to 4.30 p.m. Fine, warm with a cool easterly force 2. Birds in order of sighting Rainbow Lorikeet, 52; Leaden Flycatcher, 2; Southern Figbird, 21; Noisy Friarbird, 10; Welcome Swallow, 6; Tree Martin, 21; Black-faced Cuckoo hrike, 2; Rainbow-bird, 3; Olive-backed Oriole, 1; Sacred Kingfisher, 2; Grey Thrush, 2; Black-backed Magpie, 4; Rufous Whistler, 1; Crow, 2; Black-headed Pardalote, 2; Little Wattlebird, 3; White-throated Warbler, 1; Lewin Honeyeater, 1; Pale-headed Rosella, 2; Laughing Kookaburra, 4; Dollar-bird, 1; Spurwinged Plover, 3; White-throated Honeyeater, 1; Scaly-breasted Lorikeet, 6; Grey Butcherbird, 2

Total 25 species and 155 individuals.

# MATERIAL NEEDED

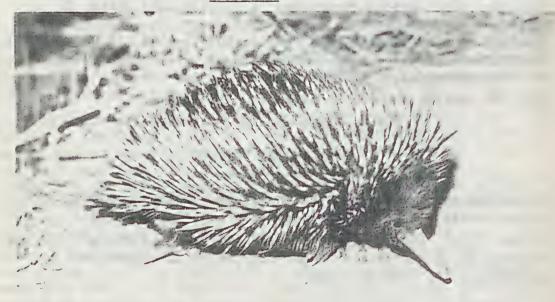
The Editor needs more articles on natural history subjects for future issues of "Geelong Naturalist". Can you help?

In particular, short notes about current observations will be most welcome, as of course are longer stories, black-and-white photographs and line drawings.

# JUNIOR PAGES



Platypus



Echidna

#### JUNIOR PAGES (Continued)

Australia is well known for its marsupials, the animals whose young are born at a very early age when they are tiny, and then live for some weeks in the mother's pouch.

The best known are the Kangaroos and Wallabies, but Possums, Pouched-mice, Koala and Bandicoots are also marsupials.

There is an even more remarkable group of animals in Australia called Monotremes, those strange mammals which lay eggs and which feed their young on milk as do all mammals.

Echidnes (Spiny Ant-eaters) and Platypus are Monotremes, and both of these animals lay eggs.

The Platypus builds a nest at the end of a burrow dug into a river or stream bank just above water level; the female builds a comfortable nest, and after laying her two eggs stays with them for the 10 days or so that they take to hatch.

She nurses them, holding them close to her body to keep them warm; once the eggs hatch, the mother becomes freer to find food; she produces milk which her babies lap up from the special milk pores on her abdomen.

The Echidna, by contrast, lays her egg and carries it in a pouch with her; the youngster is born there, and the mother carries the baby in her pouch until it becomes too large - and prickly - to remain there.

This year. Mr. Woodland is preparing a series of junior lectures on many different subjects about natural history.

The junior meetings start at 7.30p.m. before the main monthly Club meeting.

The Editor is hoping that this year we may include a number of junior members' articles in "Geelong Naturalist", starting next issue with stories on Cuttlefish.

#### THE LAST WORD

This is the last issue in Volume 10, the fortieth "Geelong Naturalist" we have produced during the preceeding 10 years.

My thanks to all who have patient ted for each issue without complaint.

The articles, notes and photographs printed have been mixed in style and text, and many excellent stories have been included.

One aspect, however, has not been fully used - that of printing in the Journal every-day notes which detail the status of the many local forms of flora and fauna; not necessarily long, studious papers, but brief comments which may now not appear very important.

But let us look ahead - another ten, twenty, fifty years - how will we know then what flora and fauna exists in the Geelong district at this time, unless we have placed on permanent record the present status.

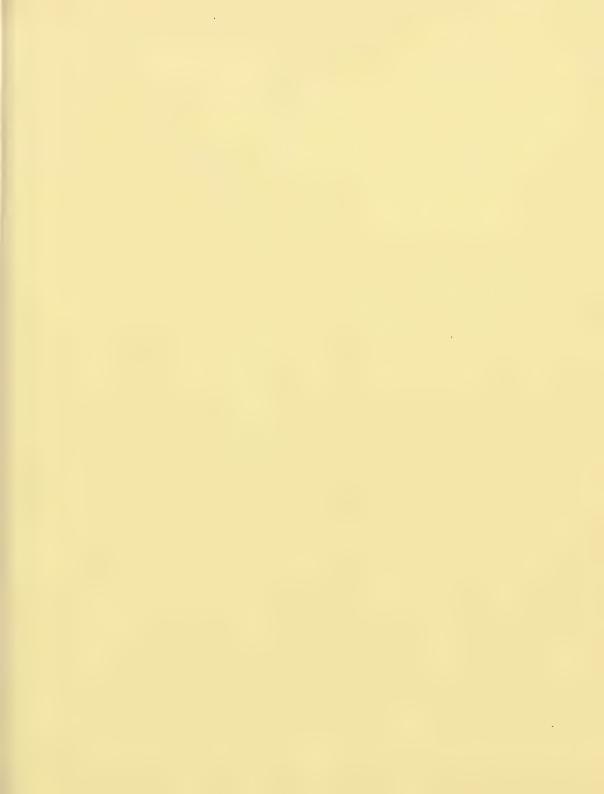
So I am asking now that 1974 ushers in a new use for the "Geelong Naturalist", making it a time-stopper for use by naturalists in the future.

We all look to Charles Belcher's book on the Geelong birds prior to 1914, as an invaluable guide to a past era - our Naturalists could become just as valuable.

If you read Beicher's book, you will be struck by its simplicity - no detailed, deep, scientific comment here; but we can at a glance compare the species of 60 years ago with those of today

Will you place on record your field notes, to be a reference for the future?

TREVOR PESCOTT,
Hon. Editor.



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