
THE NORTH QUEENSLAND NATURALIST



CAIRNS

**Journal of
NORTH QUEENSLAND NATURALIST CLUB**

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"Each author is responsible for the opinions and facts expressed in his or her article".

NORTH QUEENSLAND NATURALISTS' CLUB

Founder Presd. the late Dr. HUGO FLECKER.

OBJECTS — The Furtherance of the Study of the various branches of Natural History and the Preservation of Our Heritage of Indigenous Fauna and Flora.

Club Officers — September 1963 to September 1964.

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GENERAL MEETING for discussion, lectures, screenings and display of specimens are held on the second Tuesday, 8 p.m., at the Old Kuranda Barracks, Esplanade.

FIELD DAY excursion usually fourth Sunday.

VISITORS are welcome, especially members of Australian and Overseas Clubs and Societies.

LIBRARY open each Friday night at 7.30 p.m. and Club night.

Subscriptions (Due September 30) :

City and Suburban Members, £1/5/-.

Country Members, 15/-.

Junior Members, 5/-.

Treasurer's Address — 40 English Street, Cairns, N.Q.

EDITORIAL.

Well, once more it is the end of our year and the Editors must apologise for not putting out more Journals. However, it is still hard to get suitable articles and unless members can help by sending in material, it will probably continue to be erratic in appearance.

We much regret to announce the death of three of our members during the last few months. The first was Mr. George Atkinson, a Town Member for many years. He had been in ill health for some months and we were very sorry to lose him. Mr. Tom Elliott of Atherton was our second loss and though he was not known to many of the members personally, several members travelling to Atherton had made his acquaintance. Young Patrick Collins, a junior member of only 10 years old was the last loss and one which shocked all the members. He had not been a member for long but had already endeared himself to many on the Club Field days with his large lumps of steak burned to a cinder but eaten with the relish of youth.

Our sincere sympathies go out to the families of all these members.

Once more it is subscription time. We do ask all Country members to please forward their subscriptions to the Treasurer as soon as possible. I regret to say that quite a number have not yet paid their 1963 dues and we would ask them to do so as it is quite impossible for us to run the Club and publish a journal of this calibre without funds. Printing costs are high as are postage rates and if members wish to still receive their journals they must be prepared to forward the money to enable us to print and post them.

The Annual General Meeting is now over and it will be noticed that there are quite a few changes in Office Bearers. The members wish to thank all those who have done such sterling service for the Club and have now stepped down from office. In particular we would give our thanks to Mr. A. A. Read who has been our President for 14 years but now feels it is time for him to take a well earned rest and let some of the younger members hold the reins.

Once more we congratulate Ian Orrell on winning the Flecker Memorial Medallion for an essay on Natural History. The essay appears elsewhere in this journal and I am sure members will agree that it is a very well written and well thought out essay and thoroughly deserving the award. This is Ians third year of winning. Well done Ian.



POT POURRI.

Senseless Slaughter of Currawongs.

These birds have become so tame here at Tinaroo that they have become the victims of the most senseless slaughter imaginable — and this in a Sanctuary right in the centre of the Village. They certainly do eat a little fruit, but they also eat a lot of vermin. I do not know where they breed but they leave here about December and return in June. About 70 came this time and what a reception they received! I think there are 14 left, some crippled and the rest scared out of their wits.

Observations of the Saint Andrews Cross Spider

24/2/61. Brought spider inside from the bush.

30/3/61. 6 a.m., Mrs. Spider had begun spinning an egg sac. It is a small round light brown sac.

8 a.m. Spider has now finished spinning sac which is now about 1 inch long and has a greenish appearance. Have given her a small fly and she has spun it in a web.

7/4/61. Another egg sac has been spun.

13/4/61. This morning Mrs. Spider was busy spinning her cross. The two top ones were made first.

14/4/61. The Two bottom parts were finished.

16/4/61. Another egg sac is finished. Another cross has disappeared.

19/4/61. First egg sac has hatched out. There are hundreds of little spiders bunched together (it is raining). About 20 days to hatch.

21/4/61. Another cross has been made.

22/4/61. A small male spider is dead in the web.

26/4/61. Another egg sac and once again the cross has disappeared.

27/4/61. Second egg sac has hatched (20 days) and raining.

8/5/61. Third egg sac has hatched (22 days) sunny day.

20/5/61. Fourth sac hatched (24 days) cloudy day.

12/6/61. My spider is dead.

The spiderlings stay huddled together for about 3 days after hatching, then overnight they disappear. One day I placed another female spider on the web and there was a fight and the intruder was very glad to leave. I always find that the S.A.C. spider drops downwards to get away from danger. I have noticed that it takes anything from 4 days to 13 days for the female to spin her first sac after she has mated.

NOTE. Some times only part of the cross disappears, when an egg sac is spun. I am beginning to think that this is used in the first stages of the spinning. Then again eggs have been laid without any sign of a cross being made.

LYN CORBET, Junior Member.

"Notes on the Eastern Whip-bird *Psophodes Olivaceus*"

The Eastern Whip-bird is a shy and elusive bird which frequents rain forest undercover and other areas where suitable dense cover is available. This type of habitat and the elusive habits of the species makes detailed study of the species difficult. Most people have heard the remarkable call, many have had brief glimpses of the bird, fewer still have been lucky enough to study the bird in its natural surroundings. In my wanderings through the tropical northern rain forests, I have seen quite a lot of this species often from close quarters. For many decades considerable controversy has occurred as to whether one or two birds complete the remarkable call. My experience suggests the call can be completed by one bird, but often two birds (a pair) indulge in the practice. One bird delivering the long drawn out whistle and the other bird completing the swish or crack. Recently while standing in the centre of a secluded jungle track, a pair of Whip-birds were heard calling from the dense cover nearby. Making some squeaky calls, I soon lured the pair to a position where they were visible to me. Very soon one bird crossed the track feeding on insects in the low bushes. I kept both birds under observation for some time, the bird who had not crossed the track uttered the long drawn out call or whistle, immediately the other feeding bird stopped feeding, perched erect, raised the erectile crest and completed the final crack. With my binoculars I was able to see that both birds throats swelled before they delivered the call. Whip-birds also utter other calls, usually when feeding or if disturbed. These calls comprise many clucks and gurgling notes, sometimes mistaken by observers not well acquainted with the species who confuse these calls with the remarkable notes of Logrunners (*Chowchillas*).

Whip-birds are at times ventriloquial and have the ability to throw the voice at least sixty feet from where the call was delivered. Whip-birds feed mainly on the jungle floor quietly turning over leaves and debris and capturing the insects disturbed. They also feed among the foliage of low bushes and at times in taller saplings to a height of over twenty feet from ground level. They build a cup shaped nest of twigs and rootlets situated near the jungle floor, the usual clutch comprising two pale blue eggs.

The courtship display is extremely interesting and it is then that the birds seem to become tamer and are often observed in more open situations in the jungle. Another species of Whip-bird is known to frequent South West Australia and recently a colony was located in the North West of Victoria. This species is very rare and does not possess a Whiplike Call but is said to utter a harsh song.

J. A. BRAVERY.

VALE GEORGE ATKINSON.

The Clubs Journal was just off the Press, containing the name of "George" on the Advisory Panel of Specialists, when on the 23rd May, 1963, he ceased membership.

George Handly Atkinson as a native of Cairns, just failed to reach his 60th Birthday, and was to the Club an old stalwart, who attended many of the Clubs Field Days, and was that much happier, if the venue was to a field yielding Mineral specimens.

Mineralogy was his first interest, closely followed by photography and botany in that order. Perhaps a little difficult and impatient at times, there still was a lode of kindness and loyalty beneath the stratum of his composite, if one persisted in fossicking for the vein of true worth that existed.

The Club will certainly miss George, as will the Author who knew him, and shared in his confidences.

S.D.

WILDFLOWERING UNDER MT. CROLL

KATHLEEN McARTHUR.

There are two good seasons for wildflowers in the Cape York Peninsula, one after the 'wet' and the other after the early summer storms. My visit to Coen was in June (1960), a time normally too late, but because three inches of rain had fallen a few weeks earlier the ground flowers were plentiful and the trees in bloom were refreshed.

On the many drives I had in the district, nowhere did there seem to be such an abundance of flowering, nor so many species in bloom as on the Mt. Croll Aerodrome Reserve. There were more than enough flowers to keep me painting hard for three weeks. It was sad to leave so many because of lack of time. However, it was in this month of the year, in 1770 that Joseph Banks and Daniel Solander did their botanising in the vicinity of the Endeavour River approximately a hundred and fifty miles away. Many of the flowers I saw near Coen are in the collection of drawings made by Sydney Parkinson, their botanical artist. It was from these that the volumes entitled "ILLUSTRATIONS OF AUSTRALIAN PLANTS COLLECTED in 1770 during CAPTAIN COOK'S VOYAGE round the WORLD in H.M.S. 'ENDEAVOUR' by Sir Joseph Banks and Dr. Daniel Solander", were made. It was published as late as 1905.

There is a set of these volumes in the Government Herbarium Library in Brisbane. Looking at them there, I was able to recognise many plants seen yet not drawn. Amongst these was the wonderful night-blooming flower *CAPPARIS LUCIDA* syn. *THYLACIUM LUCIDUM*. When I first saw these flowers on a tree near the Peach River I thought they were white cockatoos, and then, when I realised they were not big enough I decided they were ants' nests. Curiosity kept me advancing to the tree to find this extremely beautiful flower of pure white.

Another flower in Banks' collection is the orange brush-like *GREVILLEA PTERIDIFOLIA*. It is now being successfully cultivated by members of the Brisbane branch of the Society for Growing Australian Plants.

The notorious Finger Cherry (*RHODOMYRTUS MACROCARPA*), Wannaki to the aborigines, was flowering. It has a simple beauty with its firm white petals and ring of yellow stamens. The fruit of this tree, if eaten, can send people blind. The aborigines know just when to eat it.

There were Acacias in all shades of yellow and Melaleucas in white, cream and pale green. No red bottlebrushes were out. Two trees with brilliant yellow flowers were *DILLENIA ALATA*, Koppakai to the aborigines, and *COCHLOSPERMUM GILLIVRAEI*, the Kapok or Cotton Tree. Both have red stamens and are most satisfying subjects for the artist. Mrs. Ellis Rowan's painting of the former is in *THE COMPREHENSIVE CATALOGUE OF QUEENSLAND PLANTS* by Bailey, as *WORMIA ALATA*, a classification not now used. The Kapok tree, which blooms after dropping its leaves is found also in the Kimberley district of West Australia, so possibly is right through North Australia. It is not the tree from which commercial kapok is taken.

The only two species of Hibiscus to bloom while I was there were the white and a low-growing pink. As I did not paint either, I did not have them identified. The white, commonly called Wild Rosella, was possibly *H. radiatus*. The early settlers of the gold rush days when out of yeast and potatoes from which they could make a bread yeast, used the leaves of this hibiscus to leaven their bread.

In the lowest areas, where damp conditions prevail longest, the number and colours of small plants made a most charming display. I painted three

WILD FLOWERING UNDER MT. CROLL (Continued)



VITREOCARPUS CONNATA (WHITE)

HIBISCUS

collected by G. J. ...
Nov 2, 1960

UNIDENTIFIED (WHITE)

SUNDESIACA
SIBBIS L'HERM'

POLYMERIA AFRICANA

"CORPUS BENT" (MURRAY)
POLYCARPUS SPIROSTYLES

BUCHINERA SP. (WHITE) GOODENIA RHODYTOGLOSSANA (WHITE)

WILD FLOWERING UNDER MT. CROLL (Continued)

different Trigger Plants (*STYLIDIUM FLOODII*, *S. ULIGINOSUM* and *S. SCHIZANTHUM*), the first deep pink, the second pale pink and the third yellow. There was a small bright blue *Lobelia* (*L. DIOICA*), the charming blue *EVOLVULUS ALSINOIDES*, and that blue pincushion flower *BORRERIA LAEVIGATA* which would be a great attraction in any garden plot. There was a fascinating yellow Bladderwort, (*UTRICULARIS FLAVA*), numerous yellow peas, including the shrub *BOSSIAEA ARMITTII*, a more handsome species than the *Bossea* which grows in Caloundra. Several of the insect-eating Sundews added interest, the one drawn was *BYBLIS LINIFLORA*, a bright pink flower. The stiff, papery Copper Plant was everywhere, its colour faded with age but when fresh was a mauvish-pink. As usual, the white flowers were dominant. There was a handsome *BUCHNERA* species, two different forms of Mitrewort (*MITRASACME CONNATA*), the humble, little *GOODENIA ARMSTRONGIANA*, the convolvulus-like *POLYMERIA AMBIGUA*, and a star-like flower the botanist did not identify, as well as many others.

Just before I left after three weeks of wonderful wildflowering, there were showers of rain that brought out what my hostess called Pigeon Plant, because they reminded her of Squatter Pigeons. It is a most beautiful species of *Ruellia*, the tuberous roots of which may be used for food. Botanically, it is known as *APORUELLIA ACAULIS*. It is illustrated in The Comprehensive Catalogue of Queensland Plants, under *Ruellia acaulis*, an illustration which does not do justice to its exquisite beauty.

There were many more. Some I painted, some I sadly left, hoping, after drinking the waters of the Llanckelly, to return again and record. Wherever one goes in Queensland there are wildflowers. Many of them are unrecorded except as dried specimens in a herbarium and botanical names, and as far as the Peninsula is concerned, many not even collected.

When I was at Kew Gardens, London, last year (1961), the Director of the Australian section told me they had a very incomplete collection from Cape York Peninsula. This is so surprising, for London is where one expects complete records. I was speaking of this at the State Herbarium in Brisbane on my return and was told that State records for the Peninsula are also incomplete. Apparently, there has never been a botanical expedition right through those far-flung areas.

FOUR INCHES OF EARTH.

The observations for this essay took a day to make while and after the hole was dug. This four inches of top soil would provide a keen naturalist with weeks of study and to the creatures themselves, the hole was their little world.

Surface Vegetation : Wiry Buffalo Grass thickly bound the ground, and other plants such as Clover, Star Grass and Thistles struggled for existence. The ground was moderately damp because a sprinkler had been running there some forty-eight hours before.

Life in this Vegetation and on the Surface Soil. As I brushed my hand over the grass a few small, green grasshoppers and a brown leaf-hopper flew into the nearby grass. These grasshoppers had left their trade-mark behind, there were small nibbles taken from a number of leaves in the area where they had been feeding. Some small spiders (green, black, brown and orange) were running over the grass looking for food. One had caught a small grasshopper. They ranged in size from about 1/32 inch to 1/8 inch across the back. The small orange one I examined under a microscope. It was covered with small hairs and was no more than 1/32 inch across back.

Small grubs and caterpillars (not identified) were found on the Buffalo Grass and the ground. Three of these were of the looper type caterpillar (green with two yellow stripes down the back) and the other four were plain brown. These grubs and caterpillars ranged from 1/16 inch to 1/8 inch in length. Some small green snails were climbing on the grass. There were about twenty of them and each was about 1/8 inch high. These had right-handed spirals. Hundreds of russet-coloured ants were running over the ground looking for food, but as far as I could see they had been unsuccessful. They had a track running through the area and followed each other in single file in two way traffic. Each was about 1/12 inch long and every now and then there was one with larger head and jaws than the rest. These were the soldier ants and were guarding the workers against attack. There were some small insects (which I could not identify) crawling through the grass and ground. They were a light brown and had large feelers for their size. These insects ranged in size from 1/8 inch to 1/4 inch in length.

A small mole-cricket jumped from the grass and when I tried to catch it, he jumped some more and I didn't have a chance.

Life in the First Two Inches of Top Soil. As I dug up the soil I placed each shovelful on an old piece of paper and examined it.

The larva of the Cadelle was digging its way through the soil. It was about 1 1/2 inches in length, cream in colour, except for the head and tail which were brown. Its head was strong and contained a pair of quite powerful jaws. It had twelve segments to the body and hairs protruded from the sides of its body. The younger larvae are shorter (1 inch) and are nearly black. The adult is a small black beetle which can move with great haste. These (larvae and beetles) were dug up from about 1/2 inch from the surface. The beetle is about 1 1/2 inch long.

* A Text Book : Australian Insects says that this species infest grain, but these didn't. The next shovel-full contained a Wolf Spider which darted from the soil into the nearby grass. As I crushed up this lump of dirt I noticed some-more small green snails, but these were a pale green in colour and when I examined a few under a microscope I found a very small ar-

FOUR INCHES OF SOIL (Continued)

achnid which seemed to be a parasite as it came from inside a dead shell. It was brown with three dark brown patches and crawled along the microscope slide on its back. It was also strong enough to push the dead shell along the slide and was barely able to be seen with the naked eye. There were about thirty of them in the 2 inch layer.

About six earth worms were in this layer of soil and they were from 1 1/2 inches to 2 1/2 inches long and about 1/16 inch thick. They were a light brown in colour. A couple of Stink Beetles (not correct name; no technical data) were making their way through the dirt and when I touched one it made an unpleasant odour. They were pitch black and 1/4 inch in diameter. A small brown and white beetle (no identification) was on his way and was about a 1/4 inch in diameter. He was shiny and an oval shape. After I had cleared all the dirt from the hole to the depth of 2 inches, I stood back and watched. In a few minutes a lot of small flies came. They were black, brown and green, and they landed in the hole and on the surrounding grass. They were very swift in their movements and very hard to catch. When I waved my hand over the hole, they flew away but quickly returned, because they seemed to like the smell of fresh dirt. These flies were about 1/8 inch in length. A Hover Fly also hovered near whilst looking for prey, but he was even swifter in his movements. Some more of those unidentified insects (See Page 1) were here in the bottom of the hole but burrowed underground so that the small brown ant wouldn't attack. Some small, round, white eggs were found about 1 1/2 inches down. These were about 1/16 inch in diameter. Some very small arachnids were found crawling through the dirt and I examined them under a microscope but could not identify them. They could move quite fast on their stomachs but were useless on their backs. I could only send them to the University of Queensland with the snails and the parasite to be identified.

Life in the Second Two Inches (2 - 4 inches). Many more earth worms inhabited this region and they were fatter and longer (2 1/2—3 inches). A thin, white, wire-like worm was found and when I tried to catch it, it resisted. It was about 1 1/2 inches in length and 1/64 inch thick. Another brown and white beetle (already mentioned) was found and it was about 1/8 inch in diameter. I stood back again to watch the hole for a few minutes and the small flies came into the hole, but strangely enough two blow-flies came (one green the other blue.) They landed in the hole. Once again the ants were on the hunt and this time they found a wounded worm. Two of them began the struggle of pulling it up the four inch slope of the hole. On the way many others joined in. As the ants began to tow their victim up the side, it fell back down and they had a second attempt. This time they were successful and when they reached the top there were forty-three ants tugging with all their might. It was towed to their nest, where no doubt they had a well-earned feast. Twenty-hours later I looked at the hole and the ants had built their nests there. The nest consisted of a hole in the ground with a barricade of dirt grains around it.

And so the struggle for existence goes on. The grass struggling against other grass, grubs and grasshoppers; worms against the ant; the hover-fly preying on other insects; and the spider seeking her food. All this struggling is just the 'Balance of Nature'. If there were none, what a queer world it would be?

Submitted by IAN STUART MCKENZIE ORRELL, (Aged 14).

P.O. Box 1, Smithfield, via Cairns.

It is regretted that we are unable to reproduce Ian's well executed drawings.

A VISIT TO MICHAELMAS CAY.

Michaelmas Cay is 27 miles N.E. of Cairns on the Barrier Reef. The launch left Hayles Wharf at 8 a.m. and the three hours passed quickly with its interesting people to talk to, chiefly from the South and Overseas.

A cloud of flying, screaming birds over the green-topped golden white sand was visible from a distance and appeared to be little changed by the presence of man.

As we approached the beach through the ebbing tide, large areas of what looked like black rock were seen; but on moving nearer along the sand they were found to be hundreds of dark brown Noddies, close together, silently facing into the breeze.

Most of the passengers were "Shellers" with a few fishermen who stayed aboard after we were dropped on the island, and as the tide was fast falling leaving a great stretch of reef all round the sand, I had the bird area almost to myself, only an occasional wanderer disturbing the sitting birds.

A coarse grass with clumps of pink flowered Ice Plants and two other low-flowering plants covered the whole flat centre of the island and birds and eggs were everywhere. On the beach edge a few nests of coral and shells had been made but usually a single egg lay just anywhere in shallow depressions.

Three distinct kinds of birds were seen which I believe (What Bird Is That? being my authority) were :—

1. Shiny black and white Sooty Tern whose eggs were unevenly blotched with brown and black.
2. Dark brown birds with black wings and tall tips and greyish top to head which is probably the Greater Noddy, but its single egg was definitely plain without marking, whereas the book says all Noddy's eggs have blotches.
3. This larger bird is probably the Crested Tern, white with silver grey above and black on the head, there were only a few of these birds and I could not trace one to an egg.

If one sat quite still the birds came quite close and I handled several fledgelings who did not seem at all frightened. One hen Noddy perched on my arm when returning, after being disturbed, then dropped down and went to her egg.

The Noddies sat straight onto their egg whilst the Sooty Terns usually beaked their egg then lowered their bodies and wriggled over it.

According to Cayley this is not the breeding time of year for any of these birds.

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