The
NORTH QUEENSLAND
NATURALIST
CAIRNS

Journal of

NORTH QUEENSLAND NATURALISTS CLUB
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Founder President: The late Dr HUGO FLECKER
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OBJECTS: The furtherance of the study of the various branches
of Natural History and the preservation of our heritage of
indigenous fauna and flora.

Meetings  Second Tuesday of each month at Oddfellows Hall,
Lake Street, 8 p.m.

Field Days  Sunday before meeting. Notice of place and time
given in 'Cairns Post'.

Subscriptions (Due September 30)
City and Suburban Members $3.50
Country Members $3.00
Pensioner and Junior Members $1.00

Club Officers  PRESIDENT  J.Cassels
   HON.SECRETARY  Mrs M.L.Cassels
   HON. TREASURER  Mr W.Felton
   EDITOR  Miss J.Morris
   PATRON  Mr S.E.Stephens

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Each Author is responsible for the opinions and facts
expressed in his or her article.
The State of Our Club

At the Annual Meeting on 10 September 1974, retiring President Bill Huddy reported that the Club had reached a somewhat low ebb. Average meeting attendance had dropped from the previous year to 19.5 members - an uncomfortable figure, we all agree! - and six visitors. During the year the Treasurer gave much time in organising two raffles. However raffles were not the answer to the financial shortage as members would become tired of selling tickets, while to raise fees might increase income but cause membership to fall off.

The Committee had tried to arrange interesting features for each meeting. These included: slides of botanical interest, Melbourne Gardens - J. Van Grieken; movie film of Ayers Rock - W. Felton; "Role of Fauna Officer, D.P.I." - Mark Weaver; mainly birds - Len Robinson; small fauna - Clyde Coleman; "Oil Spillage, Great Barrier Reef" - Joan Wright; visit by Club to Marine Gardens.

Field day venues had been varied, and so had the weather: Danbull (damp); Mareeba-Mt.Molloy (deluged); Herberton (weather fair but area sodden); Kuranda, Davies Creek, Speewah, Pine Creek, Black Mountain (beautiful days).

The fairly large amount of mail handled by our Secretary included many queries on bird life from intending overseas and interstate visitors, overseas butterfly exchanges, a snake inquiry from Western Australia, and matters such as turtle farming, protection of reptiles, etc.

While a note of foreboding is clear in this Annual Report, it is also clear that our Club still does have a role to play in "The furtherance of the study of the various branches of Natural History and the preservation of our heritage of indigenous fauna and flora" - as our Founder President stated (a trifle wordily) in 1933.

In future the monthly meeting will be spared the reading of minutes and other merely formal procedures. The guest speaker or film of the evening will be presented first, allowing time for questions and discussion. Then, after a cup of tea, specimens and nature notes will be discussed. With this assurance it is hoped that members will be encouraged to bring along more visitors, who will return and become members.

Incoming President Jack Cassels appeals especially for members with specialised knowledge of botany, geology, mammalogy or whatever, to attend field days and meetings when they can, to share their knowledge with others. Only if membership increases and members participate as fully as possible, can our Club continue to function.

Your Editor adds further that more contributions are essential if the Journal is to continue to be published in its present form. The "North Queensland Naturalist" does serve, we believe, to maintain contact with all members and exchange groups in as informatively enjoyable way as possible. By publishing the authentic observations of amateur naturalists together with those of scientifically trained experts in various fields, a useful amalgam is hopefully provided.

Do you like it this way?
Visitors to the Nectar Bowls

A few months ago I started to put out sweetened water in bowls in the Callistemon and Cadargi trees in my garden. The first bird to take advantage of these was the Yellow Honeyeater. Once I had found it he was rapidly joined by the Helmed Friar Bird, Dusky Honeyeater and Graceful Honeyeater with the Yellow Breasted Sunbird visiting now and again.

After a few days the Rainbow Lorikeets found the bowls. The first day only two came along - then by the end of the day there was about half a dozen. By the end of the second day there were twenty or more flocking greedily down.

The moment I went out to the trees to refill the bowls, the birds were on the alert and as soon as I had left, they flew down to drink. One day my husband went out and filled the bowls, came back to the verandah but the Lorikeets ignored the whole thing. I just walked out to the tree, turned round and came back. Immediately they flocked down. I tried this several times and each time they came down for me even though I did not refill the bowls but would not come when my husband went out and filled them.

Trying to make it easier for the birds to perch, my husband nailed a piece of red plastic hose to the tree. The Friar birds took to it straight away with no trouble, but when the Lorikeets arrived, they eyed it with suspicion - possibly thinking it was a snake - and it was several days before they would use it.

As the larger birds were hogging the bowls, we tried to help the smaller fellows by putting a piece of chicken wire in the tree and then wedging four small necked pill bottles into the holes. The bigger birds took over these as well, so we put lids with holes in them or two of the bottles. It didn't work as the Lorikeets and Friar Birds took them over just the same. The birds could get their tongues in so far but there was always a little left at the bottom. I would often find one of the bottles capless or pulled out of the wire and one day as I watched, a Lorikeet perched on the wire and with his beak and foot pulled up the bottle out of the wire, tipped it on one side and as the water trickled down the side, happily licked it up.

I have noticed that when the Friar Birds and Lorikeets are in the tree together, it is the Lorikeet who is top dog. The Friar has no chance to feed until the Lorikeet is finished and not always then. The Lorikeets will sit in the tree, full to overflowing, but woe betide anyone who tries to feed from the bowls - not wanting it for themselves, the Lorikeets will pounce and drive away anyone foolish enough to try for a turn.

The Friar Birds in turn, drive out the Yellow Honeyeaters, who drive out the Dusky and the Gracefuls and the poor little Sunbird is just about the last in the "peck order".

A few days ago I was sitting on the verandah when, without any warning a large ginger cat rushed out from the car port, up the leaning trunk of the Callistemon and grabbed a Lorikeet that was feeding at the bowl. I jumped up with a scream and luckily the cat dropped the bird and fled for its life with me after it. The Lorikeets flew away in a flurry but within half-an-hour were back again. My husband has now made a cat guard on the tree to stop a recurrence of this.

Now the Drongoes have found the bowls and it is nothing to see about five of them in the Cadargi enjoying the sweetness. They sometimes come to the Callistemon but seem to prefer the Cadargi.
Now our latest arrival is a Little Friar Bird. He has been around the
bowls a couple of evenings but I have not seen him through the day.
Admittedly sometimes the raucous screech of the Lorikeets at 6.30 a.m.
can get a bit trying on the ears, but to the eye it is wonderful to sit
on our front verandah and watch the birds feeding in the trees only a
few feet away from us. So colourful, so quarrelsome, so noisy but so
interesting.

Marion Cassels. Cairns

DOMINANT NATIVE TREES

DISTRIBUTION IN N.Q.

(Continued from previous issue, No. 163)

ATHERTON TABLELANDS:

This area can be divided into two main types of woodland.
1. OPEN FORESTS: These forests extend roughly from west of Kuranda to
Walkamin and Tolga, where the Great Dividing Range to the west and the
Tinaroo Range to the east are separated by the Barron River and the large
lava flows that are the basis of the rich red Atherton Tableland volcanic
soils. The open forest persists well up into the Tinaroo Range and along
almost the entire length of the Great Dividing Range. The main species are:

Cadaga (Cadaghi) - E. torelliana. Rose Gum - E. grandis.
Poplar Gum - E. platyphylla, formerly E. alba.
Swamp Box - Tristania suaveolens.
Turpentine - Syncarpia glomulifera.
She Oak - Casuarina torulosa ("baker's wood"); Cunninghamii (river)

2. RAIN FORESTS: Before settlement took place on the Atherton Tableland,
rain forests covered almost the whole of the agricultural and dairying
lands, extending to the mountain ranges in the north, east and south
where the bulk of this type of forest is found today. Small pockets of
rain forest have been preserved, notably Lakes Eacham and Barrine, Tolga,
Yungaburra, Malanda and along the Atherton-Ravenshoe road. These remnants
of forest enable the enthusiast to envisage just what a magnificent area
this must have been once. The dominant species, as in all rain forests
in North Queensland, vary considerably with rainfall, soil types and alti-
ditude, but one could expect to find such species as:

Kauri Pine - Agathis palmerstonii and A. microstachya.
Red Penda - Xanthostemon whitei.
Red Cedar - Toona australis.
Queensland Walnut - Endiandra palmerstonii.
Yellow Walnut - Beilachmiedia bancroftii.
Queensland Maple - Flindersia brayleyana.
Maple Silkwood - F. pimenteliana. Silver Ash - F. bourjotiana.
Grey Satin Ash (Watergum) - Eugenia gustavioides.
White Eungella Satin Ash (Yellow Watergum) - Eugenia spp. aff. smithii.
Red Eungella Satin Ash (Red Watergum) - Eugenia spp. aff. smithii.
Kuranda Satin Ash (Cherry Penda) - Eugenia kuranda.
Satin Sycamore (Blood in the Bark) - Ceratopetalum succirubrum.
Silver Quandong - Elaeocarpus grandis.
Rose Alder (Feather Top, Pencil Cedar) - Ackama australiensis.
Rose Butternut (Bolly Sum) - Blepharocarya involucirgera.
Red Tulip Oak (Red Crookoot) - Argyrodendron peralatum.
Northern Silky Oak (Red Oak) - Cardwellia sublimis.
Crater (Grey) Silky Oak - Musgravea stenostachya.
Northern Brush Mahogany (Red Carabeen) - Geisssois biagiana.
Northern Sassafras (Sassafras) - Doryphora aromatica.
Magnolia (Pigeonberry Ash) - Galbulimima belgraveana.
Black Bean - Castanospermum australie.
Candlenut - Aleurites moluccana.
Brown Salwood (Black lattie) - Acacia aulacocarpa.

This article has been kept as concise as possible, while still attempting to convey the vast complexity of the subject.

References: Queensland Forestry Department. Pamphlets 1 and 5.
A Card Key to the Rain Forest Trees of North Queensland, by B. P. M. Hyland.

John P. Martin.

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**Kuranda Range**

12.10.73
(From a Field Day Notebook)

Time: 8.30 a.m. to 3 p.m.
Weather: Fine and partly overcast.
Route: Wright's Lookout south into the rainforest along a track (dry weather road only), down to Surprise Creek; altitude 400 to 500 m.
Habitats: Rainforest, wet Schlerophyll forest, creekbed.

The first half-mile was uphill (northern slope) with rich mountain soil and tropical rainforest, with a great number of birds and butterflies early in the morning.

Plants noted:
- Ficus benjaminii - Weeping Fig (or closely related Ficus sp.)
- Ginger (seed recently dispersed); Cordyline terminalis;
- Grevillea pinnata (leaves light green underneath); Eugenia sp.;
- Epipremnum pinnata; Platycerium alcicornum - Elkhorn;
- Dianella sp., Ageratum sp. (introduced); Lantana sp. (introduced);
- Solanum sp. - Wild Tobacco (introduced); Calamus australis;
- Podocarpus elatus - Brown Pine; Brassia actinophylla - Umbrella Tree;
- Pandanus monticola; Freycinetia sp. (fam.Pandanaceae);
- Smilax australis (climber); Pothos longipes (climber);
- Flagellaria indica - Climbing Bamboo; Laportea moroides - Gympy-gympy;
- Large clumps of ferns (epiphytes) related to Davallia;
- Large treeferns; wild Raspberries; Acacia sp. (to 15 ft. in rainforest);
- Alstonia scholaris - Milky Pine (seeds present).

Birds seen or heard:
- Brown Pigeon, Eastern Whipbird, Rufous Thrush, Victoria Rifle Bird,
- Azure Kingfisher (near creek), Red-backed Wren, Black-headed Logrunner,
- Woomoo Pigeon, Mistletoe Bird, Lewin Honeyeater, White-winged Triller,
- Grey Fantail, Sulphur Crested Cockatoo, Buff-breasted Pitta, Forest Kingfisher, Square Tailed Kite.
Butterflies:
Union Jack, Northern Jezabel, Denrobidium butterfly, Ulysses, Cairns
Birdwing, Green Tiger, Cruiser (very restless).

Other animals:
Centipede, Horse Ant (long legs with abdomen held above thorax), Leaf
Hopper (resemble moth but related to bugs), Lacewing eggs, Gastrocanthus
sp. - Spiny Spider (two white stripes), Link Spider; Red-line Skink;
Wild Pigs (diggings only).

After the first half-mile a ridge was crossed and one continued down-
hill on a southern slope. A sudden change in vegetation was noticed and
the soil was gradually changing to a more and more gravelly topsoil
(decomposed granite). Vegetation for the first 200 yards from the rain-
forest edge was a mixture of mostly schlerophyll species and some rain-
forest (forest canopy 100 ft. high):
Acacia sp. - Black wattle (60 to 100 ft., spreading open top);
Eucalyptus torelliana - Cadag (trunk green to white, to 100 ft.);
Eucalyptus sp. - Bloodwood, and others; Treeferns;
Saw Sedge (fruits ripe on long stalks); Pteris sp. (5 linear lobes).

200 yards down from the top of the ridge the forest changed again to
an open wet-schlerophyll type forest with large shrubs and many grasses
as undergrowth. Soil included much decomposed granite and many large
granite boulders on which orchids and ferns were found.

Callitris sp. - Cypress Pine (spindly trees to 40 ft., fruits round 3/4"
in six sections); Melaleuca sp. (to 40 ft., leaves 2" x ½"), Lepto-
spernum sp. (to 30 ft., branch tips drooping, leaves ½" long very fine
needles); Eucalyptus sp.; Banksia sp. (flowers just finished);
Casuarina torulosa - Forest Sheoak; Shrub to 8 ft. (dense rounded
shape, not in Myrtaceae family, but resembled Melaleuca linearifolia);
Ceratanthus sp. - Fern (fronds to 10 ft. tall); Young trees to 20 ft.
with rough pinnate leaves the size of Black Bean leaves; Grasses,
several species; Epiphytic ferns on boulders; Moss (dry plants, yellow
green, spore cases showing); Lichen (on roadside soil banks, white,
coarse surface with pink upright spore cases); Dodder (very fine
wiry climber, green stems and minute leaves, up to 20 ft. high); Hoya
sp.

This strip of schlerophyll forest was approximately 1½ to 2 km wide
and changed to rainforest once more only 200 yards from the creek.

Several orchid species thrived in this area:
Bulbophyllum sp. (leaves 2" x 1", bulbs ½" round);
Bulbophyllum baileyi; Philadota imbricata;
Dendrobium ruppiyanum; Cymbidium maddidum;
Ribbon Fern (epiphyte); Philandron sp.; Plectranthus sp.;
Albizia toona, Mackay Cedar.

Different vegetation along creek bed (Surprise Creek):
Selaginella sp. (resembled Electric fern); Davallia sp.;
small creeping fern on rocks;

huge trees with enormous buttresses, height to 100 ft., leaves similar
to Tristania laurina but no aroma, seed pods with 3 valves, 1/3";
Stenocarpus sinuatus - Firewheel Tree (young trees with large lobed
leaves); Linoospadix monostachya - Walking-stick Palm; Freycinetia sp.;
Grevillia sp.; Sedge (leaves to 2 ft. linear).

In the creek were yabbies, frog or toad eggs, one fish species; and
not observed, seven or eight species of fish a Platypus in pools.

John Van Grieken.
Banana Fancier

Reading comfortably at the kitchen table, time about 10.30 p.m., I heard the car drive in under the house, then footsteps on the back stairs—my wife returning from an evening out. Suddenly there was a hushed excited call from her: "Jack, Jack, come and look at this. Be quiet!"

Rushing downstairs as quietly as I could, I saw my wife pointing up towards the floor joists where a ripening bunch of bananas was hanging up. Just above the bunch was a beautiful creature I had only ever read about before—a striped possum—perched on the beam, staring straight at us and pretending for all he was worth not to exist. I quietly walked over and around underneath his perch but there was not even a blink of his eyelids, so perfectly still did he sit. However his give-away was about half a yard (or metre) of tail hanging down with its creamy tufted end. I was strongly tempted to give it a tweak but resisted the temptation for fear of frightening him off. Finally we went upstairs and left him to resume his feeding.

This particular bunch of bananas had ripened unnoticed on a plant growing in the long guinea grass about fifty yards from the house. When discovered, claw marks and loose skins showed that something had already been at it. The possum tracked it down to where I hung it and returned every night when all was quiet until the bunch was finished, eventually ignoring us and the children even when we were speaking. A sudden movement would frighten him and he would scamper back up the rope to his perch and freeze, with that give-away tail hanging down so prominently.

Authorities say that the striped possum is insectivorous, even having a specially developed claw for gouging insects from holes and under bark. Why the apparent change in dietary habits? The bunch had not been covered for protection from fruit fly, yet all the bananas we picked for ourselves were perfectly clean. Did he only eat those that were maggot infested?

Shortly after this, a crop of telephone peas which had overgrown the top rail of a six foot wire support started maturing pods at the top. Pea pods up to eighteen inches from the top rail were neatly split and the peas extracted overnight, usually about two days before being ready to pick. Although not sighted, possum was suspect, for it was hard to imagine even the white-tailed rat having the reach and dexterity to eat peas so far from support and so neatly. There was no evidence of grub infestation in the eaten peas.

No other bunches of bananas have been visited since but we still hope for possum's return.

Jack Berry, Kuranda.

Striped possum—Dactyllopsila trivirgata—head and body with conspicuous black stripes down the midline and on each flank, remainder pale yellow or white—forefoot with five toes—the fourth toe longer than the remainder. —"Marsupials of Australia", Basil Marlow.

Cairns Shelling

Living so near the Great Barrier Reef, shell collecting is a popular hobby with Cairns residents. Following the three basic rules—to return overturned rocks to their original position, to collect only a few good quality specimens of each species, leaving the rest to breed, and to forego females with eggs—a minimum amount of damage will be done on an ecological basis. In a society which is becoming increasingly conscious of the importance of conservation, to stress these principles in detail would be redundant. Therefore I shall describe habitats typical of the common genera and how to find them.
Although usually associated with coral reefs, cowries prefer rocky reefs and reef flats. In these intertidal zones, they may be collected during the day from under dead pieces of coral, or at night by torchlight while they are out feeding. Food requirements, ranging from soft corals and sponges to minute algae, vary from species to species, as does the depth of water they inhabit. For the average collector it is difficult to obtain most deep water species himself, although one who combines his hobby with fishing may bring up a few via his catch's stomachs.

The sheen on the surface of olive shells makes them almost as popular as cowries. These molluscs spend much of their time scavenging under the sand for food. In doing so they leave a trail which may easily be followed.

Do not be surprised, when digging hopefully at the end of a shell track, to bring up a long slender shell, an auger, or a mitre. Mitres are colourful shells, often sculptured, and share the olive's scavenging habits. Augers, on the other hand, are predators, catching their prey (thought to consist of worms) by methods similar to those of cones, to which they are closely related.

Whereas the poison of augers is not dangerous to humans, sixteen recorded fatalities prove that some cones are dangerous. These animals, displaying extremely variable colour patterns under their periostracum (an outer layer on the shell which seems to camouflage them) may be found in sand, mud and on reefs. Because they do not shun sunlight as much as the other animals mentioned here, cones are relatively easy to find. What prevents a mad commercial rush is the difficulty in removing the periostracum, but caustic soda or strong bleach ease the procedure.

Although this by no means exhausts the types of shells found in the Cairns vicinity, it summarizes the best known. Collecting shells is a captivating experience, but they need not be cherished as mere souvenirs of that experience. Besides their wide aesthetic appeal, shells have an entertaining background history and some scientific uses.

Annie Termaat.

**Dragonfly & Robberfly**

"Through fields and pastures wet with dew
A living flash of light he flew."

These lines give some idea of the speed of the Anisopterid dragonflies—the most powerful fliers of their order and one of the speediest types of winged insect. They seldom fail to arouse curiosity and admiration for their powers of flight and grace of motion.

Carnivorous throughout their life history, they take a heavy toll of mosquitoes and other biting Diptera and will attack larger flying insects, including smaller species of their own order.

Their habit of flying relatively straight courses while hawking for prey leaves them open to attack by the larger Asilidae or Robberflies, which are more robust but slower than their dragonfly victims. The Robberflies launch surprise attacks from fenceposts, tree trunks and sides of buildings and, once having gripped the victim with their strong spiny legs, they pierce the thorax with their serrated proboscis and suck out its body fluids.

I have observed the capture of dragonfly by dragonfly and dragonfly by robberfly, and have noticed these insects with their prey on several occasions. It is difficult to approach close enough for a good photograph.

Clyde Coleman