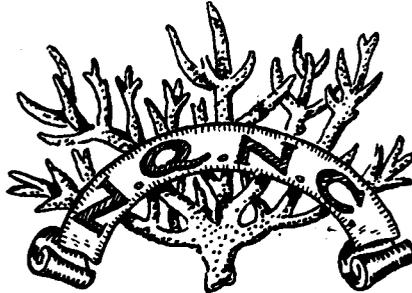

THE NORTH QUEENSLAND NATURALIST



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".

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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.

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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 Sunday prior to meeting.

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

LIBRARY open each Club Night and by arrangement with Librarian.

Subscriptions (Due September 30) :

City and Suburban Members, £1/5/-.

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CAUTION — KILLER AT WORK.

At about 7 o'clock this morning (1st April) our attention was drawn to disturbed movements in the back garden. A large Indian Turtle-dove was on the lawn making little runs at a Black Butcherbird, which gave way before it to perch low on one nearby tree or another, but persistently returned to a brown object on the grass. This as first I thought to be a dead leaf. But then the Butcherbird made a more determined approach, pulled at and partly lifted the object and began to drag it along the ground, and I realised it was a half-grown nestling, with a long strand of grass from the nest still tangled about it. It appeared to be quite dead, but was fully half the size of its attacker and no easy task to pull along. Now the dispirited parent resisted no more, but merely followed at a distance of 4 or 5 feet. The Butcherbird at last reached a stump lying on the ground, hauled its victim up and over, and lodged it against the rough end. There it immediately began to pluck feathers and fluff from the small corpse with the hooked tip of its steely white beak.

At this stage, Cat left the doorstep to take a closer look at "them thar birds". As she approached the Butcherbird flew into the tree above, but the dove remained unmoving. Moments passed; Cat crouched lower and lower; and still the dove sat, one point of an equidistant triangle with the cat and the nestling against the stump. Then the Butcherbird above began to fidget and make a croaking sound at the cat. The dove at last walked a little way and then flew off towards the next yard, where presumably the ravaged nest had been.

Almost simultaneously the Butcherbird flew to the next tree, and Cat leaped the garden bed and raced up the tree after it. Butcherbird flew down to a trellis. Cat backed down the tree and crouched, with waving tail. Butcherbird flew, croaking, to another trellis. Cat, now enjoying the game and without any notion of the pathetic little prize at stake, stalked cautiously towards it; then went racing across the yard again as the bird flew, and up another tree. This time, however, the butcherbird remained quite still and quiet among the topmost leaves. Presently Cat, having cast about a bit and lost her quarry, jumped down from the tree, hared up another for good measure, then came romping back towards the house.

For long minutes the Butcherbird made no move. Then abruptly it flew back to the trellis, down to the stump, and with grim efficiency resumed its interrupted business. A few tugs, a few morsels swallowed, and then the head of the young dove was off and carried up into the tree, where the butcher placed it in a fork to be further tugged at. After being deftly caught and replaced several times on the branch, it was dropped, but at once picked up again and carried to the next tree out of sight. A few minutes later the busy bird was back to attend to the rest of the corpse. This it now attempted to fly with, obviously intending to get it up into a tree also. Two or three laboured "hops" took it over a tall clump of weeds and out of sight.

About 9 o'clock the butcherbird was glimpsed again in the tree to which it had last taken the Dove's head. It made several vigorous head movements as I watched, but whether it had some part of the body there or was merely cleaning its beak, I could not tell. We have not been able, since, to discover any remains of the meal — surely there must have been some? Nor have we been able to locate the nest from which the butcherbird had dragged its unwieldy victim, or to guess the distance it had come.

One wonders, too, if the luring away of the cat was fortuitous or deliberate, and what the outcome would have been had the cat discovered the butcherbird's prize. We suspect the villains might be well matched.

K. J. MORRIS.

LIFE HISTORY OF A CILIATE BLUE BUTTERFLY

N. C. COLEMAN

In the late afternoon of June 29th, 1964, I saw a small blue and white butterfly with short wing cilia, ovipositing on terminal buds and young leaves of a flame tree. These eggs were laid singly and in small groups of up to four. They were pale greenish white when freshly laid, but became glistening white by the end of the next day. The eggs were about 1mm in diameter, spherical, with a slight flattening. The surface was beautifully sculptured by fine ridges at right angles, forming microscopic squares excepting on the uppermost flattened surface, which was smooth and circular and, from which the larva eventually emerged. Green ants were plentiful on the foliage but, though they were often quite close to the butterfly, no attempt was made to attack her.

I took some of the leaves with attached eggs home with about two dozen green ants and placed them in a glass covered box for observation. I left about thirty eggs on the flame tree and these I observed before and after work and on week ends until their subsequent emergence from the pupa about a month later. On the following day the eggs left on the tree were being guarded by one or more green ants in attendance on each egg or group. In the observation box the eggs were also being guarded but the ants moved about a good deal. Whenever I returned to the flame tree there were always ants in attendance on the eggs which hatched in from seven to nine days. The eggs in the observation box were two to three days longer in hatching — This may have been due to less light or lower temperature owing to the box being continually in the shade — whereas the eggs on the flame tree had several hours of sun per day. The larvae were about 2mm long, pale green, and sluglike in shape. They grew rapidly, both on the tree and in the box. In both situations the green ants were now guarding the larvae closely and, if an object on the finger, were thrust close to the larvae, it was immediately attacked by the gaping mandibles of the ant. Fresh leaves were provided to the larvae in captivity which grew nearly as fast as those on the flame tree. Both groups of larvae were examined daily with a hand lens and a few were observed from both groups each day with the low power of a microscope. The larvae in the flame tree were 6-7mm long and 1½ mm to 2mm broad on the 6th day after hatching. Those in the box were about three quarters this size. In both groups the colour was a uniform pale green on both dorsal and ventral surfaces, the head was a pale brown. The larvae had eleven body segments (excluding the head) and were covered, on the dorsal surface, with fine light brown bristles. The first segment extends forward to form a shield over the head which cannot be seen when the larvae is in an upright position. Five ocelli (or simple eyes) is a crescent shaped group on each side of head. Segments 2. 3. 4 with prolegs segments 6-10 with abdominal feet and a pair of anal prolegs on the eleventh body segment. On the 8th day after hatching some of the larvae on the flame tree were about 9mm long and had changed colour on the dorsal surface to an intricate pattern of brown and light green. Before this size had been reached a small round gland had been developing on the dorsal surface of the tenth segment. This gland was now functioning and exuding small drops of a clear fluid. This gland alternately was stroked and licked by the green ants. The typical response to the ants stroking was the exuding of a small drop of clear fluid plainly visible to the naked eye. One or more ants were in attendance on each larvae and though there was some jostling and pushing I saw no signs of hostility between individuals. One of them would take a turn at stroking and licking and allow itself to be pushed aside by an insistant fellow worker who wanted a share of the spoils.

On the 8th day after hatching 15/7/64 I took six of the largest larvae from the flame tree and placed them in a second observation box with about 20 green ants from a different locality that had, as far as I could ascertain, no contact with larvae of this butterfly or related species. Food (crushed insects and honey) and water were placed in this box and fresh leaves were provided daily for the larvae. These fed fairly constantly and only seemed a little disturbed by the change of surroundings. The green ants wandered around and some of them ate part of the food provided. At first, as their movements brought them close to and sometimes in contact with the larvae these ants reacted aggressively with uplifted antennae and gaping mandibles. As their encounters with the larvae were repeated, the aggressive attitude lessened considerably and the ants began tentatively waving their antennae as though testing the air. If their antennae or forelegs had contacted a larvae several times they would draw them through their mandibles and, while doing this would often be approached by another ant and stroked by the latter's antennae. This seeming testing and tasting went on for nearly half an hour before the first drop was actually licked off a gland. Once the gland was located by the ants, they tended to crowd around the larvae and push and jostle one another for a favourable position. With all this crowding and shoving there was no sign of hostility between individuals but the unsuccessful ones would try to lick the jaws and antennae of those who had been fortunate enough to obtain a drop of the gland fluid. As the larvae grew larger, in observation box and on the tree, the green ants would stand on the larvae's back and would even ride round on the insect as it sometimes changed feeding positions. During the period of observation I saw only one cast larvae skin, extremely thin and like a tiny transparent sausage. Presumably the larvae of this butterfly eat their cast skins as do the larva of some other butterflies. At their maximum growth the larvae grew about 18mm long by 5mm broad. Eggstage 7 to 9 days. Larval stage 13 to 16 days. Pupal stage 6 to 11 days. On pupating larval length is reduced by about one third width unchanged. Green ants are in attendance from egg to adult stage, the pupal stage seems to be guarded more strongly than any other, the ants at this stage being very aggressive.

The first adults emerged on the flame tree on 25/7/64, but none of these was captured. A few pupal cases on the tree showed small emergence holes of some parasite. Five females raised from observation boxes, many pupae in boxes failed to emerge, none of these showed parasitism. First adult emerged in box 26/7/64. Adult female 26mm across wings, body length 20-21mm

Colouration.— Dorsal wing surface, metallic azure blue with black edge to rear margin of wings, two small dark patches on rear of each hind wing, dorsal surface of body. — Thorax and fore part of abdomen black, rear drum of abdomen dark with dusting of golden scales. Very long sparse pubescence over upper surface of body.

Dense greyish white pubescence on frontal margin of thorax nape mixture of white grey and black scales in intermingled band.

Antennae.— Tapering out from pedicel 18 and segments greyish with alternate white bands, black towards tip, tip of antennae yellowish orange.

Eyes.— Dark brown with greyish white bristles.

Legs.— Normal, white streaked and banded grey and dark brown, dense white pubescence on ventral surface of thorax. Under surface of wings medium grey with irregular white banding. Small orange and black patch on rear ventral surface of hind wing.

A NEW SPECIES OF GASTRODIA (Orchidaceae) FOR AUSTRALIA

By A. W. DOCKRILL

GASTRODIA QUEENSLANDICA Spec. Nov.

Saprophytus parvus et nudatus foliis. Tubera aequus, 2-7 x 0.4 — 0.7 cm, subtereta. Radices 3-8 a coniunctione caulis tuberique, telus longicae 12 cm et latae minus 1 mm. Caulces 3-8 x 0.15 — 0.25 (extendens autem usque ad 30 cm evo fecundo), Tenerrimus et fragillimus; bracti 4, 3 in vaginam tecte recedentes et scarii, quartus bractus in vaginam non reconditus, adversus summum aliorum trium positus ist. Flores 1-2, subflavi extra, luteusculis intra 8-12 mm longi, segmenta periantha coniunct prope ad apices, tubum aliquanto depressum producunt; sepala erant crassa, obscure tuberculata extra. Sepalum dorsale 8-12 x 5-6 mm, obovatum-cucullatum. Sepala lateralia 8-12 x 6-7 mm, cymbiformes, firmiter carina extra, callus obovatus rugosus in apex $\frac{1}{2}$ intra. Paris liberis petalorum c. 2 x 2 mm, subdeltoidum, apex recurva. Labellum c. 4.5 — 5.5 x 2.5 — 3.0 mm, connectibus basibus sepalorum lateraliorum lorato unguine in media qua sunt duo calli magni, subclavata, firmiter tuberculati utrumquem; lamina trilobata; loba laterales c. 1.0 x 2.5 mm, supercurva, subrescens, summa ad basis; lobum medium c. 1.5 x 1.0 mm, oblongum, obtusum, decurvum; medio discum medio lobi medi sunt duo consimilia alta angusta iuga c. 1 mm lata et 0.5 mm alta. Columna c. 7 x 3 mm, aligna; alae erectae sed decurvae similis coris extendentes super aliquanto anthero; columnum partes priores et laterales quae extant, et alae aut nigrae aut fuscae sunt. Stigma in ima columna, obliqua subscutiformis; ima pars quae similis lunae crescens est, erecta. Rostellum suggestus est ovalis et decurvus leve qui extant ab ima extra clinandrii. Anthera promeste disiunctus, bicellis, brevis, carinata; rostra parvissima, decurva. Pollinia 4 in pares 2, sine stipes aut caudiculi, grana iniqua crassaque. Fructus rectus, c. 2.0 x 0.6 cm, cylindricus.

HOLOTYPE: LITTLE MULGRAVE RIVER, NORTH QUEENSLAND

(A. W. Dockrill, 6th January, 1962 — BRI)

DISTRIBUTION: Plants have been observed in an area extending from the Bloomfield River to the Russell River in North Queensland, but the range is probably greater than this.

A small leafless saprophyte. Tuber horizontal, 2-7 x 0.4 — 0.7 cm, subterete. Roots 3-8 from the junction of the stem with the tuber, up to 12 cm long and less than 1 mm diam. Stem 3-8 x 0.15 — 0.25 cm (but elongating to as much as 30 after fertilization of the ovary), extremely delicate and brittle; bracts 4, 3 closely sheathing and scariosus, the fourth not sheathing and situated opposite the uppermost of the other 3. Flowers 1-2, dingy yellow outside, orange inside, 8-12 mm long, perianth segments fused together almost to their apices to form a somewhat depressed tube; sepals thick in texture, indistinctly tuberculate outside. Dorsal sepal 9-12 x 5-6 mm, obovate-cucullate. Lateral sepals 8-12 x 6-7 mm, symbiform, strongly keeled on the outside, on the apical half inside, there is a raised obovate rugose area. Free portion of petals about 2 x 2 mm, subdeltoid, apex recurved. Labellum about 4.5 — 5.5 x 2.5 — 3.0 mm, attached to the bases of the lateral sepals by a lorate claw in the middle of which are 2, one on each side, large, subclavate, strongly tuberculate calli; lamina trilobate; lateral lobes about 1.0 x 2.5 mm, upcurved, subrescentic, highest towards the base; mid-lobe about 1.5 x 1.0 mm, oblong, obtuse, decurved; extending from the centre of the disc to the centre of the mid-lobe are 2 parallel, high, narrow ridges about 1 mm wide x 0.5 mm high. Column about 7 x 3 mm, winged; wings erect but curved horn-like, extending well above the anther; the anterior lateral portions of the column, which are prominent, and the wings, are black or dark brown. Stigma at the base of the column, oblique, subscutiform, the basal crescentic section raised. Rostellum an oval, slightly decurved platform projecting from the anterior base of the clinandrium. Anther readily detached, 2-celled,

shallow, ridged; Rostrum very small, decurved. Pollinia 4 in 2 pairs with no apparent stripes or caudicles, coarsely and unevenly granular. Capsule erect, about 2.0 x 0.6 cm, cylindrical.

The new species is perhaps most closely allied to *G. papuana* schltr., but differs from it mainly by the joined lateral sepals not being saccate at the base but rather at the anterior; the labellum clawed, thence rapidly dilated, thence constricted into a small mid-lobe and with 2 calli on the claw and 2 short high ridges near the apex rather than being not clawed, narrow-ovate, having 2 calli at the base and no apical ridges; the column stout near the base and becoming more slender near the apex rather than the reverse and the anther with a short, broad, more or less apiculate rostrum rather than a deitoid one. The new species does not remotely assemble the only other Australian species of the genus, *G. sesamoides* R. Br., being very much shorter in stature, not having swollen ovaries, and the flowers having a depressed appearance and having 2 tuberculate calli on the claw of the labellum.

This remarkable little orchid is found on the floor of dense rain forests, projecting a mere centimetre or two above the fallen dead leaves of trees, very much resembling, when viewed from above, a small toadstool of the same size and colour which is prevalent in such areas. It emerges from the ground after the first heavy summer rains (usually before the Monsoons) develops very quickly and the flowers drop off the plant almost as soon as they reach maturity and since fertilized ovaries are common, the flowers are probably cleistogmatic to a large extent. The whole process from the emergence of the plant from the ground to the dispersal of seed only takes a few days.

—o-o—

THE IMPERIAL BLUE BUTTERFLY

I ALMENUS I CTINUS (HEWITSON)

During February of this year (1963) I was fortunate in discovering a locality where the Imperial Blue butterfly (*I ALMENUS I CTINUS*) was breeding. The area where I found them was in a small valley known as **LENEVA** which is approximately 8 miles from **ALBURY**; A city on the Victorian New South Wales border. They proved to be fairly well distributed here, and I found them in small colonies over a distance of nearly 4 miles.

This butterfly belongs to the **LYCAENID** family; A group of butterflies known by the popular term "Blues and Copper". Their colouring includes many shades of purple, violet, green and red. Brilliant blues and metallic hues predominate resulting in insects of extreme beauty.

From information I have, the range of this butterfly extends right along the east coast of Australia as far north as **KURANDA**. The caterpillars which I found were feeding on **EARLY BLACK WATTLE** (*Acacia* 'decurrens') but I believe they also feed on **BLACKWOOD** (*Acacia melanoxylon*). The caterpillar is attended by the large meat ant (*Iridomyrmex detectus*) which guards them and will attack fiercely anyone interfering with the larvae or pupae. If a caterpillar is placed on the ground the ants immediately surround it and shepherd it back to the foodplant. The caterpillars feed openly during the daytime. The pupae are found attached to the branches and the trunk of the foodplant, and in most cases I found them singularly. The following is a general description of the specimens I succeeded in breeding. Wingspan approximately 1½ inches. On the upperside the outer margins of the wings are brown while the central areas, are green in the male and blue in the female. The lower edges of the hindwing are edged with black inside which is a narrow border of white which is broken up by a number of black dots. Inside this a small section of orange. From the lower part of each hindwing extends a narrow black tail tipped with white.

The underside colouring I believe ranges from grey to light brown. In my specimens it was a light shade of brown. This general colouring is broken up with lineal markings of black.

EDWARD LITTLE.

— P E N G U I N S —

THE ADELIES

Of all the several species of penguin the Adelie, (*Pygoscelis adilia*) is the one most familiar to Antarctic visitors. On our voyage south we met them many miles from the Antarctic coast and later on we were able to study them at close quarters ashore.

One of the smaller species, the Adelie is about 22 inches tall with black and white plumage, his clean "dinner suit" attire being matched by his pert air.

The Adelies nest in countless thousands each spring, on the ice-free areas of the mainland and on the rocky off-shore islands, and during their period ashore in the warmer months there were always several wandering through the station, often playing havoc with the nightwatchman's nerves during the silent hours.

The Husky pups, in playful mood, but with an eye to a meal of fresh meat, marrassed these wanderers unmercifully, although an adult bird was well able to hold it's own and many a pup was sent yelping with pain from the blow of a bony wing.

The older dogs, more sagacious than the brash young pups, patiently waited, feigning sleep until an over-curious bird approached too closely, then "snap" and another penguin provided lunch for one of these ever hungry animals.

Like others who had previously visited these regions, we could not fail to be intrigued by the strange mating and nesting habits of these birds.

The Adelies commence their journey over the sea-ice to the mainland and nearby islands late in October. They do little walking except where the ice surface is rough but move along at a much greater pace by "tobogganning" on their breasts, using their flippers and feet for propulsion.

On arrival at the chosen "Rookery" the male bird seeks to attract a mate by adopting the strange behaviour of stretching his neck upwards, beating his flippers and uttering guttural sounds.

After mating the pair of birds together make a "nest" of rounded stones and the "rookery" then becomes a hive of activity as the birds vigorously collect pebbles, often stealing from their neighbours when they think that they can get away with it! Then after about three weeks the eggs are laid and after the thirty five day hatching period each pair, if they are fortunate, become the proud parents of two fluffy grey chicks.

An extract from my diary reads as follows.....

Monday, 18th December.

.....took a break after lunch to go with Bill Young to Flat Island in order to check and photograph the Adelies. Found that only one chick had hatched so far, so he became the most photographed chick in Antarctica! Many of the penguins had two eggs and some had none. We robbed a penguin of one egg and presented it to another bird who was trying to hatch a stone! She quickly took possession. After spending about two hours trying to locate a Skua's nest which was known to be there, we found it only when one bird returned to sit on the eggs. The birds were extremely annoyed by our presence and repeatedly attacked us. A Wilson Petrel was removed from it's nest and photographed. There are dozens of them nesting under the rocks. No "Snowies" (Snow Petrels) were seen although it was reported that there were many nesting on the island. A very interesting trip but the ice rather hazardous. Nearly had a swim on one occasion".

We subsequently carried out several times this experiment of robbing a bird of one egg and giving it to another not so fortunate, in order to test their reaction. After the eggless one suddenly found herself in possession of an egg she adopted the attitude of a rightful owner, tucking it under her body and glaring aggressively at her near neighbours. The other bird on finding herself bereft of one egg carried out a hurried search and attempted to un-

seat one or two of those nearby in an effort to make good her loss.

However after a few skirmishes the fuss subsided and once again the rookery settled down to an uneasy truce, the case of the missing egg, apparently completely forgotten.

The predatory skuas patrolled the air above like hawks over a chicken run, waiting for an opportunity to snatch up an egg or chick. Although we noticed several broken eggs and some obviously dead, it was our opinion that the heaviest mortality was due to the attacks of skuas.

For approximately two weeks the dark fluffy chicks are protected by the mother's body, after which the parents are able to leave for the nearest tide-crack or seal hole in their search for food.

A strange feature at this time is the grouping of all the chicks for mutual protection and for warmth.

The young penguins grow rapidly as the parents work hard to feed them with semi-digested shrimps and after about four weeks they are fully grown, ready to leave the rookery and fend for themselves.

Daily trips were made by other members of the party to the islands but the sea-ice was now showing signs of breaking up and after two weeks I was reluctantly forced to call a halt to these visits.

Off the coastline of MacRobertson Land, on which Mawson Base is situated, there are many hundreds of small islands, most of which are inhabited by the Adelie Penguins during the breeding season. As a result heavy deposits of guano have built up over the years, in some cases which we noted, up to a depth of three feet. The deposits contain large proportions of feather and down, the result of moulting, and also numerous mummified bodies of the penguins themselves.

How the gardeners amongst the party would have liked a few sacks of this phosphate and nitrogen rich fertiliser at home!

Although the sweetish odour of the guano was not altogether unpleasant we learnt to avoid camping on rookery islands when using dog teams because the animals on quenching their thirst by licking the surface snow, became very ill.

During the early months of the year the birds remained ashore for the moulting when every nook and cranny, every sheltered spot, contained some very dejected looking penguins. Some groups preferred to moult in comparatively open places on the snow, but always on the northern slopes of a mound or hill where there was stronger sunlight and some protection from the daily Katabatic wind.

Unless disturbed, which annoys them very much, the penguins remain practically motionless for days on end, apart from occasionally assisting the removal of their old plumage with their beaks, and having a few arguments amongst themselves. As the old plumage is shed in untidy patches its place is taken by a growth of short, fur-like down which apparently provided adequate protection against the bitter cold. During the few weeks of moulting they do not eat but are sustained by their accumulated body fat; however by the time they are ready to return to the sea they are starved looking birds indeed.

Now this is a land of severe blizzards, some of them lasting for three or four days which howling winds often exceeding 130 miles per hour in velocity and bringing from the Plateau, clouds of stinging drift snow which reduce visibility to almost nil. For humans it is a time of danger and discomfort and even for the huskies, bred to withstand the sub-zero bitterness and the smothering clouds of snow, it is a trying and miserable time.

But what about the penguins, nesting on the rock exposures of the islands or "sitting out" the moult?

To find the Adelie population apparently unharmed after a severe blizzard, to find any living thing, was to me a source of amazement. Truly nature looks after her own!

EDITORIAL

At this point it is fitting we should review the clubs activities over the past 12 months and give some idea of what is proposed for next year.

Our meetings are attaining a higher standard of interest and we have heard excellent lectures by our own and guest speakers. Also the quality of films and slides shown has been good with ample material available and a promise of more to come.

Field Days have sometimes been poorly attended but this is receiving the attention of our live wire committee. We lack botanists amongst our members but Mr. Gordon Stephens who was formerly an active member of the Club has agreed to accompany us on a Field Day either in November or December. He has an extensive knowledge of our trees and plants and we should learn a lot from him. This idea will be extended to other fields, geology, reptiles etc., and we hope will result in adding interest and increasing attendances.

Parcels of specimens have been dispatched to Meerut College, India and the Queensland Naturalists Club and this opportunity it taken of commending the keen members responsible for collecting and dispatching same.

Our Orchid Check List is being revised by Mr. Alick Dockrill who is taking pains to do the job properly. Publication of the new list will take some time as several new species have still to be published before it can be printed. Intending purchasers please bear with us a while longer.

Entries for the Flecker Memorial Medallion were poor, only one being received from Peter Cassels who was awarded 2nd prize but no medallion. That entries from our juniors were so few can be attributed to lack of interest by we older members. We should and must encourage our children to take an active interest in nature. A hobby such as this can become absorbing and be the means of keeping ones feet squarely on the ground in the ever increasing tempo of modern living.

The regular publication of this journal depends mainly on two things — availability of material to print and money to print it with. Articles short or long are always wanted. Each of us is continually observing happenings in nature that would be of interest to others so let your editor have your observations. Don't let inability to write fluently deter you. If necessary send notes only, we can knock them into shape for publication. Write Box 991 or Phone Jack Cassels, Cairns 3703 (working hours) or Mrs. Geddes 2323 to leave messages for onward transmission.

Like most no-profit Clubs, we depend mainly on members subscriptions for finance so as these are now due again, please send yours promptly. The sending of reminder notices cost the Club money and means more work for the Treasurer. Donations will be gratefully received.

The Club has been active on Conservation but space does not permit a more detailed account.

We can get out of anything only as much as we put into it so let us strive to make our Club function as it should — a force in the study, enjoyment and conservation of nature.

SPECIALIST ADVISORY PANEL

Astronomy	Mr. C. CANTRILL
Botany	Mr. S. E. STEPHENS, F.R.H.S.
Conchology	Mrs. A. J. READ
Entomology	Mr. N. C. COLEMAN and Mr. G. BROOKS, F.R.E.S.
Geography	Mr. J. ORRELL, F.R.G.S.
Herpetology	Mr. V. M. REILLY
Marine Biology	Mr. A. A. READ
Mineralogy	Mr. K. COLLINS
Ornithology	Mrs. J. CASSELS, Mr. J. BRAVERY
Orchidology	Mr. A. W. DOCKRILL, Mr. S. St. CLOUD



CLUB HANDBOOKS

Check List of North Queensland Orchids, 1964 (In course of Revision).

Check List of North Queensland Ferns	1/-
Edible Plants in North Queensland	2/-
List of Birds Occuring in North Queensland	2/-
Marketable Fish of the Cairns Area	1/-
Check List of Australian Dryopidae	6d

(Plus Postage)