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# The North Queensland Naturalist

The Journal and Magazine of the North Queensland Naturalists' Club.

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## NORTH QUEENSLAND NATURALISTS' CLUB

Meets at Girls' and Infants' School, Abbott Street, Cairns,  
usually on second Monday in each month, at 8 p.m.

NEXT MEETING—MONDAY, 14th SEPTEMBER, 1936

BUSINESS: Annual General Meeting. Election of Officers.

Instead of the Annual Address which will be postponed until next meeting, Mr. C. T. White, Government Botanist, will address the meeting on "A General Talk on the Flora of North Queensland."

Election of Member.

Mr. N. J. B. Plomley, Bank of  
N.S.W., Threadneedle St., London.

Proposer

Seconder

Dr. H. Flecker Mr. M. Auricchio

### Exhibits at August Meeting.

Mr. L. Massey (Cairns)—Eggs, caterpillars, chrysalids and adult male and female of the butterfly (*Delias argenthona* Fabr.) with its food plant, *Loranthus odontocalyx*, var. *propria*, a mistletoe.

Dr. Flecker (Cairns)—A number of crabs. Unripe fruit of *Barringtonia speciosa*. *Balanophora fungosa* showing the male and female flowers. Herbarium specimens.

Mr. J. Wyer (Cairns)—Native stone axe and sharpening stone; petrified jaw-bone (mandible) of a *Diprotodon*, petrified wood and petrified clay. These specimens were obtained from the Chinchilla district.

Mr. A. B. Cummings (Green Island)—A razor fish (*Centriscus scutatus*).

Mr. Pedder (Edge Hill)—A mounted specimen of Lesser Flying Phalanger (*Petaurus breviceps*).

Mr. Auricchio (Cairns)—Spiny Red Spider (*Gasteracantha* sp.)

Mr. J. G. Brooks, B.D.Sc. (Cairns)  
—A small collection of Hemiptera (bugs).

(a) A representative of the family Tingidae.

(b) A representative of the family Gerridae, sub-family Halobatinae, probably *Hermatobates haddoni* Carp. This particular specimen lives on the ocean.

(c) A representative of the family Neididae (*Capyella lobulata* Berg.) This specimen is to be found on the under surface of leaves of the stinging tree (*Laportea*).

A collection of North Queensland Spiders, determined by Mr. Lindsay D. Sykes, of Melbourne.

### Visitors.

Mr. J. E. Bray (Sydney)—Interested in botany, particularly grasses.

Mr. and Mrs. E. G. Ogg (Gladstone)—Interested in birds, fish and mammals.

## INSECT FAUNA OF THE UPPER WALSH RIVER, NORTH QUEENSLAND.

By R. C. CANNON, B.Sc.Agr.

The country is of granitic origin, with occasional areas of sandstone formation. In general one is faced with barren, stony ridges with characteristic stunted vegetation and coarse grasses, among which spear grass,

(*Heteropogon*, sp.) predominates. The whole of the country is very much cut about by creeks and gullies, all of which find their way to the Walsh River, eventually emptying their waters into the Gulf of Carpentaria.

The less rugged portions of the country constitute an open forest formation with poplar gum, (*Eucalyptus platyphylla*), ironwood, (*Erythrophloeum Labouchei*), beefwood, (*Grevillea* sp.), box, (*Eucalyptus* sp.) bloodwood (*E. corymbosa*) and "quinine-berry" (*Petalostigma quadriloculare*) with ironbarks (*Eucalyptus* sp.) on the stony ridges. In the poorly drained areas are to be found associations of several species of the tea-tree (*Melaleuca* spp.), whilst the Walsh River carries a flora almost entirely of tea-trees and she-okes (*Casuarina* sp.), the former growing to a fairly large size.

The whole area presents a very barren and uninviting appearance, especially during the many dry months of the year. This probably accounts for the fact that it has been comparatively neglected by entomologists. A day's collecting will rarely yield a very large harvest, though what one does collect often comprises some very interesting specimens, including some rather bizarre forms.

Taking the year as a whole, certain families of Coleoptera probably occur in the greatest numbers, namely, Tenebrionidae and Curculionidae. To the casual observer this fact would be far from obvious as the greater proportion of these beetles are to be found under logs, rocks and other debris. During the summer months there are countless wasps and scarabs to be seen in flight and visiting the blossoms of the poplar gum, and other trees. At this period, too, there is a large range of moths to be taken on grass during the day or around lights at night; while on the other hand, the number of butterflies is limited. As in most of this inland country, large termite heaps are to be seen everywhere, carrying their population of termites which swarm around lights at certain periods of the year. Then, too, the creeks and river play their part in maintaining a fauna of aquatic and semi-aquatic insects. For convenience we shall discuss the separate orders of importance under their respective headings.

**Plectoptera:**

Mayflies are by no means common in any area and are but infrequently met with in this arid area, odd speci-

mens having been seen on the wing. The larvae or "naiads" spend their lives in the water and the adult emerge for its brief life of only a few hours. With such a short reproductive life, it is not surprising that very few can survive the dry conditions so often prevailing.

**Odonata:**

During all but the mid-winter months adult dragon-flies may be collected around waterholes and watercourses. The "nymphs" lead an entirely aquatic existence and are to be found clinging to grasses, sedges or dead twigs below the water level, where they feed on the lower forms of water life as well as on the larvae of other aquatic insects. There are represented both sub-orders, Zygoptera and Anisoptera. Quite a considerable time has been spent in searching for the larvae of that elusive damselfly, *Chorismagrion risi* Mort., but so far no success has been attained. Representatives of another group of archaic types have been collected, however, and include *Agriocnemis rubescens* Selys and an undetermined species of the primitive *Protoneturidae*.

**Orthoptera:**

This order includes the most primitive types of winged insects in which only minor differences occur between the larval and imaginal forms. In Europe fossil cockroaches are dominant in the earliest known insect beds of the Upper Carboniferous, though in Australia they do not appear till the Upper Triassic. To-day, on the other hand, they form a very small proportion of the Class Insecta. With the modification of the mode of living has come the condition of reduced wings as shown by the giant cockroach, *Macropanesthia rhinoceros* Sauss., the female of which measures up to 2 inches in length. This insect is quite common following a downpour of rain, when it will be seen crawling about and burrowing into the sandy soil. Some rather bizarre mantids are met with at most periods of the year, while grasshoppers occur in large numbers during the summer months. At certain periods these constitute a serious pest of young tobacco seedlings and often, to a minor extent, of the crops planted in the field.

**Isoptera:**

Wherever one looks there are to be seen the termitaria of so-called "white-ants." They occur over the whole range of soils in the district and are built up very rapidly. Fence posts, wooden buildings, dead trees, and even living trees are subject to their attack, the one exception being cypress pine (*Callitris* sp.). They do not enter this wood though their covered galleries may often be seen on the surfaces of cypress pine logs or posts.

They are probably a specialised offshoot of the Orthoptera in which the social habit has become predominant. Except in the case of the giant termite, *Mastotermes*, five distinct castes can be recognised, namely, the royal pair, the workers, the soldiers, the sexual or winged caste and neotenic royalties.

Following rain there are usually to

(To be continued)

**ADDENDA ET CORRIGENDA.**

(Figures after plants indicate observed flowering months).

- Vol. 1, No. 9, p. 6. Before Wilkiea add (P.) coriacea, White.
- Thornton Peak (Brass).
- No. 10, p. 6. Before (*Garcinia*) Gibbsiae add (G.) Brassii, White.
- Thornton Peak (Brass).
- No. 11, p. 7. *Euphorbia prostrata*. For Introduced read Pantropical.
- P. 8. Before *Glochidion* add (P.) Brassii, White, 3.
- Thornton Peak (Brass).

be seen millions of the winged caste of sexual individuals which swarm around lights, shedding their wings everywhere. It is this caste which is responsible for the formation of new colonies.

**Hemiptera:**

This extensive order comprises a wide range mostly of vegetarian insects, and, therefore, insects harmful to crops of all kinds. Representatives of both sub-orders are quite common and the most abundant group would probably be, as elsewhere, the family Pentatomidae. One of the most striking bugs is the large *Lethocerus indicus* Stal., an aquatic species which is frequently taken around lights. The waterstriders (*Gerridae*) can be seen on the surface of any still water moving rapidly over the surface of the water when disturbed. In the waters themselves are to be found the carnivorous *Notonectidae*.

- No. 12, p. 7. After *Dimorphocalyx* add Thwaites.
- P. 8. *Ficus infectoria*. For Mooleeah read var. *Forbesii*, King.
- Mooleeah, 3 to 11. After *Iocs*. Mapoon, add (F.M.B.), Green Is. (Wright), Cairns (Flecker).
- Vol. 2, p. 16. *Chenopodium ambrosioides*. For Introduced read Trop. Amer.
- Vol. 4, p. 3. After (*Acacia*) *Whitei*, add Marden.
- P. 7. After *Ostrearia* add Baillon.

**CENSUS OF NORTH QUEENSLAND PLANTS—(Continued)**

(Figures after plants indicate observed flowering months).

- Zizyphus*, Juss.
- Oenoplia*, Mill. Wine Jujube.
- Is. of G. of Carp. (R.Br.), Thursday and other Is of Torres Str. (F.M.B.)
- Jujuba, Lam. Common Jujube. Torres Str. (Dubouzet).
- Dallachya*, F.v.M.
- vitiensis*, F.v.M. Murtillam.
- Somerset (F.M.B.), Daintree R. (Kajewski).

- Schistocarpea*, F.v.M. 9.
- Johnsoni, F.v.M.
- Boonjie (Kajewski), Mt. Bartle Frere (Johnson).
- Colubrina*, L. C. Rich.
- asiatica*, Brongn. 3 to 6, 11 to 1.
- C. York (M'Gillivray), Howick's Gp. (F.v.M.), Daintree R. (Kajewski), Green I. (Bates), Cairns (Flecker), C. Grafton (A. Cunn.) Russell R. (F.M.B.), Rocking ham B. (F.M.B.), Pt. Denison (F.M.B.)

**Alphitonia**, Reissek.  
*excelsa*, Reissek. Red Almond, 3, 4.  
*Sweers* I. (F.M.B.), Batavia R.  
 R. (Wård), Mt. Mulligan  
 (Flecker), Cairns (Cowley), L.  
*Barrine* (Flecker), Pt. Denison  
 (F.M.B.)  
 var *franguloides*, Maraticoola.  
 Boar Pocket, nr. Barron R.,  
 (J. F. Bail), Jordan Cr., In-  
 nisfail Dist. (Mocatta).  
**Whitei**, Braid.  
 Daintree R. (Kajewski).  
*Petriei*, Braid et White. Whiteleaf.  
 9, 10.  
*Thursday* I. (Francis), Cairns  
 (Francis), Clayton's Cr. (Flecker)  
**Emmenospermum**, F.v.M.  
*alphitonioides*, F.v.M. Jingly.  
 Barron R. (Francis), Cairns  
 (F.M.B.), Gadgarra (Kajewski),  
 Rockingham B. (Dall.)  
**Gouania**, L.  
*Hilli*, F.v.M.  
 Daintree R. (Hill).  
*australiana*, F.v.M.  
 Mulgrave R. (F.M.B.), Rock-  
 ingham B. (Dall.)  
**Sageretia**, Brongn.  
*hamora*, Brongn.  
 Freshwater Cr. (Francis).  
**FAMILY VITACEAE.**  
**Cissus**, L.  
*antarctica*, Vent.  
 var. *pubescens*, Domin.  
 Gadgarra (Kajewski).  
**Tetrastigma**, Planch.  
*nitens*, F.v.M.  
 Gadgarra (Kajewski), Herbert  
 (F.v.M.)  
**Vitis**, L.  
*cordata*, Wall. 8.  
 Range Rd. (Flecker), Barnard  
 Is. (M'Gillivray), Burdekin R.  
 (F.v.M.)  
*adnata*, Wall.  
 Ras. Barron R. (Cowley).  
**saponaria**, Seem.  
 Walsh R. (Barclay-Millar), Tor-  
 res Str. (R.Br.), C. York (M'Gil-  
 livray), Piper's I. (M'Gillivray).  
*trifolia*, L. Lorwora. 1.  
 Szatan R. (F.M.B.), Nassau R.  
 (F.M.B.), Palmer R. (F.M.B.),  
 C. York (M'Gillivray), P. Char-  
 lotte B. (F.M.B.), Cooktown,  
 (F.M.B.), Bullock Paddock,  
 Brooklyn Stn. (Flecker), But-  
 cher's Hill (F.M.B.)

*strigosa*, F.M.B.  
 Ras. abt. Barron R. (Nugent).  
**brachypoda**, F.v.M.  
 Rockingham B. (Dall.)  
**penninervis**, F.v.M.  
 Campbell's Cr. (Flecker), Rock-  
 ingham B. (Dall.)  
**clematidea**, F.v.M. Mor-bir. 2, 3, 6,  
 10, 12.  
 Mt. Mulligan (Flecker), C. Bed-  
 ford (F.M.B.), Cooktown  
 (F.M.B.), Green I. (Flecker),  
 Ras. abt. Cairns (Nugent), Mt.  
 Bartle Frere (Flecker).  
**japonica**, Willd.  
 Endeavour R. (Planchon), Ras.  
 abt. Barron R. (Cowley).  
**acetosa**, F.v.M., Mbau-nu.  
 Mabuiag I. (Macgregor), Palmer  
 R. (F.M.B.), Batavia R.  
 (F.M.B.), C. York (F.M.B.), P.  
 Charlotte B. (F.M.B.), C. Bed-  
 ford (F.M.B.), Cooktown  
 (F.M.B.), Butcher's Hill  
 (F.M.B.), Bloomfield R. (F.M.B.)  
**hypoglauca**, F.v.M. Water Vine. 12.  
 Palmer R. (F.M.B.), C. Bedford  
 (F.M.B.), Cooktown (F.M.B.),  
 Bloomfield R. (F.M.B.), Cairns  
 (F.M.B.)  
*opaca*, F.v.M. Pepper-vine. 12.  
 Mt. Mulligan (Flecker), Cook-  
 town (F.M.B.)  
**Gardineri**, F.M.B.  
 Walsh R. (Gardiner).  
**Leea**, L.  
*sambucina*, Willd. Kalet.  
 Is. of Howick's Gp. (F.v.M.)  
**FAMILY ARALIACEAE, Vent.**  
**Delarbrea**, Vieill. Blue Delarbrea.  
*Michieana*, F.v.M. 1.  
 Mt. Spurgeon (Flecker), Mul-  
 grave R. (F.M.B.), Rockingham  
 B. (F.M.B.)  
**Aralia**, L.  
*Macdowallii*, F.v.M.  
 Russell R. (Hill).  
**Pentapanax**, Seem.  
*Willmottii*, F.v.M. 10.  
 Mt. Bartle Frere (Kajewski),  
 Mt. Bellenden Ker, 5,000 ft.  
 (Sayer and Davidson).  
**Mackinalaya**, F.v.M.  
*macrosciada*, F.v.M. 9, 10.  
 Smithfield Pa. (Flecker), Fitzroy  
 I. (M'Gillivray), Clayton's Cr.  
 (Flecker), Campbell's Cr.  
 (Flecker), Dunk I. (M'Gillivray),  
 Rockingham B. (Dall.), Pt. Molle  
 (Fitzalan).