

107
41

The

North Queensland Naturalist

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

Vol. IV.

CAIRNS, 1st AUGUST, 1936.

No. 47

47

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, 10th AUGUST, 1936.

Lecture by Mr. W. Schridde, entitled "Capture of Crocodiles. Animals in Captivity."

July Lecture.

Mr. Mungomery, of the Meringa Experimental Station, delivered an interesting address on the life-history and habits of the Giant Toad (*Bufo marinus*). This toad is a native of South America being more prevalent in the coastal districts. It was taken to Hawaii, where it has been very successful in controlling insect pests and now has been introduced into this district, in the hope that it may control the gray-back cane-beetle (*Lepidoderma albo-hirta*) and other insect pests.

This toad has not been bred in captivity until Mr. Mungomery was successful at Meringa. The female is larger than the male and has a smooth back whereas the male has a rough one. Normally the back is dark-brown, but yellowish after a moult. The ventral surface is creamy. The toad is capable when greatly provoked of secreting a poison which acts as a protective mechanism.

Life History.

Egg laying takes place during practically every month of the year at Meringa. The eggs are deposited in strings which entwine around aquatic plants. One toad laid 30,000 eggs, but the average is 20,000.

Blackish tadpoles hatch in one to three days depending on the temperature. On the tenth day after hatching, the tadpole begins to develop legs. When the legs are developed the tail begins to shrink. During the period of tail-shrinkage, the tadpole does not eat as the tail itself

provides sufficient nourishment. When the tail has disappeared the young toad leaves the water and lives on small insects.

The mature toads are capable of undergoing a sex reversal.

The lecture was appreciated by the members present.

Exhibits.

Mr. L. Massey, Cairns—Eggs, caterpillars, chrysalids, and adult male and female of the butterfly (*Papilio priamus euphorion* Gray).

Mr. P. G. Close, Cairns—Northern Blue Tongue Lizard (*Tiliqua scincoides*).

Mr. A. B. Cummings, Green Island—A Flute-mouth Fish (*Fistularia petimba*).

Dr. N. J. O'Connor, Mareeba—A Scorpion (*Lychas marmoreus*) responsible for injuries to a human-being.

Mr. S. L. Hannan, Cairns—A Larva of the beetle *Xylotrupes australicus* Thoms, Family *Scarabaeoidae*, Sub-family *Dynastinae*.

Mr. R. Hunter, Freshwater—A case of moths, Order *Lepidoptera*, including *Ophideres salamina* Fabr. and *O. materna* L., Family *Noctuidae*, Sub-Family *Noctuinae* (Orange sucking moths) and *Coscinoscera hercules* Misk. Family *Saturniidae*, a specimen of the largest moths in the world.

Dr. Flecker, Cairns—A collection of Herbarium specimens, in particular including *Rhododendron Lochae*, now placed on the list of protected plants.

ENCOUNTER BETWEEN CONE SHELL AND OCTOPUS

By Bruce Cummings.

In the course of seeking material for cinematographic study, a small party set out on the exposed reef at Green Island and came across a small octopus whose tentacles extended some eight or nine inches from its body. Placing this in an enamel pail of sea water, a further search resulted in the discovery of a live cone shell, *Conus textile* which was likewise deposited in the same receptacle, where the cephalopod was swimming about freely.

It was not long, however, before the latter was aware of the presence of the cone, and some twenty minutes or so later, as is usually the case in attacking gastropods, placed one of its tentacles across the entire length of the narrow opening of the shell, the tip of the tentacle entering further than the remainder. (The mouth of the shell measures two and a quarter inches long by about five-sixteenths of an inch wide). About twenty seconds later the octopus quickly withdrew its hold waving its tentacles about with a writhing motion as though violently agitated.

Inspection of the shell immediately after the withdrawal of the tentacles revealed a thin round spike-like object, evidently the radula being with-

drawn. This spike-like radula was about an inch in length tapering from its proximal extremity to a point distally, and was bright red in colour. A few minutes later it was noted that the octopus had shed one of its tentacles, it being detached close to its body.

The octopus was transferred to a glass tank and although well-supplied with abundant fresh sea water it was found dead on the following morning. On the other hand the cone shell did not suffer any apparent injury and is still alive and in excellent condition ten days later.

When the radula is protruded, it is seen directly beneath the syphon, the latter having a red band at its free extremity, a white ring around its centre and a black band proximally. The cone itself measures two and a half inches in length and an inch and three-sixteenths in diameter.

In view of the reported case of a fatal issue following the bite of a native of New Caledonia in 1874 from this shell as well as of similar fatalities from other species of *Conus*, this encounter between the two molluscs is interesting. No doubt, such are of frequent occurrence although rarely observed.

ADDENDA ET CORRIGENDA.

(Figures after plants indicate observed flowering months).

Vol. 1, No. 9, p. 8. *Tinospora smilacina*. Add loc. Second Bch. (Flecker) and mo. 4.
Cleome aculeata. For Introduced read Trop. Amer. and add mos. 3, 6, 9 to 12.
 No. 10, p. 5. *Capparis canescens*. Add loc. Mt. Mulligan (Flecker) and mo. 12.
 After *Sisymbrium orientale* add L. Cent. and S. Eur.
 P. 6. Before *Melia* add *Turraea*, L. *pubescens*, Hellen, 12.
 Mt. Mulligan (Flecker).

P. 8. *Geijera salicifolia*. Add loc. Mt. Mulligan (Flecker) and mo. 12.
 No. 11, p. 4. *Tribulus cystoides*. Add loc. Cloncurry (Macdonald) and mos. 1, 2, 4, 5.
 Before (*Abutilon*) *muticum*, add (A.) *oxycarpum*, F.v.M., 2.
 Cloncurry (Macdonald)
 P. 6. *Corchorus trilocularis*. Add loc. Cloncurry (Macdonald) and mos. 2, 3.

P. 8. *Glochidion Ferdinandii*. Add loc. Mt. Molloy (Flecker) and mo. 1.
 No. 12, p. 5. *Flueggia microcarpa*. Add (F.M.B.) after locs. Mitchell R., Palmer R., Pt. Denison, Cloncurry. Add loc. Mt. Molloy (Flecker) and mos. 8, 11 to 3.
Petalostigma quadriloculare, var. *glabrescens*. Add loc. Mt. Mulligan (Flecker) and mo. 12.
 Before (*Antidesma*) *Dallachyanum* add (A.)
Bunius, Spreng. Moi-kin. 11.
 Bloomfield (F.M.B.), Cairns (Flecker), Tully (F.M.B.).
 P. 6. *Croton arnhemicus*, var. *urenaefolius*. Add loc. Hodgkinson R. (Flecker) and mo. 12.
 P. 7. Before *Excaecaria* add *Sebastiania*, Spreng.
chamelaea, Muell. Arg. 12.
 Dimbulah (Flecker).
 P. 8. *Trema aspera*, var. *viridis*. Add loc. Mt. Mulligan (Flecker) and mo. 4.
 Delete *T. aspera*, var. *virgata*.
Ficus eugeniodes, Add loc. Mt. Mulligan (Flecker). Brown Bay (Flecker) and mos. 4, 12.
 Vol. 2 p. 2. For (*Pouzolzia*) *indica*, Gaudich read (P.) *zeylanica*, (L.) Beauv. 2. Add loc. Cairns (Flecker)
 P. 6. Before *Castanospora* add *Allophylus ternatus* (Fast.) Radlk. 2.
 Parramatta Swamp (Flecker)
 P. 12. *Pleiogynium Solandri*. Add loc. Mt. Mulligan (Flecker) and mo. 12.
 P. 18. Before (*Trianthema*) *turgidifolia* add

(T.) *decandra*, L. 3.
 Cloncurry (Macdonald).
 Before *Mollugo* add (T.) *monogyna*, L. 2, 3.
 Cloncurry (Macdonald).
 Vol. 3, p. 27. *Galactia tenuifolia*. Add loc. Freshwater (Flecker) and mo. 4.
 P. 31. *Phaseolus Mungo*. Add loc. Second Bch. (Flecker) and mo. 4
Vigna vexillata. For (E.M.B.) after Cloncurry read (F.M.B.) Add loc. Parramatta Swamp (Flecker) and mo. 2.
 P. 40. *Cassia Sophera*, v. *schinifolia*. Add loc. Cloncurry (Macdonald) and mo. 2.
 P. 44. *Erythrophloeum Laboucherii*. Add loc. Mt. Mulligan (Flecker) and mo. 12.
 P. 48. *Acacia calyculata*. Add loc. Bessie's Cr. (Flecker) and mo. 4.
 Vol. 4, p. 3. A. *Bidwilli*. Add loc. Woodville (Flecker) and mo. 12.
Albizzia canescens. Add loc. Minehan's, Hodgkinson R. (Flecker) and mo. 12.
 P. 4. For *Polyosmia* read *Polyosma*.
 P. 7. *Aristolochia Thozetii*. Add loc. Dimbulah (Flecker) and mo. 12.
 P. 12. *Haloragis acanthocarpa*. Add loc. Bessie's Cr. (Flecker).
 P. 15. *Callistemon viminalis*. Add loc. Bessie's Cr. (Flecker)
 P. 40. *Polycarpea breviflora* should be inserted above, before *T. calostachyum* in Vol. 2, p. 12.

CENSUS OF NORTH QUEENSLAND PLANTS—(Continued)

(Figures after plants indicate observed flowering months).

Eugenia cormiflora, F.v.M. Moorool. 6, 9, 10.
 Barron R. (J. F. Bail), Cairns (Flecker), Gadgarra (Kajewski), Rockingham B. (Dall.)
Hislopia, F.M.B. Walkaran Nr. Cooktown, above 1,500 ft. (F.M.B.).
trachyphloia, White. 11.
 L. Barrine (Kajewski), Gadgarra (Kajewski).

Tierneyana, F.v.M. 10 to 12.
 Daintree R. (Kajewski), Bi-boohra (Flecker), Wright's Cr. (Flecker), Rockingham B. (F.M.B.)
grandis, Wight. White Apple. Albany I. (Hill), Lizard Is. (B. and Sol.), Herberton Dist. (J. F. Bail), Rockingham B. (Dall.)
Johnsonii, F.v.M.
 Mt. Bartle Frere (Johnson).
suborbicularis, Benth. Fudgin-jacker.

- Mitchell R. (Palmer), Batavia R. (Roth), C. York (Hill), Somerset (F.M.B.), Endeavour R. (Hill), Bloomfield R. (Roth), Dunk I. (F.M.B.)
- Wilsonii**, F.v.M.
Rockingham B. (F.M.B.)
- fibrosa**, F.M.B. 6.
Somerset (F.M.B.)
- Banksii**, Britt. et Moore.
C. Bedford (Pollock)
- bungadinnia**, F.M.B. Bungadinnia.
Somerset (Jardine).
- eucalyptoides**, F.v.M. Austral Pear.
Endeavour R. (Barclay-Millar).
paniculata, B. et Sol. 11.
Scrubby Cr. (Kajewski), Atherton (Francis).
- sordida**, F.M.B. 6.
Mt. Demi (Brass), Freshwater (Francis), Gadgarra (Fuller), S. Pk. Bellenden Ker (F.M.B.)
- Luehmanni**, F.v.M. Cherry Alder 12.
Cairns (Francis), Atherton Tablel. (Francis), Mt. Bartle Frere (Johnson).
- angophoroides**, F.v.M.
L. Barrine (Kajewski), Rockingham B. (Dall.)
- oleosa**, F.v.M.
Gadgarra (Kajewski), Bellenden Ker (F.M.B.), Rockingham B. (Dall.)
- cyanocarpa**, F.v.M.
Rockingham B. (Dall.)
- apodophylla**, F.v.M.
Bellenden Ker Ra. (Sayer).
- hedraiophylla**, F.v.M.
Mossman R. (Sayer), Russell R. (Johnson)
- cryptophlebia**, F.v.M. 7.
Daintree R. (Kajewski), Gadgarra (Kajewski).
- Dallachyana** (F.v.M.)
Gadgarra (Kajewski), Rockingham B. (Dall.)
- subopposita**, F.M.B. Tarbugai.
Tully R. (J. F. Bail), Hull R. (Kenny).
- erythrocalyx** (White) 9.
Boonjie (Kajewski).
- FAMILY LECYTHIDACEAE.**
Barringtonia, Forst.
speciosa, L. 3 to 6, 11 to 1.
Dayman's I., Endeavour Str. (Hill), C. York (Hill), Rockingham B. (Dall.), Dunk I. (Bamfield), Palm I. (Herbert).
- acutangula**, Gaertn. 1.
Mt. Molloy (Flecker).
- calyptrata**, Gaudich. 9 to 11.
Is. of Torres Str. (F.M.B.), Hammond I. (F.M.B.), Lizard I. (B. and Sol.), Bloomfield R. (Poland), Pt. Douglas (Reynolds), Kamerunga (Newport), Cairns (Kenny), Fitzroy I. (Flecker), Johnstone R. (Ladbrook), Rockingham B. (Dall.)
- longiracemosa**, White. 6, 11.
Daintree R. (Kajewski), Johnstone R. (Bancroft).
- Careya**, Roxb.
australis, F.v.M. Go-onje. 1, 10, 11.
Is. of G. of Carp. (R. Br.), Mitchell R. (F.M.B.), Batavia R. (F.M.B.), Palmer R., Pt. Douglas Bch. (Flecker), C. Grafton (B. and Sol.), Range Rd. (Kajewski), Cloncurry (F.M.B.), Burdekin Estuary (Fitzalan).
- FAMILY MELASTOMACEAE,**
Juss.
- Osbeckia**, L.
chinensis, L.
Rockingham B. (Dall.)
- Otanthera**, Blume.
bracteata, Korth.
Rockingham B. (Dall.)
- Melastoma**, L.
malabathricum, L. 1 to 12.
C. Bedford (F.M.B.), Endeavour R. (B. and Sol.), Mowbray (Mrs. Sparvel), Mt. Elliott (Dallachy).
var. **nanum**, F.M.B.
Kuranda (Kenny)
- Medinulla**, Gaud.
Balls-Headleyi, F.v.M.
Daintree R. (Kajewski), Alice Cr., Bellenden Ker (Sayer).
Johnstone R. (Ladbrook).
- Memecylon**, L.
umbellatum, Burm.
Cleveland B. (Bowman), Rockingham B. (Dall.), Mt. Elliott (Dall.), Burdekin Estuary (Fitzalan), Edgecombe B. (Dall.)
- Tristemma**, Juss.
virusanum, Comm. Madagascar.
Babinda (Illingworth).
- FAMILY RHAMNACEAE, Juss.**
Ventilago, Gaertn.
viminialis, Hook. Thandorah.
G. of Carp. (F.v.M.), Cloncurry (Palmer).
- ecorollata**, F.v.M.
Endeavour R. (Pers.), Rockingham B. (Dall.)