

THE DRAGONFLIES OF BARKUDA ISLAND.

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The Odonate fauna of the island, though rich in individuals, contains only about thirty species, most of which belong to the Libellulinae. A strong hint is given for the reason of the preponderance of the latter by the remarkable number of species belonging to the modern group Trameini in which the development of the wings and the art of flying has reached its greatest perfection. Insects possessed of such powerful flight as these find no difficulty in crossing over from the mainland, so that it seems improbable that many of them breed on the island. A few, however, pass their larval stages in a small pond on Barkuda in which sedges grow in abundance on the sides, making it eminently suitable for breeding purposes, especially for species of such genera as *Tramea*, *Pantala*, *Macrodiplax* and *Tillarga*.

The absence of some very common plains species is noticeable. For instance, there is only a single representative of the genus *Trithemis*; *T. aurora* and *T. festiva* not being included in the collection though they must abound on the neighbouring mainland.

Only seven species of Coenagrioninae have been taken on the island, one of these being an interesting *Enallagma*, represented by a single female, which has been described as *E. insula* Fraser. Three of these seven species, e.s. *Ceriagrion coromandelianum*, *Agriocnemis pygmaea* and *Pseudagrion microcephalum*, breed in the pond on the island, the latter also breeding in large numbers at the edge of the lake. It seems, however, that the larger numbers of the individuals cross over from the mainland. *Pseudagrion microcephalum* and *Ischnura senegalensis* are known to indulge in comparatively long flights and during the month of September vast numbers may be seen crossing the strip of sea separating Bombay Island from the neighbouring island and mainland. Vessels entering the Bay there are visited by numbers of these insects so that it is quite possible that a number of species are carried in a similar way across to Barkuda from the Ganjam Coast.

Dr. Annandale's observations respective of individual species prove that insular habits do not differ markedly from continental. Thus: *Lathrecista asiatica*, *Potamarcha obscura* and *Aethriamanta brevipennis* are found in jungle, usually perched on the ends of bare and prominent twigs; *Zyxomma petiolatum* flies only at dusk, skimming in rapid evolutions, low over the surface of the water; *Brachydiplax sobrina* rests on sedge at the edge of the lake; *Brachythemis contaminata* regales itself on the hosts of Amphi-

Pods (*Orchestia platensis*) which are found on islets of decaying vegetation; and lastly *Diplacodes trivialis* flies low over the ground settling on waste places. This similarity of habits is a further proof that the Odonate fauna is largely dependent on immigration from the mainland.

Anisoptera.

Family LIBELLULIDAE.

Subfamily LIBELLULINAE.

Potamarcha obscura Karsch.

Berl. ent. Zeitschr. XXXIII, p. 370 (1890); Ramb. (*Orthetrum*, p. 38. n. 29) (*Lib. obscura*), *Ins. Neur.*, p. 64 (1842); Ramb., (*Lib. congene*), *loc. cit.*, p. 70 (1842); Kirby, *Cat. Odon.*, pp. 38 and 180 (1890).

Barkuda, 2 examples, 3·iii·19 (*Annandale*, "caught in jungle"), 4-19·ix·19 (*Gravelly*).

A comparatively rare species sometimes seen perched on the ends of bare and prominent twigs in the jungle.

Lathrecista asiatica asiatica Fabr.

Lib. asiatica, *Ent. Syst. Suppl.*, p. 283 (1798); Kirby (*Orthetrum asiaticum*), *Cat. Odon.*, p. 36 (1890); Ris, *Cat. Coll. Selys (Lib.)*, 1908.

Barkuda, 1 example, 6·ix·19 (*Annandale*).

This specimen, a female, was the only one taken on Barkuda.

Brachydiplax sobrina Ramb.

Lib. sobrina, *Ins. Neur.*, p. 114 (1842); Kirby, *Cat. Odon.*, p. 17 (1890).

A single male of this species has been taken, but the specimen has unfortunately been lost.

Diplacodes trivialis Fabr.

Ent. Syst. Suppl., p. 284 (1798); Ramb. (*Lib. trivialis*), *Ins. Neur.*; p. 115 (1842); Uhl. (*Lib. phalerata*), *Proc. Acad. Nat. Sci. Phil.*, p. 30 (1858); Brauer (*Diplax trivialis*), *Novara*, p. 104 (1866). Kirby (*Trithemis trivialis*), *Cat. Odon.*, p. 18 (1890).

Barkuda, many examples, 5·viii·19 (*Annandale*, "resting on creeper on wall"); 12·viii·19 (*Annandale*, "in jungle"); 14·viii·19 (*Annandale*, "flying low over bare ground, 10 a.m."); 25·viii·19 (*Annandale*, "common on the shore of the lake and also in waste places"); 27·ix·19 (*Annandale*, "from shore"); 3·x·19 (*Annandale*, "caught in verandah of house"); 4-19·x·19 (*Gravelly*), 24·x·19 (*Annandale*, "at light") 8·iv·20 (*Annandale and Dover*, "common on shore"), 11-15·xii·19 (*Annandale*).

This is one of the commonest dragonflies on the island at all seasons. It generally flies low over the ground, settling in waste places, and probably for this reason is most abundant on the shores of the island. Dr. Annandale tells us that it often falls a prey to spiders that build their webs on the ground.

Brachythemis contaminata Fabr.

Lib. contaminata, *Ent. Syst.* II, p. 382 (1793); Ramb., *Ins. Neur.*, p. 99 (1842); Kirby, *Cat. Odon.*, p. 21 (1890).

Barkuda, many examples, 25·viii·19 (*Annandale*, "at edge of pond on wet day"); 3·ix·19 (*Annandale*); 27·ix·19 (*Annandale*, "on shore"); 4-19·x·19 (*Gravelly*, "flying low over edge of lake; female apparently ovipositing").

A common species found mainly on the shore of the island, where it feeds voraciously on Amphipods. It also flies at dusk.

Crocothemis servilia servilia Drury.

Lib. servilia, *Ill. Ex. Ent.* I, t. 47, f. 6 (1773); Ramb., *Ins. Neur.*, p. 80 (1842); Fabr. (*Lib. ferruginata*), *Spec. Ins.* I, p. 521, n. 11 (1781); Kirby, *Cat. Odon.*, p. 21 (1890).

Barkuda, many examples, viii 19 (*Annandale*, "caught in jungle"); 4-19·x·19 (*Gravelly*), 24-28·x·19 (*Annandale*, "at lighth"); 15·xii·19 (*Annandale*); 8·iv·20 (*Annandale and Dover*).

A fairly common species. In *Mem. Ind. Mus.* V, p. 180, 1915, Dr. Laidlaw records a male from Barkuda (17·vii·14) which he stated had a deformed wing, and abnormal venation. He hopes to figure it at some future date. The specimen is, we believe, still with him.

Orthetrum pruinatum neglectum Ramb.

Lib. neglectum, *Ins. Neur.* p. 86 (1842); Selys (*Lib. neglectum*), *Ann. Mus. Genov.* XXVII, p. 463 (1889); Burm. (*Lib. pruinosa*), *Handb. Ent.* II, p. 858, n. 63 (1839); Brauer (*Lib. pruinosa*), *Verh. zool.-bot. Ges. Wien*, XV p. 1013 (1865); Selys (*Lib. pruinosa*), *loc. cit.* (1889).

Barkuda, 1 example, 9·x·19 (*Annandale*).

This specimen, a male, was the only one ever taken. It was captured in the jungle.

Orthetrum sabina Drury.

Lib. sabina, *Ill. Ex. Ent.* I, t. 48, f. 4 (1773), Ramb., *Ins. Neur.*, 47 (1842); Kirby (*Orth. sabina*), *Trans. Zool. Soc. Lond.* XII, pp. 261, 263, 301 (1889); Fabr. (*Lib. gibba*), *Ent. Syst. Suppl.*, p. 284 (1798); Schneid. (*Lib. ampullacea*), *Stett. ent. Zeit.* VI, p. 110 (1845); Selys, *Rev. Odon.*, p. 288 (1859); Selys (*Leptthemis sabina* var. *africana*), *Ann. Soc. Ent. Belg.* XXXI, p. 22 (1887).

Barkuda, many examples, viii 19 (*Annandale*, "in jungle"); 3·ix·19 (*Annandale*, "in jungle"); 4-19·x·19 (*Gravelly*); 23·x·19 (*Annandale*); 11-15·xii·19 (*Annandale*).

Not an uncommon species in the jungle from August to December, 1919. The species was comparatively rare in 1920.

Trithemis pallidinervis Kirby.

Sympetrum pallidinervis, *Trans. Zool. Soc. Lond.* XII, p. 327, t. 55, f. 4 (1889); Ris (*Trithemis pallidinervis*), *Cat. Coll. Selys* (1908).

Barkuda, 1 example, viii 19 (*Annandale*, "caught in jungle"). A male specimen.

Neurothemis tullia tullia Drury.

Lib. tullia, *Ill. Ex. Ent.* II, t. 46, f. 3 (1773); Fabr. (*Lib. equestris*), *Spec. Ins.* I, p. 523, (1781); Burm., *Handb. Ent.* II, p. 855 (1839), Ramb., *Ins. Neur.*, p. 72 (1842.) Fabr. (*Lib. lineata*), *Ent. Syst.* II, p. 375 (1793); Ramb., *loc. cit.*, p. 73 (1842); Kirby, *Cat. Odon.*, p. 8 (1890); Ris, *Cat. Coll. Selys* (1908).

Barkuda, 1 example, 6·ix·19 (*Annandale*, "on jungle path").
A male specimen.

Pantala flavescens Fabr.

Lib. flavescens, *Ent. Syst. Suppl.*, p. 285 (1798); Hagen (*Pantala flavescens*), *Neur. N. Amer.*, p. 141 (1860); *Stett. ent. Zeit.* XXVIII, p. 215 (1867); Beam. (*Lib. viridula*), *Ins. Afr. Amer.*, p. 69, t. 3, f. 4 (1805); Ramb., *Ins. Neur.*, p. 38 (1842); Burm. (*Lib. analis et terminalis*), *Handb. Ent.* II, p. 852, nos. 23 et 24 (1839).

Barkuda, many examples, 4-19·x·19 (*Annandale* and *Gravelly*); 12·viii·19 (*Annandale*, "caught in jungle"), 6·ix·19 (*Annandale*, "flew into verandah on wet and stormy evening and after rustling round lamp, settled on white wall").

This is one of the commonest dragonflies on Barkuda throughout the hot season and wet weather, disappearing almost entirely by the end of October.

In its season it hovers in clouds over the island at a considerable height, but in September it flies lower. It probably does not breed on the island to any great extent, but females have occasionally been observed ovipositing in the pond. Dr. Annandale has noticed that it hangs on to the twigs of trees and bushes at night, as a rule in considerable numbers on a single bush or tree. The body hangs vertically downwards, the first two pairs of legs are bent upwards close to the head and clasp the twig, while the hind pairs are stretched downwards and backwards before they do so. *Pantala flavescens* was once observed hawking a small butterfly.

Tramea limbata similata Ramb.

Libellula similata, *Ins. Neur.*, p. 36 (1842); Kirby (*Tramea similata*) *Cat. Odon.*, p. 3 (1890); Desj. (*Tramea limbata*), *Rapport Soc. Maurice*, I (1832); *Bull. Soc. Ent. France*, IV, p. 4 (1835); Kirby, *Trans. Zool. Soc. Lond.* XII, p. 318 (1889); *id.*, *Cat. Odon.*, p. 4 (1890).

Barkuda, many examples, 1·ix·19 (*Annandale*, "hovering over jungle and resting on bark of trees"); 17·ix·19 (*Annandale*, "hovering over pond, 9 a.m., also observed in the evening"); 27·ix·19 (*Annandale*); 11·ix·19 (*Dover*, "taken in copula while hovering over pond").

Not an uncommon species on Barkuda.

Tramea basilaris burmeisteri Beauv.

Lib. basilaris, *Ins. Afr. Amer.*, p. 171, t. 2, f. 1 (1805); Ramb., *Ins. Neur.*, p. 35 (1842); Burm. (*Lib. chinensis*), *Handb. Ent.* II, p. 852, n. 27 (1839); Kirby (*Tramea basilaris*), *Trans. Zool. Soc. Lond.* XII, pp. 258 and 268 (1889); *id.*, *Cat. Odon.*, p. 3 (1890); Ris, *Cat. Coll. Selys, Lib.* (1908).

Barkuda, many examples, 27·ix·19 (*Annandale*); 23·x·19 (*Annandale*), 25·x·19 (*Annandale*, "caught in verandah of house") 4·19·x·19 (*Gravelly*). Rarer than the preceding form.

Tholymis tillarga Fabr.

Lib. tillarga, *Ent. Syst. Suppl.*, p. 285 (1798); Ramb., *Ins. Neur.*, p. 39 (1842); Kirby, *Cat. Odon.*, p. 1 (1890).

Barkuda, many specimens, 6·ix·19 (*Annandale*, "flew into verandah on wet and stormy evening and after rustling round lamp settled on white wall"); 27·ix·19 (*Annandale*); 9·x·19 (*Annandale*); 4·19·x·19 (*Gravelly*, "caught in jungle").

A moderately common species. It frequently flies at and after dusk.

The larvae of this species have been described by Fraser in *Rec. Ind. Mus.* XVI, p. 460, 1919.

Rhyothemis variegata variegata Joh.

Lib. variegata, *Amoen. Acad.* VI, p. 412 (1764); Linn., *Syst. Nat.* I (2), p. 904 (1767), Ramb., *Ins. Neur.*, p. 44 (1842); Drury (*Lib. arria*), *Ill. Ex. Ent.* II, t. 46, f. 1 (1773); Fabr. (*Lib. indica*), *Spec. Ins.* I, p. 521 (1781); Donovan., *Ins. China, Neur.*, f. 2 (1798); Guer., *Icon. R. Anim., Ins.*, t. 60, f. 1 (1829); Fabr. (*Lib. histrio*), *Mant. Ins.* II, p. 237 (1787); Oliv. (*Lib. celestina*), *Enc., Meth.* VII, p. 569 (1792); Kirby (*Rhyothemis variegata*), *Cat. Odon.*, p. 5 (1890); Ris, *Cat. Coll. Selys, Lib.* (1908).

Barkuda, many examples, 20·viii·19 (*Dover*); 31·viii·19 (*Annandale*, "fluttering over jungle"); 6·ix·19 (*Annandale*, "caught in jungle"); 27·ix·19 (*Annandale*); 8·iv·20 (*Annandale* and *Dover*).

A fairly common species at all seasons. The females are usually more abundant than the males. It is generally found flying low in a fluttering manner over jungle and often settles on the ground or on low herbage.

It bears a distinct superficial resemblance to an ant-lion.

Zygomma petiolatum Ramb.

Ins. Neur., p. 30, t. 2, f. 4d (1842); Kirby, *Trans. Zool. Soc. Lond.* XII, pp. 258, 301 (1889) *id.*, *Cat. Odon.*, p. 35 (1890); Ris, *Cat. Coll. Selys, Lib.* (1908).

Barkuda, four specimens, 11·viii·19 (*Annandale*, "a few observed nightly about dusk flying round and round pond a few inches above surface of water"); 6·x·19 (*Dover*, "flying round pond at dusk").

A moderately common species generally found flying round the pond on Barkuda, but stray specimens have also been observed in the day. Only four examples were captured because this dragonfly is a difficult one to catch.

Aethriamanta brevipennis brevipennis Ramb.

Lib. brevipennis, *Ins. Neur.*, p. 114 (1842); Kirby (*Aethriamanta brevipennis*), *Trans. Zool. Soc. Lond.* XII, pp. 262, 283 (1889); *id.*, *Cat. Odon.*, p. 24 (1890); Ris, *Cat. Coll. Selys, Lib.* (1908).

A single male only has been taken on the island.

Macrodiplax cora Brauer.

Diplax cora, *Verh. zool.-bot. Ges. Wien*, XVIII, pp. 20 (1887); Kirby, *Cat. Odon.*, p. 23 (1890); Ris, *Cat. Coll. Selys, Lib.* (1908).

Barkuda, many examples, 25·vii-4·viii·17 (*Annandale*); 3-19·x·19 (*Annandale* and *Gravelly*, "one specimen caught in verandah of bungalow").

A common species.

Urothemis signata signata Burm.

Lib. signata, *Handb. Ent.* II, p. 858, n. 60 (1839); Ramb., *Ins. Neur.*, p. 112 (1842); Kirby (*Urothemis sanguinea*), *Cat. Odon.*, p. 23 (1890); Ris, *Cat. Coll. Selys, Lib.* (1908).

Barkuda, one example, viii·19 (*Annandale*).

This specimen, taken in the jungle, was the only one ever captured.

Family AESCHNIDAE.

Subfamily AESCHNINAE.

Anax guttatus Burm.

Aeschna guttatus, *Handb. Ent.* II, p. 840 (1839); Brauer (*Anax guttatus*), *Reise d. Novara, Neur.*, p. 62 (1866); Hagen, *Verh. zool.-bot. Ges. Wien*, XVII, p. 39 (1867); Ramb. (*Anax magnus*), *Ins. Neur.*, p. 188 (1842); Brauer, *loc. cit.*, p. 62 (1866).

Barkuda, many examples, 4-19·x·19 (*Gravelly*), 23·x·19 (*Annandale*, "caught in verandah of bungalow"); 4·viii·19 (*Annandale*), 28·viii·19 (*Hora*, "flying over pond"); 25·viii·19 (*Annandale*, "drowned in pond after heavy rain; inside eaten out by water beetles").

In Dr. Laidlaw's recent account of this species¹ he places the Barkuda specimens under his "series A," which he believes to be fairly typical examples of the true *A. guttatus* Burm. The length of the abdomen varies from 55 to 58 mm. (Laidlaw gives the length as 15 mm.) of the hindwing from 50 to 51 mm. The venation is rather variable, but the antenodal nervures range only from 15 to 17 and the postnodals from 7 to 9, the hypertrigones being almost constantly traversed by 3 nervures.

With reference to the habits of this species Dr. Annandale has a note in Laidlaw's account, and he also gives us the following note on the colouration of a male specimen. "Head, including eyes, sclerites of thorax, first abdominal segment, anterior triangular area on dorsum of second abdominal segment bright leaf-green with darker reflections on the eyes; mouth parts yellowish-green edged with black, first abdominal segment and a triangular area on the second also edged with black, lateral region and posterior part of dorsum of second abdominal segment bright china-blue, also sides of dorsum of third segment, sides of latter segment shining white; these markings are most conspicuous in

¹ Laidlaw, *Rec. Ind. Mus.* XXII, p. 82, 1921.

flight; remainder of abdomen purplish-black fading to purplish-brown on the ventral surfaces, with paler markings orange or yellow. Legs black; femora brownish at base. A large yellow patch on hindwing."

Four of the specimens in our collection from the island were hatched in captivity from larvae found in the pond, one being nearly three months in its strange surroundings before this event took place.

Fraser has recently carried out prolonged breeding experiments with this insect and finds that they prey readily on one another in preference to all other food. As larvae were found in great numbers in two tanks, it is probable that this cannibalism goes on freely under natural conditions and must contribute largely to cutting down the numbers of the insect.

Fish also were found to be attacked, the eyes being the invariable point of attack. One fish so attacked and partially eaten was over 2 inches in length. Tadpoles were found to be immune and lived on amicable terms with the larvae. Probably the fish approach the head of larvae to examine them and see if they are good to eat, thus rendering themselves liable to attack.

The larvae only feed at night during which period they are as active as they are sluggish in the day-time. A bowl of larvae approached at night and seen under the rays of a lamp was seen to be in the wildest commotion, the larvae plunging in every direction seeking for cover.

Zygoptera.

Family COENAGRIONIDAE.

Subfamily COENAGRIONINAE.

Ceriagrion coromandelianum Fabr.

Agrion coromandelianum, *Ent. Syst.*, p. 287 (1798); Selys, *Bull. Acad. Belg.* (2) XI. II, p. 528 (1876); Ramb. (*Agrion cerinum*), *Ins. Neur.*, p. 529 (1842); Laidlaw (*C. coromandelianum*), *Rec. Ind. Mus.* XII, p. 132 (1916); *id.*, *Rec. Ind. Mus.* XVI, p. 190 (1919).

Barkuda, many specimens, viii·19 (*Annandale*, "from pond," "in jungle"); viii·20 (*Dover and Ribeiro*, "larvae caught in pond on 16·viii·20, hatched, 18·viii·20").

A common species, endemic on Barkuda.

Enallagma insula Fraser.

Rec. Ind. Mus. XIX, p. 32, ♀ (1920).

Barkuda, one specimen, 5·x·19 (*Annandale*).

A unique specimen.

Agrionemis pygmaea Ramb.

Agrion. pygmaeum, *Ins. Neur.*, p. 278 (1842); Selys, *Bull. Acad. Belg.* (2), XL. III, p. 142 (1877); Kirby, *Cat. Odon.*, p. 158 (1890).

Barkuda, many specimens, 4.viii.19 (*Annandale*, "among sedge at edge of pond, 6.viii.19; larva from pond on 6.viii.19, hatched in the afternoon on 16.viii.19"), 10-20.viii.19 (*Annandale*, "caught in jungle"), 27.viii.19 (*Annandale*, "larvae from pond"), 4-19.x.19 (*Gravely*), 4.x.19 (*Annandale*, "resting on walls in house").

A common species usually found among grass and shrubs. It breeds on Barkuda in the pond.

Ischnura senegalensis Ramb.

Agrion senegalense, *Ins. Neur.*, p. 276 (1842); Selys, *Rev. Odon.*, p. 186 (1850); *id.* (*Ischnura senegalensis*), *Bull. Acad. Belg.* (2) XLI, p. 273 (1876); Kirby (*Micronympha senegalensis*), *Cat. Odon.*, p. 141 (1890) Laidlaw (*Ischnura senegalensis*), *Rec. Ind. Mus.* XII, p. 129 (1916).

Barkuda, many examples, 16.viii.19 (*Annandale*, "in jungle"), 4-19.x.19 (*Gravely*), 5.xii.19 (*Annandale*), 14.xii.19 (*Gravely*, "at light"); 15.xii.19 (*Annandale*, "from side of lake").

A common species.

Ischnura aurora Brauer.

Agrion aurora et Ischnura aurora, *Verh. zool.-bot. Ges. Wien*, XV, p. 510 (1865); *Reise d. Novara, Neur.*, p. 56 (1866); Selys (*Ischnura delicata*), *Bull. Acad. Belg.* (2) XLI, p. 281 (1876); Kirby (*Micronympha aurora*), *Cat. Odon.*, p. 143 (1890).

Barkuda, one example, x.19 (*Annandale*).

Rare.

Rhodischnura nursei Morton.

Ischnura nursei, *Trans. Ent. Soc. Lond.*, 1907, pp. 306-307, pl. xxiv, figs. 4, 5 and 6; Laid. (*Rhodischnura nursei*), *Rec. Ind. Mus.* XVI, p. 177 (1919); (*Ischnura? nursei*) *loc. cit.*, XII, p. 131 (1916); *Fras., loc. cit.*, XIX, p. 31 (1920).

Barkuda, one example, 20.viii.19 (*Annandale*, "among herbage"). This specimen is the interesting andromorph female described by Fraser, which has also given us the most easterly locality yet recorded for the genus. Other localities are Karachi, Dehra Dun, Pusa, Deesa, Agra and Nagpur.

Pseudagrion Microcephalum Ramb.

Agrion microcephalum, *Ins. Neur.*, p. 259 (1842); Selys (*Pseudagrion microcephalum*), *Bull. Acad. Belg.* XLII, p. 504 (1876); Kirby, *Cat. Odon.*, p. 153 (1890); Laid., *Rec. Ind. Mus.* V, p. 178 (1915); *id., loc. cit.* XII, p. 23 (1916), *id., loc. cit.*, XVI, p. 467 (1919).

Barkuda, many examples, 25.vii-4.viii.17 (*Annandale*); 25.viii.19 (*Annandale*, "common on shore of lake"); 4-19.x.19 (*Gravely*, "one pair in copula"); 14.viii.20 (*Dover* and *Ribeiro*, "rather common on shores of island").

A common species which breeds in abundance in the lake.

Subfamily *LESTINAE*.

Lestes elata Selys.

Bull. Acad. Belg. (2), XIII, p. 319 (1862); Kirby (*Lestes elatus*), *Cat. Odon.*, p. 162 (1890); Laid., *Rec. Ind. Mus.* XIX, p. 153 (1920).

Barkuda, four examples identified by Dr. F. F. Laidlaw, 2·x·19 (*Annandale*).

Probably not uncommon on the mainland, and also breeds on the island. The Indian Museum has an example from Barkul, 1000 feet, Orissa.

Lestes gracilis Selys.

Bull. Acad. Belg. (2), XIII, p. 327 (1862); Laid., *Rec. Ind. Mus.* XIX, p. (1920); Ris (*Lestes gracilis gracilis*), *Sup. Ent.* (1919).

Barkuda, males only 4·viii·19 (*Annandale*, "among sedges at edge of tank.")

We have noticed that specimens from Barkuda show a large amount of black pigmentation on the sides of the thorax. The species is widely distributed, and though we have captured many specimens this form of melanism has never been noticed before.

[In addition to the species recorded above Dr. F. F. Laidlaw has identified the Gomphine *Ictinus rapax* (Ramb.) from Barkuda (1-5 viii·14). A single specimen only was obtained. *N.A.*]