DRAGONFLIES OF THE LAKE OF BAYS REGION.

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The period from June 28th, to July 15th, of the summer of 1920 was spent by myself at Norway Point on the Lake of Bays. Considerable collections of insects were made, rather particular attention being paid to the Odonata and allied orders. A list of the species of Odonata taken would appear to be of interest not only as a supplement to Dr. E. M. Walker's reports on the Odonata of Algonquin Park and the Go Home Bay region, but also on account of the fact that several species new to our Canadian lists were observed and the known northern range-limit in such instances considerably extended.

The Lake of Bays region is in general topography very similar to that of Algonquin Park or the Muskoka Lakes. Along the shores of the Lake of Bays proper few dragonflies were observed, but the smaller lakes and ponds proved to be quite rich in species. The main collections were made (1) around Black Lake, a small tranquil lake, just south of the Norway Point golf links, with heavily wooded, precipitate shores, except at a few points at the northern end where the ground was flatter and a considerable growth of sedges and water lilies was to be found; (2) at a small marshy pond on the Baysville road, which I have designated Brown's Brae Pond, and which I unfortunately only discovered during the latter half of my sojourn.

Twenty-six species in all were captured; the following list is probably far from exhaustive, but will at least serve as a basis for further investigations.

ZYGOPTERA.

Coenagrionidæ.

1. *Lestes eurinus* Say.

Four males of this unmistakable species were taken on July 11th among the sedges at Brown's Brae Pond. As far as can be ascertained from the available literature, this constitutes a new record for our Canadian fauna.

2. *Lestes rectangularis* Say.

One teneral male was taken on June 24th on a wooded slope rather remote from any body of water.

3. *Lestes disjunctus* Selys.

A series of more or less teneral males and females was captured on July 11th and 14th around Brown's Brae Pond.

4. *Agria moesta putrida* Hagen.

Only a single female was taken at Black Lake on July 1st. Two males were captured on July 28th, 1919, on a road skirting the Lake of Bays east of Norway Point.

5. *Enallagma hageni* Walsh.

Common around Black Lake and Brae Pond, June 23rd to July 8th. A number of the males showed the fifth abdominal segment suffused with black for at least half its length, a feature not noticed in our Ottawa specimens of this species; no difference in genitalia, however,

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could be detected between these darker forms and the normal one, which also occurred in the same localities.

6. *Enallagma cyathigerum* Charp. (*annexum* Hag.)

One male, June 23rd, Black Lake; taken along with the following species. The genitalia correspond exactly with Williamson's figure of *annexum* in Ent. News, XI, pl IX. Walker records a single male from Go Home Bay (1915, Suppl. 47th Ann. Report, Mar. and Fisheries Branch, 66) so that the occurrence of the species in the present region is not unusual.

7. *Enallagma calverti* Morse.

Both sexes very common in copula around the Brae Pond, July 11th to 14th; a few specimens were also captured at Black Lake in June.

8. *Enallagma aspersum* Hag.

Ten males and one female of this dark-bodied species were taken around the Brae Pond on July 11th. The species does not appear to have been previously recorded from Canada, but the similarity of genitalia of the male specimens to Needham's figure (Bull. 68, New York Sta. Mus., pl. XIX) renders the reference fairly certain.

9. *Nehallenia irene* Hag.

Common during the first half of July in the sedges bordering Brown's Brae Pond, but easily overlooked on account of the low flight and small size.

10. *Chromagrion conditum* Hag.

A single male was taken, June 23rd, at Black Lake. No further specimens were seen, although diligent search was made on subsequent dates.

11. *Ischnura verticalis* Say.

Extremely common all through the season at both places.

ANISOPTERA.

Aeshnidæ.

12. *Gomphus exilis* Selys.

Common along the shores of Black Lake, June 20th to July 1st.

13. *Gomphus spicatus* Hag.

One female taken along with *G. exilis*, June 28th, belongs apparently to this species rather than to *sordidus*, judging by the remarks of Kellicott (Odonata of Ohio) and Williamson (Dragonflies of Indiana) and their descriptions of vulvar laminae.

14. *Basiæschna janata* Say.

One male, July 1st, and one female, June 20th; others were observed flying over the waters of a shallow inlet of the Lake of Bays.

15. *Aeshna canadensis* Wlk.

Common during July around Brown's Brae Pond and vicinity but difficult to capture. Three males were taken.

Libellulidæ.

16. *Didymops transversa* Say.

Three males and two females were taken June 23rd, July 1st, patrolling along a moist road through a rather dense wood, busily

engaged in capturing mosquitoes. The species was not seen in any other situation.

17. *Tetragoneuria cynosura simulans* Mutt.

One of the commonest species of the district and on the wing during the whole period of my stay. It frequents the borders of woods and open meadows, seldom alighting but tirelessly patrolling to and fro in search of food.

18. *Cordulia shurtleffi* Scud.

Not rare, early in July, on the edges of woods in semi-shady places; it is not a strong flier and is easily recognized on the wing by the brilliant green colour of the eyes. Only males were captured.

19. *Libellula exusta julia* Uhl.

Very common in June and early July on the margin of lakes and ponds, frequently resting on dead logs.

20. *Libellula incesta* Hag.

Three males and two females captured, July 1st and 10th; the species was not uncommon along the shores of Black Lake, the males darting from their resting places for short excursions and returning to sit in their characteristic attitudes on either tree-trunk or twig. Walker (op. cit. p. 92) records the species from Go Home Bay; evidently it has a more widespread northern range than has heretofore been supposed.

21. *Libellula quadrimaculata* Linn.

Quite rare in this region; only two males were captured on the border of woods near Black Lake.

22. *Leucorrhinia frigida* Hag.

Five males were taken, July 11th, among the sedges bordering Brown's Brae Pond.

23. *Leucorrhinia proxima* Cal.

Four males were taken along with *L. frigida*. The species is fond of resting on half-submerged logs and is then not difficult to capture. The pruinose suffusion on the dorsum of the males extends in this species over the fifth abdominal segment whilst in all specimens of *frigida* examined this segment remains black.

24. *Leucorrhinia glacialis* Hag.

One male, taken with the other species of the genus. On the wing it at once strikes the eye by the brilliant red coloration of the base of the abdomen.

25. *Leucorrhinia intacta* Hag.

One female was taken on the roadside, June 20th, near the Brae Pond. Apparently the flight of the species was at this time already almost over.

26. *Sympetrum obtrusum* Hag.

The species was just beginning to emerge, July 11th to 14th, at the Brae Pond. A single pair only was captured but later in the month the species would doubtless become commoner, along with others of the genus.