

ODONATA COLLECTED IN COASTAL BRITISH COLUMBIA, CANADA, IN JULY-AUGUST, 1984

S.G. CANNINGS

Department of Zoology, University of British Columbia, Vancouver, B.C., V6T 2A9, Canada

Abstracts — Records are provided for 17 spp. *Coenagrion resolutum* and *Nehalennia irene* are reported for the first time on the Pacific Coast of British Columbia.

Introduction

The distribution of dragonflies along the rugged coast of British Columbia is not well known. Between Vancouver and southern Vancouver Island in the south and Prince Rupert in the north, very few collections have been made. WHITEHOUSE (1941) did extensive work

near Campbell River on the east coast of Vancouver Island and CANNINGS & CANNINGS (1983) reported on a collection made on the Brooks Peninsula on the outer west coast of the island, but the central and northern coasts of the province remain virtually untouched by odonatologists.

While sailing along this coast in the summer of 1984, Jim Goble and Edie Bijdemast collected 99 adult odonates in five localities (here listed from south to north):

Localities

Unwin Lake, Tenedos Bay, Desolation Sound, 50° 7'N 124° 40'W. This is a large lake, with conifers growing right to the shoreline except for the occasional rock outcrop. Dragonflies were collected near the outlet stream, where various waterweeds and *Nuphar* grew amongst floating vegetated logs.

Black Lake, West Redonda Island, Desolation Sound, 50° 10'N 124° 46'W. This is another large lake, again with conifer-bordered edges and rock ledges; scattered clumps of rushes and *Nuphar* are also present. All odonates were collected in an adjacent lush meadow.

Thurston Bay, Sonora Island, 50° 21'N 125° 19'W. The three species of *Aeshna* collected here were hawking over a lush meadow next to a brackish marsh. A rushing stream entered the marsh nearby.

Hannant Point, McIntosh Bay, Simoom Sound, 50° 52'N 126° 30'W. Collections were made here at a small lake with dead trees and aquatic plants throughout the littoral zone. Although dragonflies were fairly common, not many were collected because a black bear arrived and wanted to cross the 109 bridge the collectors were working from!

Steamboat Bay, Kenneth Passage, Watson Island, 50° 57'N 126° 48'W. This is an open-edged lake with deep *Sphagnum* moss growing to the edge. The littoral area is relatively shallow with *Nuphar* present. This last site is approximately 55 km NE of Port Hardy, Vancouver Is.

List of species

Coenagrionidae: *Coenagrion resolutum* (Hag.): Black Lake, 27-VIII-1984, 1 female. This specimen represents the first record of this species on the Pacific Coast of British Columbia, and is also the latest flight record for the species. — *Enallagma carunculatum* Morse: Black Lake, 27-VIII-1984, 5 males, 1 female. — *E. cyathigerum* (Charp.): Simoom Sound, 1-VIII-1984, 1 male; Unwin Lake, 17-VII-1984, 4 males (1 teneral), 18-VII-1984, 1 male; Watson Island, 28-VII-1984, 1 male, 1 female. — *Ischnura cervula* Sel.: Simoom Sound, 1-VIII-1984, 1 male, 2 females; Unwin Lake, 17-VII-1984, 2 males, 8 females, 18-VII-1984, 1 female. — *Nehalennia irene* (Hag.): Watson Island, 27-VII-1984, 1 male, 28-VII-1984, 1 female. These represent the first records of this species on the

Pacific Coast.

Aeshnidae: *Aeshna eremita* Scud.: Sonora Island, 19-VIII-1984, 1 female; Watson Island, 28-VII-1984, 1 male. — *A. multicolor* Hag.: Black Lake, 27-VIII-1984, 1 male. — *A. palmata* Hag.: Sonora Island, 19-VIII-1984, 1 male. — *A. umbrosa* Wlk.: Sonora Island, 19-VIII-1984, 1 male.

Cordulegastridae: *Cordulegaster dorsalis* Leach: An individual identified as this species was seen patrolling the stream at the Sonora Island site, 19-VIII-1984. It was not caught.

Libellulidae: *Libellula forensis* Hag.: Black Lake, 27-VIII-1984, 8 males, 2 females. — *L. julia* Uhl.: Unwin Lake, 17-VII-1984, 2 males; Watson Island, 28-VII-1984, 15 males. — *L. quadrimaculata* L.: Black Lake, 27-VIII-1984, 1 male; Watson Island, 28-VII-1984, 5 males. — *Sympetrum costiferum* (Hag.): Black Lake, 27-VIII-1984, 7 males (females teneral). — *S. obtusum* (Hag.): Black Lake, 27-VIII-1984, 1 male, 1 female. — *Leucorrhinia glacialis* Hag.: Watson Island, 27-VII-1984, 8 males, 28-VII-1984, 7 males, 3 females. — *L. hudsonica* (Sel.): Watson Island, 27-VII-1984, 1 female. — *L. proxima* Cal.: Black Lake, 27-VIII-1984, 2 females.

Discussion

The presence of *Coenagrion resolutum* and *Nehalennia irene* on the coast is not surprising at these latitudes. These "first records" are a reflection of a lack of collecting rather than the rarity of the taxa. To the north, both have been collected at Terrace, an inland community on the coastal slope of the Skeena River. The late record for *Coenagrion* is probably an example of the more extended emergence period for coastal dragonflies as discussed by WHITEHOUSE (1941) and CANNINGS & CANNINGS (1983).

At first I was struck by the absence of corduliids from this collection, but this is explained by two factors: the peak of the flight season for the common *Cordulia shurtleffi* Scud. had passed in late June (WHITEHOUSE, 1941) and the local *Somatochlora* species (notably *S. albicincta* and *S. semicircularis*) are associated either with bogs or with lakes at moderate to high elevations, neither of which were visited.

Being familiar with the large size of coastal *Somatochlora albicincta* (WALKER & COR-

BET 1975), I was surprised to find that a number of the libellulids in this small collection were actually smaller than the ranges given by WALKER & CORBET (1975). The *Leucorrhinia glacialis* specimens in particular had small hindwings — ranging from 25 to 27 mm in length, compared with the published range of 27.1 to 28.2 (the total body lengths were difficult to measure since most of the abdomens were curled). The *Sympetrum costiferum* had hindwings ranging in length from 25 to 26 mm, compared with the published range of 26 to 27 mm. Although the single male *Aeshna palmata* caught had wings of normal length, its total

length was only 65 mm; the range given by WALKER (1958) is 69-74 mm.

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