

NEW DISTRIBUTION RECORDS OF ODONATA FROM ALBERTA, CANADA

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Abstract — Records are provided for 39 spp. *Ischnura verticalis* and *Calopteryx aequabile* were not reported earlier from Alberta.

Introduction

The distribution of dragonflies in the province of Alberta, Canada is still quite poorly known. WALKER (1953, 1958), and WALKER & CORBET (1975), summarize the known records to date, CANNINGS (1980), has reported on a small collection from the Crowsnest Pass area in southwestern Alberta, and GRIFFITHS & GRIFFITHS (1980) have reported on a collection from near Devon,

Alberta. Nonetheless, the total number of published distribution records is still small, and statements about dragonfly ranges in Alberta are difficult to make with any degree of confidence.

The following records add considerably to our knowledge of Alberta dragonflies, and include records of two species new to Alberta, as well as 14 second records for this province. The specimens are in the University of Alberta Strickland Museum, and were collected by myself unless otherwise indicated. Specimens collected by Felix A.H. Sperling are indicated as F.S. All specimens were identified by myself.

List of species

Coenagrionidae. — *Amphiagrion abbreviatum* (Sel.): West boundary of Bow Valley Provincial Park, 25-VII-1982, 1♂, 1♀; 19 km S. of Stettler, 29-V-1981, 5♂, 1♀., 26-VI-1982, 2♀. These are the second records of this species for Alberta. In Alberta, this species seems to be found only in spring-fed ponds which do not freeze over in the winter. Whether this distribution pattern is due to dispersal from less patchy southern populations, or represents relict populations from a formerly more widespread distribution during the warm hypsithermal period following the last (Wisconsin) glaciation, is unknown. — *Nehalennia irene* (Hag.): Hondo, 1-VII-1982, 1♀ (F.S.); Obed Lake, 20-VI-1981, 2♀. — *Coenagrion resolutum* (Hag.): Blackfalds, 26-VI-1982, 3♂, 2♀; Bragg Creek, 12-VI-1971, 1♀ (F.S.); Devon, 25-V-1981, 2♂, 1♀; Edmonton, 29-VI-1976, 1♂., 24-V-1981, 3♂, 3♀; Lesser Slave Lake, 1-VII-1982, 2♂, 2♀ (F.S.); 19 km S. of Stettler, 26-VI-1982, 2♂, 2♀. — *C. interrogatum* (Hag.): 30 km E. of Hinton, 19-VI-1981, 1♀ (F.S.). This is the second record of this species for Alberta. — *C. angulatum* Walker: Alix, 29-V-1981, 1♂; Devon, 7-VI-1981, 1♂; 19 km S of Stettler, 26-VI-1982, 1♂. — *Enallagma boreale* Sel.: Blackfalds, 26-VI-1982, 1♀; Devon, 25-V-1981, 7♂, 3♀; Edmonton, 1-VI-1981, 1♀; Gull Lake, 4-VII-1976, 1♀. — *E. cyathigerum* (Charp.): Blackfalds, 6-VI-1982, 1♀; 7 km W of Hardisty, 23-V-1981, 1♂ (F.S.); Joffre, 6-VI-1982, 2♂; Lac La Biche, 6-VI-1981, 1♂, 1♀; Neutral Hills, 22-V-1981, 2♀ (F.S.); 28 km S of Sedgewick, 23-V-1981, 1♀ (F.S.); 19 km S. of Stettler, 26-VI-1982, 1♀. — *E. hageni* (Walsh): Hondo, 1-VI-1982, 2♀ (F.S.). This is the second record of this species from Alberta. — *E. ebrium* (Hag.): Blackfalds, 30-VI-1982, 1♂; George Lake, near Busby, 19-VI-1981, 1♀ (J.-D. Fournier); Lesser Slave Lake, 1-VII-1982, 1♂ (F.S.). This is the second record of this species for Alberta. — *Ishnura verticalis* (Say): George Lake, near Busby, 19-VI-1981, 1♂ (J.-D. Fournier). This is the first record of this species for Alberta, and the most Westerly record in Canada.

Lestidae: *Lestes dryas* Kby: West boundary of Bow Valley Provincial Park, 25-VII-1982, 1♂; Gull Lake, 3-VII-1976, 1♂. — *L. disjunctus* Sel.: Blackfalds, 9-VIII-1982, 1♂; West boundary of Bow Valley Provincial Park, 25-VII-

-1982, 2♂; Bragg Creek, 10-VIII-1982, 2♀ (F.S.).

Calopterygidae: *Calopteryx aequabile* (Say): Blindman River near Blackfalds, 29-VIII-1982, 1 (D.R. Maddison). This dragonfly was seen but not caught. However, since this species is virtually unmistakable, and since this represents the first record of this species for the province, and a considerable range extension, I have included the record here.

Aeshnidae: *Aeshna eremita* Scud: Blackfalds, 9-VIII-1982, 1♀; Rocky Mountain House, 26-VII-1980, 2♂., 25-IX-1980, 2♂. — *A. interrupta* Walker: Alix, 10-IX-1980, 1♀; Blackfalds, 9-VIII-1982, 2♂, 1♀; Edmonton, 28-VI-1976, 1♀., 1-VIII-1976, 1♀., 1-VI-1980, 1♂; Gull Lake, 15-VII-1976, 1♂, 1♀; Joffre, 10-VII-1982, 1♂., 20-VII-1982, 1♂; Rocky Mountain House, 4-VIII-1980, 1♂; Waterton, 19-VIII-1981, 1♂, 1♀ (F.S.). — *A. canadensis* Walker: Rocky Mountain House, 4-VIII-1980, 1♂. This is the second record of this species for Alberta. — *A. juncea* (L.): Blackfalds, 9-VIII-1982, 1♂; Rocky Mountain House, 26-VII-1980, 1♂. These are the second records of this species for Alberta. — *A. stichensis* Hag.: Blackfalds, 3-VIII-1982, 1♀; Rocky Mountain House, 4-VIII-1980, 1♂. — *Anax junius* (Drury): Alix, 28-V-1981, 1♂. This specimen was seen but not caught. However, its large size, the blue markings on the base of its abdomen, and the absence of any *Aeshna* spp. at this time of year made it unmistakable. Lake Newell, 30-V-1981, 1♂, 1♀, in copula. These are the second records of this species for Alberta.

Gomphidae: *Ophiogomphus severus* Hag.: Blackfalds, 9-VIII-1982, 1♂; Edmonton, 1-VII-1980, 1♂; Joffre, 10-VII-1982, 2♂; Nevis Junction, 20-VIII-1981, 1♀ (F.S.); Rocky Mountain House, 26-VII-1980, 1♂. — *O. colubrinus* Sel.: Blackfalds, 10-VIII-1982, 1♂; Rocky Mountain House, 4-VIII-1980, 1♂. — *Gomphus intricatus* Hag.: Lost River Ranch, Milk River, 13-VIII-1980, 1♀. This is the second record of this species for Alberta, and the fourth for Canada.

Corduliidae: *Epitheca spinigera* (Sel.): Boyle, 29-V-1982, 2♂, 3♀ (F.S.); Lac La Biche, 6-VI-1981, 1♂, 1♀; 50 km S of Lac La Biche, 6-VI-1981, 1♀; Lake Eden, 10-VI-1982, 1♂., 20-VI-1982, 1♂ (F.S.); Lesser Slave Lake, 1-VII-1982, 3♂, 1♀ (F.S.); Rocky Mountain House, 28-VI-

-1980, 1♀. — *Somatochlora minor* Calv.: Bragg Creek, 2-VIII-1982, 1♀ (F.S.); Rocky Mountain House, 4-VIII-1980, 1♂. These are the second records of this species for Alberta. — *S. franklini* (Sel.): Hondo, 1-VII-1981, 1♀ (F.S.). — *S. hudsonica* (Sel.): 50 km S of Lac La Biche, 6-VI-1981, 1♂. — *Cordulia shurtleffi* Scud.: Bragg Creek, 12-VI-1971, 1♀ (F.S.), 24-VI-1981, 1♀ (F.S.); Devon, 29-V-1981, 2♂, 3♀; Edmonton, 1-VII-1981, 1♀; Fort McMurray, 30-V-1981, 2♀ (F.S.); Rock Island Lake, Pelican Mountains, 21-V-1981, 5♂, 2♀ (F.S.); Rocky Mountain House, 28-VI-1980, 2♂.

Libellulidae: *Libellula quadrimaculata* L.: Blackfalds, 8-VI-1982, 2♂; Buck Mountain, near Pigeon Lake, 27-V-1981, 1♂, 1♀ (F.S.); 7 km W of Hardisty, 23-V-1981, 1♀ (F.S.); 50 km S of Lac La Biche, 6-VI-1981, 2♂; Rock Island Lake, Pelican Mountains, 31-V-1981, 1♀ (F.S.); Rocky Mountain House, 28-VI-1980, 1♂. — *L. julia* Uhler: Rocky Mountain House, 28-VI-1980, 1♂. This is the second record of this species for Alberta. — *Sympetrum corruptum* (Hag.): Gull Lake, 3-VII-1976, 1♂., 8-V-1981, 1♂, 1♀. — *S. costiferum* (Hag.): Patricia, 3-IX-1980, 3♂, 3♀. — *S. occidentale* Bart.: Brooks, 25-VIII-1972, 1♂ (F.S.); Patricia, 13-IX-1980, 2♀. These are the second records of this species for Alberta. — *S. danae* Sulz.: Blackfalds, 9-VIII-1982, 2♂; Patricia, 13-IX-1980, 1♂, 1♀; Rocky Mountain House, 4-VIII-1980, 2♂., 25-IX-1980, 1♂. — *S. internum* Mont.: Bragg Creek, 17-VII-1982, 1♀ (F.S.), 24-VII-1982, 1♀ (F.S.); Edmonton, 15-VI-1976, 1♂, 1♀., 1-VII-1980, 1♀; Gull Lake, 20-VII-1976, 1♂, 3♀;

Patricia, 13-IX-1980, 1♂, 1♀; Rocky Mountain House, 26-VII-1980, 3♂, 2♀. — *S. obtrusum* (Hag.): Rocky Mountain House, 26-VII-1980, 1♂, 1♀. — *Leucorrhinia borealis* Hag.: Blackfalds, 8-VI-1982, 2♂; Buck Mountain, near Pigeon Lake, 27-V-1981, 1♂, 1♀ (F.S.); Devon, 24-V-1981, 2♀; Edmonton, 22-V-1981, 4♂, 1♀; Hardisty, 23-V-1981, 2♀ (F.S.); Lac La Biche, 6-VI-1981, 1♂; Lacombe, 22-V-1981, 1♂ (F.S.); Neutral Hills, 22-V-1981, 1♀ (F.S.); Rock Island Lake, Pelican Mountains, 31-V-1981, 1♂ (F.S.). — *L. hudsonica* (Sel.): Blackfalds, 8-VI-1982, 1♀; 50 km S of Lac La Biche, 6-VI-1981, 1♂, 1♀; May Hill Turnoff, 180 km S of Fort McMurray, 29-V-1981, 1♂ (F.S.); Rock Island Lake, Pelican Mountains, 13-V-1981, 1♀ (F.S.); Rocky Mountain House, 13-VI-1980, 1♀. — *L. proxima* Calv.: Rocky Mountain House, 29-V-1980, 1♂., 28-VI-1980, 1♂. — *L. intacta* Hag.: near Big Knife Provincial Park, 18-V-1981, 1♀ (F.S.); Devon, 24-V-1981, 1♀.

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