

ADDITIONS TO THE CANADIAN EPHEMEROPTERA

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Abstract.—New provincial distribution records are provided for 40 Ephemeroptera species in Canada based on the examination of specimens held in the Canadian National Collection of Insects. Nine species are newly reported for Alberta, four for British Columbia, five for Manitoba, 12 for New Brunswick, 10 for Nova Scotia, two for Ontario, four for Quebec, and one for Prince Edward Island. Of these, *Ameletus amador* Mayo, *Cinygmula reticulata* McDunnough, and *Procloeon vicinum* (Hagen) are reported from Canada for the first time.

McCafferty and Randolph (1998) provided provincial and territorial documentations of the Ephemeroptera of Canada (see also Randolph and McCafferty, 2001), including 321 species. One additional species had been inadvertently excluded (McCafferty, 2001), and recent systematic studies have resulted in the description of a new species from Canada (McCafferty, 2000) and the first report of one species from Canada (Burian, 2001). Study of the Ephemeroptera collections at the Canadian National Collection of Insects (CNC), in Ottawa, Ontario, has revealed new provincial records for 40 species, including the first Canadian records for three species. This brings the total number of valid species of mayflies known from Canada to 327. All data below represent new provincial record data, and an asterisk (*) indicates species we report from Canada for the first time.

AMELETIDAE

**Ameletus amador* Mayo, 1939

ALBERTA, Lake Louise, 5,600' elev., 29-VII-1938, G. S. Walley, adults.

Ameletus ludens Needham, 1905

NOVA SCOTIA, Baddeck Forks, 8-VII-1936, J. McDunnough, adults.

Ameletus tertius McDunnough, 1938

NEW BRUNSWICK, Tabusintac, 31-VII-1939, W. J. Brown, adults.

ARTHROPLEIDAE

Arthroplea bipunctata (McDunnough), 1924

MANITOBA, Dauphin, 22-VI-1913, J. B. K., adults.

BAETIDAE

Acentrella turbida (McDunnough), 1924

NOVA SCOTIA, Doctor's Bridge, Antigonish, 19-VI-1936, J. McDunnough, larvae.

Acerpenna pygmaea (Hagen), 1861

ALBERTA, Bearberry Creek near Sundre, 21-VIII-1926, C. H. Young, adults.

Baetis flavistriga McDunnough, 1921

ALBERTA, Seven Persons Creek, Medicine Hat, 16/17-VI-1930, J. H. Pepper, adults.

Baetis rusticans McDunnough, 1925

NOVA SCOTIA, Baddeck Forks, VI/VIII-1936, J. McDunnough, adults; Hunter Cr., Baddeck, same data.

Centroptilum convexum Ide, 1930

QUEBEC, Chateauguay, 18/19-VI-1925, F. P. Ide, adults; Lachine, 20-VI-1925, F. P. Ide, adults; Vaudreuil, 24-VI-1934, G. S. Walley, adults.

Centroptilum minor (McDunnough), 1926

QUEBEC, Cascades Point, 23-VI-1930, G. S. Walley, adults; Vaudreuil, same data.

Centroptilum semirufum McDunnough, 1926

NEW BRUNSWICK, Renous, 7-VII-1928, W. J. Brown, adults.

Plauditus dubius (Walsh), 1862

NEW BRUNSWICK, Boiestown, 10/13-VII-1928, W. J. Brown, adults; Fredericton, 8/16-VII-1928, W. J. Brown, adults. NOVA SCOTIA, Annapolis Royal, 21-VII-1928, W. J. Brown, adults.

Procloeon bellum (McDunnough), 1924

ALBERTA, Ross Creek, Medicine Hat, 16-VII-1929, J. H. Pepper, adults; Seven Persons Creek, Medicine Hat, 6-VIII-1929, J. H. Pepper, adults. MANITOBA, Berens River, 9-VII-1938, W. J. Brown, adults.

Procloeon implicatum (McDunnough), 1924

MANITOBA, Douglas Lake, 30-VII-1924, Criddle & White, adults.

Procloeon ozburni (McDunnough), 1924

NOVA SCOTIA, Annapolis Royal, 24/26-VII-1928, W. J. Brown, adults.

Procloeon quaesitum (McDunnough), 1931

BRITISH COLUMBIA, Okanagan Landing, 12-VII-1933, A. N. Gartrell, adults.

Procloeon simile (McDunnough), 1924

NEW BRUNSWICK, Boisetown, 10/13-VII-1928, W. J. Brown, adults. NOVA SCOTIA, Hunter Creek, Baddeck, 8-VIII-1941, J. McDunnough, adults; Smith's Cove, 1-VIII-1945, J. McDunnough, adults.

Procloeon simplex (McDunnough), 1925

MANITOBA, Campbell Lake, 8 mi NE Erickson, 10-VII-1965, H. D. A., larvae. NEW BRUNSWICK, Fredericton, 16-VII-1928, W. J. Brown, adults.

**Procloeon vicinum* (Hagen), 1861

ONTARIO, Grand Bend, 11-VII-1939, T. N. Freeman, adults. QUEBEC, Ottawa Golf Club, 13-VII-1925, adults.

Pseudocloeon dardanum (McDunnough), 1923

ALBERTA, Lethbridge, 9/17-VII-1929, 7/11-VII-1930, J. H. Pepper, adults; Medicine Hat, 22-VIII-1930, J. H. Pepper, adults; Saskatchewan River at Medicine Hat, 11-VIII-1929, J. H. Pepper, adults; Milk River, 18/19-VII-1929, 13-IX-1929, 18-VIII-1930, J. H. Pepper, adults.

BAETISCIDAE

Baetisca rubescens (Provancher), 1878

ONTARIO, Ottawa, 26-VI-1944, G. S. Walley, adults; Westboro, 22/28-VI-1937, G. A. Hobbs, adults.

EPHEMERELLIDAE

Ephemerella septentrionalis McDunnough, 1925

NOVA SCOTIA, Peter Brook, Baddeck, 26-VI-1936, J. McDunnough, adults.

EPHEMERIDAE

Hexagenia limbata (Serville), 1829

NOVA SCOTIA, S. Milford, 2/4-VII-1934, J. McDunnough, adults.

HEPTAGENIIDAE

Cinygma lyriforme (McDunnough), 1924

BRITISH COLUMBIA, Alberta Lake, Mons, 10-VI-1926, J. McDunnough, adults.

**Cinygmula reticulata* McDunnough, 1934

BRITISH COLUMBIA, Hope, 17-III-1960, F. I. S., adults; Langford, 12-IV-1973, D. Evans, adults.

Heptagenia elegantula (Eaton), 1885

ALBERTA, Lethbridge, 1/2-VIII-1929, VII/VIII-1930, J. H. Pepper, adults.

Leucrocuta hebe (McDunnough), 1924

ALBERTA, Lethbridge, 3-VII, J. H. Pepper, larvae; Milk River, 18-VII-1929, J. H. Pepper, larvae; Old Man River, Lethbridge, 3-VII, J. H. Pepper, larvae; Ross Creek, Medicine Hat, 13-VII-1929, J. H. Pepper, adults; Seven Persons Creek, Medicine Hat, 6-VIII-1929, J. H. Pepper, adults.

Leucrocuta minerva (McDunnough), 1924

NEW BRUNSWICK, Boisetown, 10-VII-1928, W. J. Brown, larvae.

Nixe inconspicua (McDunnough), 1924

NEW BRUNSWICK, Fredericton, 8/17-VII-1928, W. J. Brown, adults.

Rhithrogena anomala McDunnough, 1928

NEW BRUNSWICK, Boisetown, 10/11-VII-1928, W. J. Brown, adults. NOVA SCOTIA, Baddeck, 22-VI-1936, J. McDunnough, adults.

Rhithrogena jejuna Eaton, 1885

MANITOBA, Churchill, 3/14-VII-1937, W. J. Brown, adults.

Stenonema ithaca (Clemens and Leonard), 1924

NEW BRUNSWICK, Boisetown, 13-VII-1928, W. J. Brown, adults.

Stenonema terminatum (Walsh), 1862

NEW BRUNSWICK, Fredericton, VI/VII-1928, W. J. Brown, adults; Fredericton, 12-VI-1934, J. McDunnough, adults; Redbank, 7-VII-1928, W. J. Brown, adults.

LEPTOPHLEBIIDAE

Leptophlebia johnsoni McDunnough, 1924

NEW BRUNSWICK, Fredericton, 28-VI-1928, W. J. Brown, adults.

Paraleptophlebia praepedita (Eaton), 1884

NOVA SCOTIA, Annapolis Royal, 14/27-VII-1928, W. J. Brown, adults.

Paraleptophlebia vaciva (Eaton), 1884

ALBERTA, Lundbreck Falls, Old Man River, 24-V-1930, J. H. Pepper, larvae.

Paraleptophlebia volitans (McDunnough), 1924

NEW BRUNSWICK, Boisetown, 13-VII-1928, W. J. Brown, adults.

METRETOPODIDAE

Siphloplecton interlineatum (Walsh), 1863

BRITISH COLUMBIA, Jesmond, VIII/IX-1937, J. K. Jacob, adults.

POLYMITARCYIDAE

Ephoron album (Say), 1824

ALBERTA, Medicine Hat, 21-VIII-1930, J. H. Pepper, adults; Milk River, 13/18-VIII-1930, J. H. Pepper, adults and larvae. QUEBEC, Kirk's Ferry, 12-VIII-1920, J. McDunnough, adults.

SIPHONURIDAE

Siphonurus quebecensis (Provancher), 1878

PRINCE EDWARD ISLAND, Alberton, 15-VII-1940, G. S. Walley, adults.

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