

NUNAVUT MAYFLIES (EPHEMEROPTERA) A SUPPLEMENT FOR FAR NORTHERN NORTH AMERICA^{1, 2, 3}

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ABSTRACT: *Acentrella feropagus*, *Acerpenna pygmaea*, *Baetis bundyae*, *B. flavistriga*, *B. foemina*, *Dipheter hageni*, *Ephemerella aurivillii*, *Leptophlebia nebulosa*, and *Metretopus borealis* are Ephemeroptera species found in the new northern Canadian province of Nunavut. Of these, *B. foemina*, *L. nebulosa*, and *M. borealis*, along with 43 other species occur in the newly restricted Northwest Territories. No species are endemic to Nunavut, but *B. foemina* is endemic to northern Canada.

McCafferty and Randolph (1998) reported 321 species of mayflies in Canada and provided an annotated checklist for each of the provinces and territories officially recognized at that time. Sixty-two mayfly species were reported from northern Canada (28 from the Yukon Territory and 52 from the Northwest Territories). From all of far northern North America (including Alaska), some 63 species are known (McCafferty 1985, 1994, McCafferty and Randolph 1998). In 1993, the Canadian government formally passed the Nunavut Land Claims Agreement (NLCA), creating the new territory, Nunavut, for an area of land that represented a large eastern portion of the former Northwest Territories (Fig. 1) (Salloum 1999). In 1999, the NLCA officially went into effect, and Nunavut became a recognized territory. Nunavut encompasses a 1.9 million square kilometer region (nearly 1/5 the area of Canada) but which harbors a human population of only about 25,000 (Anonymous 1999). It might also be noted that in the future many Nunavut locality names will revert to their original Inuit names.

The mayflies reported from the Northwest Territories by McCafferty and Randolph (1998) need to be revised to show species recorded from Nunavut. Nine of the 52 former Northwest Territories species are found in Nunavut. They include *Acentrella feropagus* Alba-Tercedor and McCafferty, *Acerpenna pygmaea* (Hagen), *Baetis bundyae* Lehmkuhl, *B. flavistriga* McDunnough, *B. foemina* McDunnough, *Dipheter hageni* (Eaton), *Ephemerella aurivillii* Bengtsson, *Leptophlebia nebulosa* (Walker), and *Metretopus borealis* (Eaton).

For the most part, initial locale records for Nunavut may be found under NW (Northwest Territories) under the species treatments in McCafferty and Randolph (1998). In the case of *B. foemina*, *L. nebulosa*, and *M. borealis*, which occur in both Nunavut and the Northwest Territories, additional records

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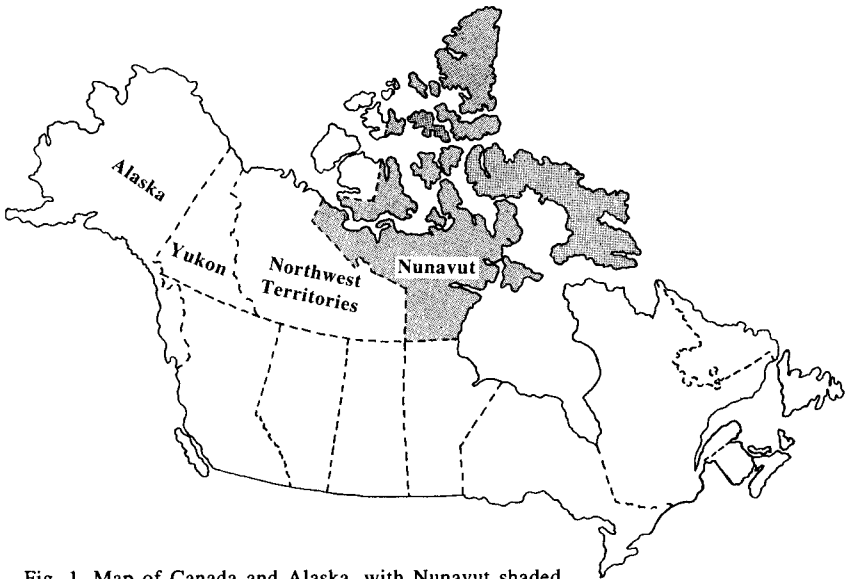


Fig. 1. Map of Canada and Alaska, with Nunavut shaded.

that establish their presence in either Nunavut or the Northwest Territories may be found in McDunnough (1936), Wiens et al. (1975), Cobb and Flannagan (1980), and Harper and Harper (1981). The records for *A. feropagus* will appear under the former name, *A. lapponica* (Bengtsson) (Alba-Tercedor and McCafferty 2000). No mayfly species are endemic to Nunavut; however, *B. foemina* apparently is endemic to far northern Canada.

With respect to the northern North America distribution (northern Canada and Alaska) of the Nunavut mayflies, *A. feropagus* is also known from Alaska, *B. bundyae* from Alaska and the Yukon, *B. foemina* from the Northwest Territories s.s., *E. aurivillii* from Alaska, *L. nebulosa* from the Northwest Territories s.s.; and *M. borealis* from the Northwest Territories s.s. and the Yukon (McCafferty and Randolph 1998).

LITERATURE CITED

- Alba-Tercedor, J. and W. P. McCafferty.** 2000. *Acentrella feropagus*, new species (Ephemeroptera: Baetidae): formal new name for North American *A. lapponica* sensu Morihiro and McCafferty. Entomol. News 111: 137-139.
- Anonymous.** 1999. New territory, Nunavut, is created. Facts on File 59: 233.
- Cobb, D. G. and J. F. Flannagan.** 1980. The distribution of Ephemeroptera in northern Canada. pp 155-166 in J. F. Flannagan and K. E. Marshall (eds). Advances in Ephemeroptera biology. Plenum, NY. 552 p.

- Harper, F. and P. P. Harper.** 1981. Northern Canadian mayflies (Insecta: Ephemeroptera), records and descriptions. *Can. J. Zool.* 59: 1784-1789.
- McCafferty, W. P.** 1985. The Ephemeroptera of Alaska. *Proc. Entomol. Soc. Wash.* 87: 381-386.
- McCafferty, W. P.** 1994. Additions and corrections to the Ephemeroptera of Alaska. *Proc. Entomol. Soc. Wash.* 96: 177.
- McCafferty, W. P. and R. P. Randolph.** 1998. Canada mayflies: a faunistic compendium. *Proc. ent. Soc. Ont.* 129: 47-97.
- McDunnough, J.** 1936. A new arctic baetid (Ephemeroptera). *Can. Entomol.* 68: 33-34.
- Salloum, H.** 1999. Nunavut—Canada's newest child. *Contemp. Rev.* 275: 80-84.
- Wiens, A. P., D. M. Rosenberg, and N. B. Snow.** 1975. Species list of aquatic plants and animals collected from the Mackenzie and Porcupine River watersheds from 1971-1973. *Can. Fish. Mar. Serv. Tech. Rept.* 557: 1-39.