

## **NOTE**

## Macropogon piceus (Coleoptera: Artematopodidae) in the Maritime Provinces of Canada

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Artematopodidae is family of beetles within the basal lineage of Elateroidea. There are approximately 60 species in seven genera in the world. Three genera, *Allopogonia* Cockerell, *Eurypogon* Motschulsky, and *Macropogon* Motschulsky are found in North America (Young 2002). Representatives of the latter two are found in Canada (Bousquet 1991). *Macropogon* consists of three species: *Macropogon sequoiae* Hopping found in California; *Macropogon testaceipennis* Motschulsky found along the Pacific coast; and the transcontinental *Macropogon piceus* LeConte (Young 2002). While *Macropogon piceus* was reported from New Brunswick by Bousquet (1991), it has never been recorded from Nova Scotia. The present paper provides records of its occurrence there.

In the context of biodiversity studies on Coleoptera, a number of collections in Atlantic Canada were examined for specimens of Artematopodidae. Abbreviations (following Evenhuis 2009) of collections referred to in this study are:

**CBU** Cape Breton University, Sydney, Nova Scotia, Canada

CNC Canadian National Collection of Insects, Arachnids, and Nematodes, Ottawa, Ontario,

Canada

NSNR Nova Scotia Department of Natural Resources, Shubenacadie, Nova Scotia, Canada

NSMC Nova Scotia Museum, Halifax, Nova Scotia, Canada

The number of specimens and the collection abbreviation are enclosed in parentheses.

Artematopodids superficially resemble pubescent click beetles (Elateridae) (Fig. 1), however, their prosternal keel is less developed than in elaterids, and they lack their frontal ridge. A characteristic feature of the family is a tongue-like process located on the ventral surface of the elytral apex (Fig. 2) (Young 2002).

Macropogon piceus LeConte, 1861

NEW BRUNSWICK: Northumberland Co.: Boiestown, 7.VIII, 1953, J.F. Brimley (1, CNC); Saint John Co.: Saint John, 11.VII.1928, W.J. Brown (1, CNC). NOVA SCOTIA: Inverness Co.: Skyline Trail, Cape Breton Highlands National Park, 10.VIII.2008, D.B. McCorquodale (1, CBU); Halifax Co.: Halifax, 29.VII.1968, P.S. Doleman, flying at dusk (1, NSMC); Guysborough Co.: Bonnet Lake Barren, 8-15.VII, 1999, R.F. Lauff (2, NSNR); Hants Co.: Little Armstrong Lake, 16-29.VII.1997, D.J. Bishop, 75 year old red spruce forest, flight intercept trap (1, NSMC).

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**Fig. 1**. Lateral habitus of *Macropogon piceus* LeConte. Photo credit: C. G. Majka, Nova Scotia Museum, Halifax, NS



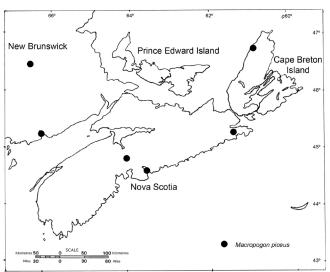
**Fig. 2**. Apico-ventral aspect of the left elytron of *Macropogon piceus* LeConte; the arrow indicates the projecting tongue-like process. Photo credit: C.G. Majka, Nova Scotia Museum, Halifax, NS



Macropogon piceus is newly recorded from Nova Scotia. In North America it has previously been recorded from Alberta, British Columbia, Illinois, Maine, Manitoba, Michigan, Montana, New Brunswick, New Hampshire, Northwest Territories, Ontario, Oregon, and Québec (Procter 1946; Bousquet 1991; Young 1992).

The small number of records of *Macropogon piceus* to date indicate that it is widely distributed in New Brunswick and Nova Scotia (Fig. 3). The elateriform larvae are associated with moss mats growing on granitic boulders; those of *Macropogon piceus* have been particularly associated with the lithophytic moss, *Paraleucobryum longifolium* (Hedw.) Loeske (Dicranaceae) (Young 2002), a widely distributed Holarctic moss found across North America from Alaska and British Columbia east to Newfoundland and Greenland and south to Alabama in the east; it has also been found at higher elevations in the Rocky Mountains

**Fig. 3**. The distribution of *Macropogon piceus* LeConte in the Maritime Provinces of Canada



in Colorado, Arizona, and New Mexico, and in Europe and Asia (Ireland 2007). *Paraleucobryum longifolium* is common and widely distributed throughout the Maritime Provinces (except for the eastern shore of New Brunswick) where it grows on non-calcareous boulders and cliffs; sometimes on tree trunks, stumps, and rotten logs (Ireland 1982, 2007). Given that its host plant is common and widely distributed in the region, further research should be conducted to ascertain the extent of the distribution of *Macropogon piceus* in the Maritime Provinces.

Another artematopodid, *Eurypogon niger* (Melsheimer), has been recorded in both Maine and Québec (Bousquet 1991; Chandler 2001) and should be looked for in the Maritime Provinces, particularly in the western portions of New Brunswick that adjoin the former jurisdictions.

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