

Scientific Note

New Records of Dytiscidae (Insecta: Coleoptera) in Manitoba

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Manitoba is situated in the central part of Canada. It includes the border of some geomorphologically different regions (Precambrian Shield and Paleozoic to Cenozoic formations). It has a temperate-continental climate. Geology and climate combine to create different ecozones (Boreal Shield and Boreal Plain) within the province. Due to these various geophysical features, many species of Dytiscidae have the eastern or western limits of their distributions in Manitoba. As well, some widely distributed species (e.g. *Laccophilus maculosus* Say, *Coptotomus longulus* LeConte) have a transition zone between their eastern and western forms here. All this makes Manitoba an interesting and important region for collecting water beetles.

The most intensive study of Dytiscidae of Manitoba was conducted by J.B. Wallis. He reported 141 species of dytiscids from Manitoba (1973) and described three new species from this province (1924, 1933, and 1939). Larson *et al.* (2000) documented 148 species of Dytiscidae in Manitoba. Several recent collecting trips were carried out by us in the province. New faunistic data on three dytiscid species are presented herein. Specimens are deposited in the J.B. Wallis Museum, Department of Entomology, University of Manitoba.

Hydroporus melsheimeri Fall

1♂ : Canada, MANITOBA, (2002-04a); Whiteshell Provincial Park, backwater of Lyon's Lake, 49°44'06" N, 95°10'51" W; 14.vii.2002 (coll. Roughley and Shaverdo).

This species was recorded from southeastern Canada and northeastern USA. The most western points of its distribution were in western Ontario and Minnesota (Larson *et al.* 2000). The present record is an extension of its known distribution to the northwest. However, the species is not recorded for a new ecozone. It is so far known only from the Boreal Shield and Mixedwood Plains within Canada.

Oreodytes quadrimaculatus (Horn)

1♂ : Canada, Manitoba, Cowan Creek, 51°59'04" N; 100°40'49" W; 18.viii.2001 (coll. T. Mousseau).

This species has a western distribution in North America: central Alberta, southern British Columbia, Washington, Oregon, Nevada, and California. It is known from Montane Cordillera and Boreal Plain in Canada (Larson *et al.* 2000). It is apparent from the present record that *O. quadrimaculatus* is more widely distributed, and Cowan Creek is the most eastern point of its range, though this does not change the known distribution of the species among ecozones.

Acilius mediatius (Say)

1♂ : Canada, Manitoba, (77), NE, Richer, Hwy #506, ditch, 49°40'09" N; 96°05'30.6" W; 12.ix.2002 (coll. Shaverdo and Roughley).

This species has a distribution similar to, but much wider than *H. melsheimeri*. It occurs from Nova Scotia to southern Ontario and south to Florida and, in Canada, it is known from Boreal Shield, Mixedwood Plains, and Atlantic Maritime (Larson *et al.* 2000). Our new record extends its known distribution to the northwest. However, within Manitoba, *A. mediatius* is reported from the same ecozone (Boreal Shield) as previously.

Thus, at present, 151 species of Dytiscidae are known from Manitoba.

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