

New records of Helophoridae, Hydrochidae, and Hydrophilidae (Coleoptera) from New Brunswick, Canada

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Abstract

The following three species of Helophoridae are newly recorded for New Brunswick, Canada: *Helophorus* (*Kyphobolophorus*) *tuberculatus* Gyllenhal, *Helophorus* (*Rhopaleporus*) *oblongus* LeConte, *Helophorus* (*Rhopaleporus*) *marginicollis* Smetana. *Hydrochus subcupreus* Randall, family Hydrochidae, and the following 15 species of Hydrophilidae are newly reported for the province: *Berosus fraternus* LeConte, *Berosus peregrinus* (Herbst), *Berosus sayi* Hansen, *Paracymus despectus* (LeConte), *Chaetarthria atra* (LeConte), *Cymbiodyta acuminata* Fall, *Cymbiodyta blanchardi* Horn, *Cymbiodyta minima* Notman, *Enochrus* (*Lumetus*) *hamiltoni* Horn, *Enochrus* (*Methydrus*) *consors* (LeConte), *Enochrus* (*Methydrus*) *consortus* Green, *Enochrus* (*Methydrus*) *pygmaeus nebulosus* (Say), *Cercyon* (*Cercyon*) *cinctus* Smetana, *Cercyon* (*Cercyon*) *herceus frigidus* Smetana, *Cercyon* (*Dicyrtocercyon*) *ustulatus* (Preysslner).

Keywords

Helophoridae, Hydrochidae, Hydrophilidae, Hydrophilinae, Chaetarthriinae, Enochrinae, Sphaeridiinae, new records, Canada, New Brunswick

Introduction

This paper treats new records of Helophoridae, Hydrochidae, and Hydrophilidae from New Brunswick, Canada. A few brief comments are required regarding the

family status of Helophoridae, Hydrochidae, and Georissidae as there has been some disagreement in the literature. Smetana (1988) in the review of the Hydrophilidae of Canada and Alaska treated the Helophorinae and Hydrochinae as subfamilies of the Hydrophilidae. Van Tassel (2000) provided a general overview on the taxonomy and classification of North American members of the Hydrophilidae and also treated these taxa as subfamilies of the Hydrophilidae. This arrangement was subsequently used by Bousquet et al. (2013) in the Checklist of the Beetles of Canada. However, Hansen (1991), employing adult characters, and Archangelsky (1998), using adult and larval characters, provided data that support treating these subfamilies as families (Helophoridae, Hydrochidae, Georissidae). See Van Tassel (2000) for more details and references regarding this issue. Recently, Short and Fikáček (2013) provided a revised classification of the Hydrophilidae based on morphological data and molecular analysis of DNA sequence data from mitochondrial and nuclear genes. They also considered the Helophoridae, Hydrochidae, and Georissidae as separate families and made a number of changes to the classification of the Hydrophilidae. We follow their classification in this publication.

The Helophoridae and Hydrochidae are aquatic and usually occur in fresh water (Smetana 1988, Van Tassel 2000). The Hydrophilidae (water scavenger beetles) occurring in Canada can generally be divided into two biologically different groups, one aquatic and the other terrestrial, but see Short and Fikáček (2013) and Bloom et al. (2014) for more detailed discussions on the relationship between diversity patterns, habitat associations, and taxonomic lineages in this family from a global perspective. The aquatic species, which are the most species rich in Canada, belong to the subfamilies Hydrophilinae, Chaetarthriinae, and Enochrinae (Smetana 1988, Van Tassel 2000, Short and Fikáček 2013). Members of the Sphaeridiinae are mostly terrestrial, with a few semi-aquatic species. Aquatic species usually live in stagnant pools, littoral areas of lakes and ponds, in shallow water of streams, and in springs, and a few occur in brackish to strongly saline water (Smetana 1988, Van Tassel 2000). Immature stages are predaceous, and adults are mostly omnivorous, feeding on decaying vegetation and plants, but some are predatory on snails and other small invertebrates (Van Tassel 2000). The terrestrial species are scavengers in fresh mammal dung, soil rich in humus, rotting mushrooms, seaweed, or among moist decaying leaves (Smetana 1988, Van Tassel 2000). See Van Tassel (2000) for further details on the biology of North American members of this family.

Thirty-eight species of Hydrophilidae, including the Helophoridae and Hydrochidae, were reported for New Brunswick by Smetana (1988) and Roughley (1991). Since those publications, little has been published on the Hydrophilidae of New Brunswick. In the most recent checklist of the beetles of Canada, eight species of Helophoridae (as Helophorinae), one species of Hydrochidae (as Hydrochinae), and 37 species of Hydrophilidae were reported for the province (Bousquet et al. 2013). During a general survey of the Coleoptera of New Brunswick, an additional three species of Helophoridae, one species of Hydrochidae, and 15 species of Hydrophilidae have been recorded for the province. The purpose of this paper is to report on these new records.

Methods and conventions

Collection methods. The following records are based, in part, on specimens collected as part of a general survey to document the Coleoptera fauna of New Brunswick. Helophoridae, Hydrochidae, and Hydrophilidae were sampled from various aquatic and semi-aquatic habitats. Aquatic habitats were sampled with aquatic nets. Very small aquatic and semi-aquatic habitats, such as vernal pools, spring-fed seepages, and moss and debris on stream margins, were sampled by removing moss and debris and placing it on a cloth sheet or aquatic net to drain water away. The specimens were sifted and collected as they became active. Some specimens were collected from Lindgren funnel trap samples during a study to develop methods for improved survey and detection of potentially invasive species of bark and wood-boring beetles. These traps are visually similar to tree trunks and are often effective for sampling species of Coleoptera that live in microhabitats associated with standing trees (Lindgren 1983), but species associated with other habitats are often collected as well. At many sites, equal numbers of traps were deployed in the canopy and 1 m high under trees. Traps were baited with various combinations of lures for detecting Cerambycidae. See Webster et al. (2012) for details of the lures used and Hughes et al. (2014) for methods used to deploy Lindgren traps and sample collection. A description of the habitat was recorded for all specimens collected during this survey. Locality and habitat data are presented as on labels for each record. Two labels were used on many specimens, one that included the locality, collection date, and collector, and one with macro- and microhabitat data and collection method. Information from the two labels is separated by a // in the data presented from each specimen.

Specimen preparation. Males of Hydrochidae and some species of Helophoridae and Hydrophilidae were dissected to confirm their identity. The genital structures were dehydrated in absolute alcohol and mounted in Canada balsam on celluloid microslides and then pinned with the specimens from which they originated. Keys in Smetana (1985 and (1988) were used to determine specimens.

Distribution. Every species is cited with current distribution in Canada and Alaska, using abbreviations for the state, provinces, and territories. New records for New Brunswick are indicated in bold under Distribution in Canada and Alaska. The following abbreviations are used in the text:

AK	Alaska	MB	Manitoba
YT	Yukon Territory	ON	Ontario
NT	Northwest Territories	QC	Quebec
NU	Nunavut	NB	New Brunswick
BC	British Columbia	PE	Prince Edward Island
AB	Alberta	NS	Nova Scotia
SK	Saskatchewan	NF & LB	Newfoundland and Labrador*

*Newfoundland and Labrador are each treated separately under the current Distribution in Canada and Alaska.

Acronyms of collections examined or where specimens reside referred to in this study are as follows:

AFC	Atlantic Forestry Centre, Fredericton, New Brunswick, Canada
NBM	New Brunswick Museum, Saint John, New Brunswick, Canada
RWC	Reginald P. Webster Collection, Charters Settlement, New Brunswick, Canada

Results

Species accounts

All records below are species newly recorded for New Brunswick, Canada. Species with a † are adventive to Canada, species with a * are Holarctic. The determination that a species was a new record was based on information in the print version of Bousquet et al. (2013). The classification used below follows Short and Fikáček (2013).

Family Helophoridae Leach, 1815

Helophorus (Kypohelophorus) tuberculatus Gyllenhal, 1808*

Material examined. New Brunswick, Restigouche Co., near Little Tobique River, 47.4503°N, 67.0583°W, 13.VI.2006, R.P. Webster // Eastern white cedar swamp, in saturated moss in small pool (1, RWC).

Distribution in Canada and Alaska. AK, YT, BC, AB, SK, MB, ON, QC, NB, NS (Bousquet et al. 2013).

Helophorus (Rhopalelophorus) marginicollis Smetana, 1985

Material examined. New Brunswick, Madawaska Co., 4.0 km W of Saint-Hilaire, 47.2926°N, 68.4622°W, 27.VII.2006, R.P. Webster // Margin of Saint John River in rock pool (1, RWC).

Distribution in Canada and Alaska. ON, NB (Bousquet et al. 2013).

Helophorus (Rhopalelophorus) oblongus LeConte, 1850

Material examined. New Brunswick, Restigouche Co., Morin Bog, N of Kedgwick, 47.6813°N, 67.3142°W, 22.V.2003, R.P. Webster // Black spruce forest, flooded semi-permanent sedge marsh [pond] (1, RWC).

Distribution in Canada and Alaska. AK, YT, NT, NU, BC, AB, SK, MB, ON, QC, NB (Bousquet et al. 2013).

Family Hydrochidae C.G. Thomson, 1859

Hydrochus subcupreus Randall, 1838

Material examined. New Brunswick, York Co., Charters Settlement, 45.8395°N, 66.7391°W, 26.VI.2003, 17.VII.2004, 1.VIII.2004, 11.VI.2005, 10.VII.2005, 20.VII.2006, 3.IX.2010, R.P. Webster // Mixed forest, m.v. light (10 [6 males dissected], RWC)

Distribution in Canada and Alaska. ON, QC, NB (Bousquet et al. 2013).

Hydrophilidae, Latreille, 1802

Subfamily Hydrophilinae Latreille, 1802

Tribe Berosini Mulsant, 1844

Berosus fraternus LeConte, 1855

Material examined. New Brunswick, Restigouche Co., 8.5 km S of Saint Arthur, 47.8196°N, 66.7596°W, 14.VI.2006, R. P. Webster // Mixed forest, gravel bottomed pool near roadside (4, RWC). Sunbury Co., Sheffield, Portobello Creek N.W.A. [National Wildlife Area], 45.8952°N, 66.2728°W, 18.VI.2004, R.P. Webster // Silver maple forest, u.v. light trap near marsh (1, RWC). York Co., 45.8428°N, 66.7279°W, 2.VI.2003, R.P. Webster // Mixed forest, small pool on forest trail (1, RWC).

Distribution in Canada and Alaska. BC, AB, SK, MB, ON, QC, NB (Bousquet et al. 2013).

Berosus peregrinus (Herbst, 1797)

Material examined. New Brunswick, Carleton Co., Bell Forest, 46.2200°N, 67.7231°W, 13.VII.2004, K. Bredin, J. Edsall, & R. Webster // Mature hardwood forest, u.v. light trap (1, NBM); Meduxnekeag Valley Nature Preserve, 46.1888°N, 67.6762°W, 4. VII.2005, R. P. Webster // River margin, in flood debris (1, RWC); Meduxnekeag Valley Nature Preserve, 46.1941°N, 67.6830°W, 30.VI.2014, R. P. Webster // River margin with cobblestones, collected at night using headlamp (1, NBM; 1, RWC). Kings Co., Hampton, Hampton Marsh at the Hammond River, 45.4787°N, 65.9007°W, 13.VII.2005 // R. P. Webster, river margin with sand/clay bottom (1, NBM; 2, RWC). Queens Co., Grand Lake near Scotchtown, 45.8762°N, 66.1816°W, 9.VII.2006, R. P. Webster // Oak and maple forest, m.v. light (1, RWC);

Bayard at Nerepis River, 45.4426°N, 66.3280°W, 20.VI.2008, R.P. Webster (1, RWC). **Sunbury Co.**, Blissville, S Branch Oromocto River, 45.5996°N, 66.5604°W, 5.VII.2006, R. P. Webster // Gravel bottomed river in trailing vegetation (2, RWC). **York Co.**, Douglas, Nashwaaksis River at Rt. 105, 45.9850°N, 66.6900°W, 26.VI.2005, R. P. Webster // River margin in embayment with sand/gravel bottom, sun-exposed (1, RWC); Charters Settlement, 45.8395°N, 66.7391°W, 23.VII.2007, R.P. Webster // Mixed forest, m.v. light (1, RWC).

Distribution in Canada and Alaska. ON, QC, NB, NS (Bousquet et al. 2013).

Berosus sayi Hansen, 1999

Material examined. **New Brunswick, Albert Co.**, Shepody N.W.A., Germantown Section, 45.7060°N, 64.7640°W, 16.VI.2004, R. P. Webster // Cattail and sedge marsh in small pool (1, RWC). **Gloucester Co.**, Miscou Island, 47.9081°N, 64.5907°W, 31.VII.2005, R. P. Webster // Shallow (15 cm) gravel pit pond with scattered grasses and sedges and gravel bottom (1, RWC). **Queens Co.**, Grand Lake near Scotchtown, 45.8762°N, 66.1816°W, 19.V.2003, V. Webster, M.-A. Giguère & R. Webster // Shallow lake margin among grasses (1, RWC); Grand Lake, Scotchtown, 45.8763°N, 66.1822°W, 16.VI.2013, R.P. Webster // Lake margin in shallow water (1, NBM); near Jemseg, 45.8237°N, 66.1393°W, 7.VI.2003 // Vernal pond in meadow, grass and sedge bottom (1, RWC); Rt. 105, N of Coytown, 45.8237°N, 66.1393°W, 17.VI.2013, R.P. Webster // Flooded meadow near seasonally flooded forest/marsh (1, NBM). **Sunbury Co.**, Maugerville, Portobello Creek N.W.A., 45.8992°N, 66.4248°W, 18.VI.2004, R. P. Webster // Silver maple forest near slow flowing river, black light trap (1, RWC). **York Co.**, Charters Settlement, 45.8352°N, 66.7330°W, 24.V.2003, R. P. Webster // mixed forest, margin of beaver pond among sedges (1, RWC); Charters Settlement, 45.8395°N, 66.7391°W, 24.V.2003, 7.IX.2007, 3.IX.2010, R. P. Webster // Mixed forest, u.v. light (2, NBM; 2, RWC); near Thomaston Corner, 45.637°N, 67.113°W, 13.IX.2003, V. Webster & R. Webster // Gravel pit pond (1, RWC).

Distribution in Canada and Alaska. NT, BC, AB, SK, MB, ON, QC, NB, PE (Bousquet et al. 2013).

Tribe Laccobiini Houlbert, 1922

Paracymus despectus (LeConte, 1863)

Material examined. **New Brunswick, Queens Co.**, C.F.B. Gagetown, 45.7516°N, 66.1866°W, 3-15.VII.2013, C. Alderson & V. Webster // Old mixed forest with *Quercus rubra*, Lindgren funnel trap in canopy of *Q. rubra* (1, AFC). **York Co.**, Canterbury, Browns Mtn. Fen [Eel River P.N.A.], 45.8967°N, 67.6343°W, 23.VI.2005, J. Edsall & R. Webster // Cedar swamp, in shaded moss-covered pools (4, RWC);

same locality but 23.VI.2014, R.P. Webster // Calcareous cedar fen with shrubby cinquefoil, treading saturated sphagnum along moose trail (1, NBM; 1, RWC).

Distribution in Canada and Alaska. AB, SK, MB, ON, QC, NB (Bousquet et al. 2013).

Comments. Most specimens from New Brunswick were collected from saturated sphagnum moss in an open calcareous cedar fen. Smetana (1988) mentions that *Paracymus despectus* (LeConte) frequents shallow water with abundant organic debris but noted that little else was known about its habitat preferences.

Subfamily Chaetarthriinae Bedel, 1881

Tribe Chaetarthriini Bedel, 1881

Chaetarthria atra (LeConte, 1863)

Material examined. New Brunswick, Carleton Co., Belleville, Meduxnekeag Valley Nature Preserve, 46.1942°N, 67.6832°W, 9.VI.2008, R.P. Webster // River margin, among cobblestones set in sand and fine gravel near water's edge (2, RWC). Queens Co., Bayard at Nerepis River, 45.4426°N, 66.3280°W, 30.V.2008, 25.VI.2010, R.P. Webster // River margin, under small rocks in gravel and in moist gravel (5, RWC)

Distribution in Canada and Alaska. QC, NB, NS (Bousquet et al. 2013).

Comments. In New Brunswick, adults of *Chaetarthria atra* (LeConte) were found on river margins among cobblestones set in fine sand and gravel, under small rocks, and in moist gravel at water's edge. Little was previously known about its habitat preferences (Smetana 1988).

Subfamily Enochrinae Short & Fikáček (2013)

Cymbiodyta acuminata Fall, 1924

Material examined. New Brunswick, Albert Co., Shepody N.W.A., Germantown Section, 45.7056°N, 64.7642°W, 17.V.2004, R. P. Webster // Cattail and sedge marsh in marsh litter (1, RWC). York Co., Charters Settlement, 45.8263°N, 66.7350°W, 5.V.2003, R. P. Webster // Sedge marsh, in pools among sedges and sphagnum moss (1, RWC).

Distribution in Canada and Alaska. AK, YK, NT, BC, AB, SK, MB, ON, QC, NB, NS (Bousquet et al. 2013).

Cymbiodyta blanchardi Horn, 1890

Material examined. New Brunswick, Albert Co., Caledonia Gorge P.N.A., 45.8380°N, 64.8484°W, 3.VII.2011, R.P. Webster // Near Turtle Creek, old-growth

hardwood forest, mossy [spring-fed] seepage with some *Carex*, sifting saturated moss (1, RWC). **Carleton Co.**, Meduxnekeag Valley Nature Preserve, 46.1890°N, 67.6706°W, 8.VI.2005, R. P. Webster // Old-growth cedar stand, in saturated moss and debris in spring-fed seepage (7, RWC); [Jackson Falls] Bell Forest, 46.2210°N, 67.7210°W, 2.VI.2005, R. P. Webster // Mature hardwood forest, among small stones in spring-fed brook (2, RWC). **York Co.**, Charters Settlement, 45.8380°N, 66.7309°W, 14.V.2004, R. P. Webster // Mixed forest, small clear stream among gravel and stones (1, RWC).

Distribution in Canada and Alaska. ON, QC, NB (Bousquet et al. 2013).

Comments. Most specimens of *Cymbiodyta blanchardi* Horn from New Brunswick were found in saturated moss and debris in spring-fed seepages. Others were found among small stones in a spring-fed brook and among gravel and stones in a small clear stream. Smetana (1988) reported the species from similar habitats, including moss and algae on dripping cliffs. Little else is known about the biology of this species.

Cymbiodyta minima Notman, 1919

Material examined. **New Brunswick, Albert Co.**, Shepody N.W.A., Germantown Section, 45.7101°N, 64.7542°W, 17.V.2004, R. P. Webster // Spruce, fir, birch forest near large marsh, in leaf litter (1, RWC). **Sunbury Co.**, Sheffield, Portobello Creek N.W.A., 45.8965°N, 66.2725°W, 1.VIII.2004, R. P. Webster // Silver maple swamp near seasonally flooded marsh, u.v. light trap (1, RWC).

Distribution in Canada and Alaska. BC, MB, ON, QC, NB (Bousquet et al. 2013).

Enochrus (Lumetus) hamiltoni Horn, 1890

Material examined. **New Brunswick, Gloucester Co.**, Caraquet near Rivière du Nord, 47.7949°N, 65.0903°W, 15.VIII.2003, R. P. Webster // Salt marsh, in small salt pond (2, NBM, 1, RWC); Maisonette Marsh, 47.8150°N, 65.0146°W, 30.VII.2005, R. P. Webster // Salt marsh, under litter on margin of salt pond (9, NBM; 2, RWC). **Kings Co.**, Plumweseep Salt Spring, 45.74326°N, 65.43819°W, 19.VI.2012, R.P. Webster & D. Sabine // Inland salt spring with clay margin with sparse vegetation (salt grass), splashing (1, RWC). **Madawaska Co.**, Loon Lake, 236 m elev., 47.7839°N, 68.3943°W, 21.VII.2010, R.P. Webster // Boreal forest, small lake surrounded by sedges, treading sedges near *Myrica gale* bushes (1, RWC). **Queens Co.**, near Jemseg [Grand Lake Meadows P.N.A.], 45.8237°N, 66.1393°W, 7.VI.2003, R.P. Webster // Vernal pond in meadow, grass and sedge bottom (4, RWC). **Restigouche Co.**, near Morin Bog, N of Kedgwick, 47.6828°N, 67.3148°W, 6.VI.2003, R. P. Webster // Black spruce forest, sedge marsh in large semi permanent flooded pool (1, RWC). **Sunbury Co.**, Maugerville, Portobello Creek N.W.A., 45.8992°N, 66.4248°W, 18.VI.2004, R. P. Webster // Silver maple forest near slow flowing river, black light trap (1, RWC). **York Co.**, Fredericton, 4.VI.1930, R. P. Gorham (1, AFC); Charters

Settlement, 45.8248°N, 66.7220°W, 11.V.2003, 18.V.2003, R. P. Webster // Mixed forest, small eutrophic pond in dense vegetation (3, RWC).

Distribution in Canada and Alaska. NT, BC, AB, SK, MB, ON, QC, NB, NS, PE, NF (Bousquet et al. 2013).

Enochrus (Methyrus) consors (LeConte, 1863)

Material examined. **New Brunswick, Queens Co.,** Grand Lake Meadows P.N.A., 45.8227°N, 66.1209°W, 24.VIII-3.IX.2010, R.P. Webster // Old silver maple forest with green ash and seasonally flooded marsh, Lindgren funnel trap (1, RWC); same locality data, forest type and collection method but 5-17.VIII.2011, M. Roy & V. Webster (1, RWC). **Restigouche Co.,** Otter Brook Fen, 47.9337°N, 68.0532°W, 30.VII.2012, R. Webster & M. Turgeon // *Carex* marsh on lake margin, treading vegetation (1, RWC).

Distribution in Canada and Alaska. ON, QC, NB (Bousquet et al. 2013).

Enochrus (Methyrus) consortus Green, 1946

Material examined. **New Brunswick, Queens Co.,** Grand Lake near Scotchtown, 45.8762°N, 66.1816°W, 9.VII.2006 // R. P. Webster, oak and maple forest, m.v. light (2, RWC). **Sunbury Co.,** Maugerville, Portobello Creek N.W.A., 45.8992°N, 66.4248°W, 18.VI.2004, R. P. Webster // Silver maple forest near slow flowing river, black light trap (1 [male dissected], RWC). **York Co.,** Charters Settlement, 45.8395°N, 66.7391°W, 17.VI.2004, R.P. Webster // Mixed forest, m.v. light (1, RWC)

Distribution in Canada and Alaska. MB, ON, NB (Bousquet et al. 2013).

Enochrus (Methyrus) pygmaeus nebulosus (Say, 1824)

Material examined. **New Brunswick, York Co.,** Charters Settlement, 45.8395°N, 66.7391°W, 23.VII.2007, R. P. Webster // Mixed forest, u.v. light (1, RWC).

Distribution in Canada and Alaska. MB, ON, QC, NB (Bousquet et al. 2013).

Subfamily Sphaeridiinae Latreille, 1802

Tribe Megasternini Mulsant, 1844

Cercyon (Cercyon) cinctus Smetana, 1978

Material examined. **New Brunswick, York Co.,** Charters Settlement, 45.8395°N, 66.7391°W, 23.VII.2007, 20.VIII.2011, R. P. Webster // Mixed forest, m.v. light (2,

RWC); Douglas, Currie Mountain, 45.9832°N, 66.7564°W, 24.VI–9.VII.2013, C. Alderson & V. Webster // Old *Pinus strobus* stand, Lindgren funnel trap in canopy of *P. strobus* (1, RWC).

Distribution in Canada and Alaska. NT, BC, AB, SK, MB, ON, QC, NB (Bousquet et al. 2013).

Cercyon (Cercyon) herceus frigidus Smetana, 1978

Material examined. **New Brunswick, Albert Co.,** Shepody N.W.A., Germantown Section, 45.7056°N, 64.7642°W, 17.V.2004, R. P. Webster // Cattail and sedge marsh, in marsh litter (1, RWC); Caledonia Gorge P.N.A., 45.7930°N, 64.7764°W, 1.VII.2011, R.P. Webster // Small rocky clear-cold river (Caledonia Creek), sifting drift material (tree bud material) near eddy area (1, RWC). **Carleton Co.,** Two Mile Brook Fen, 46.3619°N, 67.6733°W, 6.V.2005, R.P. Webster // Cedar forest/swamp, in moist sphagnum (1, RWC). **Queens Co.,** W of Jemseg near “Trout Creek” [Grand Lake Meadows P.N.A.], 45.8227°N, 66.1240°W, 9.V.2004, R.P. Webster // Silver maple swamp, sifting litter at base of large tree (1, RWC). **Sunbury Co.,** Mauderville, Portobello Creek N.W.A., 45.8992°N, 66.4248°W, 5.VI.2004, R. P. Webster // Silver maple forest, margin of small pond in leaf litter (1, RWC); Gilbert Island, 45.8770°N, 66.2954°W, 12–29.VI.2012, C. Alderson, C. Hughes & V. Webster // Hardwood forest, Lindgren funnel trap 1 m high under *Juglans cinerea* (1, RWC). **York Co.,** Fredericton, at Saint John River, 45.9588°N, 66.6254°W, 4.VII.2004, R.P. Webster // River margin, in drift material (mostly maple seeds) (1, RWC); Charters Settlement, 45.8395°N, 66.7391°W, 15.IV.2004, R. P. Webster // Mixed forest, in leaf litter near small stream (2, RWC); same locality data and collector but 9.IV.2005 // Residential lawn among lawn grass adjacent to garden (1, RWC).

Distribution in Canada and Alaska. AK, YT, NT, BC, AB, SK, MB, ON, QC, NB (Bousquet et al. 2013).

Cercyon (Dicyrtocercyon) ustulatus (Preyssler, 1790)†

Material examined. **New Brunswick, Sunbury Co.,** Gilbert Island, 45.8770°N, 66.2954°W, 18–28.V.2012, C. Alderson, C. Hughes & V. Webster // Hardwood forest, Lindgren funnel trap 1 m high under *Tilia americana* (1, RWC).

Distribution in Canada and Alaska. QC, NB (Bousquet et al. 2013).

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