# NEW RECORDS OF CADDISFLIES (TRICHOPTERA) FOR OHIO

# Eric P. McElravy, Thomas L. Arsuffi, and Benjamin A. Foote

Abstract.—Collections of adult Trichoptera were made along several streams in northeastern Ohio between 1970 and 1976. Sixty-nine of the collected species apparently represent new records for Ohio. An annotated list of the newly recorded species is presented and it nearly doubles the number of caddisflies reported from Ohio.

The order Trichoptera has been little studied in Ohio. Marshall's (1939) work on the caddisflies of western Lake Erie is apparently the only study dealing exclusively with the occurrence of species of the order in the state. Most of the other records for the state are given in Ross' (1944) work on the Illinois fauna. A few additional records are contained in Horwath's (1964) study of the insects of Gibraltar Island (western Lake Erie), Gordon's (1974) revision of *Cheumatopsyche*, and Ross' (1966) descriptions of new *Oecetis* species. As a result of these earlier published studies, 77 Trichoptera species were known to occur in Ohio. Forty-nine of these species are from Lake Erie. In addition, two more species of *Hydropsyche* are listed for the state by G. Schuster and D. Etnier, University of Tennessee, in their study of the immatures of that genus (personal communication). Resh (1975) reported 175 species from Kentucky; presumably a similar number will be recorded from Ohio.

Since 1970, and especially between 1974 and 1976, collections of Trichoptera have been made at four stream sites in northeastern Ohio (Fig. 1). Sixty-nine of the species apparently are the first reported records for the state. Complete lists are forthcoming for the collections from northeastern Ohio.

#### Description of Study Areas

Stebbins Gulch.—Stebbins Gulch, located within the Holden Arboretum in western Geauga County, is a deep gorge cut in sandstone and conglomerate. The stream that flows through this gorge, a tributary of the East Branch of the Chagrin River, has a high gradient and good water quality. Collections were made by sweeping during 1970, 1971, and 1972 (Tkac, 1973).

*Cuyahoga River.*—The Cuyahoga River in Portage and Geauga Counties is a moderately-sized stream of varying substrate and current. Collections of Trichoptera were made in 1975 with a gasoline lantern by J. Wilke, De-



Fig. 1. Location of sampling sites in northeastern Ohio. 1, Stebbins Gulch. 2, Upper Cuyahoga River. 3, Upper West Branch, Mahoning River. 4, Tributary of Silver Creek.

#### VOLUME 79, NUMBER 4

partment of Biology, University of Akron, who is presently completing a study of the Trichoptera of the upper portion of this river.

West Branch, Mahoning River.—The upper portion of this river in Portage County is a small to moderately-sized stream (width 2–12 m) that has reasonably good water quality. Intensive collections were made with blacklight traps during 1974 and 1975 as part of a more comprehensive study of the caddisflies occurring in the area (McElravy, 1976).

Silver Creek Valley.—A small tributary which enters Silver Creek from the southeast just south of the West Branch Reservoir in Portage County is being studied by T. Arsuffi. Trichoptera collections were made with a blacklight trap during 1975 and 1976. The small woodland stream (width 2–3 m) flows over a substrate consisting primarily of sandstone and loose rubble.

## Annotated List of Species

The list below presents collection data for those species that represent new records for Ohio. The following symbols are used to indicate collection sites: S—Stebbins Gulch; C—Cuyahoga River (upper portion); WB—West Branch, Mahoning River (upper portion); SC—Tributary of Silver Creek.

# Rhyacophilidae

Rhyacophila banksi Ross. (S), June. Rhyacophila carolina Banks. (S), June to September. Rhyacophila carpenteri Milne. (S), August. Rhyacophila glaberrima Ulmer. (S); July, August. Rhyacophila torva Hagen. (S), June to September. Rhyacophila vibox Milne. (S), June to August.

## Glossosomatidae

Glossosoma nigrior (Banks). (S), (WB); April to September. Protoptila lega Ross. (C); July, August.

# Philopotamidae

Dolophilodes distinctus (Walker). (S), June to August. Wormaldia shawnee (Ross). (WB); (SC); June, July. Chimarra aterrima Hagen. (WB), (SC); May to August.

# Hydroptilidae

Oxyethira dualis Morton. (C), July. Oxyethira forcipata Mosely. (SC), June. Hydroptila ajax Ross. (C); July, August. Hydroptila armata Ross. (WB), May to August.

Hydroptila consimilis Morton. (C), (WB), (SC); May to September.

Hydroptila grandiosa Ross. (SC), May to July.

Hydroptila jackmanni Blickle. (WB), (SC); May to July.

Hydroptila perdita Morton. (C); (WB); July, August.

Hydroptila strepha Ross. (WB), August.

Hydroptila vala Ross. (WB), June.

Hydroptila virgata Ross. (SC), May.

Ochrotrichia arva (Ross). (WB); (SC); May, June.

Ochrotrichia spinosa (Ross). (WB), (SC); May to July.

Ochrotrichia wojcickyi Blickle. (WB), (SC); May to July. Reported only from Maine, our records represent a significant southwestward extension of its known range.

Mayatrichia ayama Mosely. (S), June.

## Polycentropodidae

Polycentropus centralis Banks. (SC); May, June.

Polycentropus crassicornis Walker. (SC), May.

Polycentropus maculatus Banks. (S), June.

Polycentropus pentus Ross. (WB), (SC); May to August.

Polycentropus remotus Banks. (C), (WB); May to July.

## Hydropsychidae

Hydropsyche slossonae Banks. (S), (C), (WB), (SC); May to August.
Hydropsyche sparna Ross. (WB), May to August.
Hydropsyche walkeri Betten and Mosely. (SC), May to September.
Cheumatopsyche aphanta Ross. (WB), (SC); May to August.
Cheumatopsyche halima Denning. (WB), May to September.
Cheumatopsyche miniscula (Banks). (SC), July.
Cheumatopsyche pasella Ross. (S), May to September.
Diplectrona modesta Banks. (S), (WB), (SC); May to August.

# Phryganeidae

Banksiola crotchi Banks. (WB); (SC); June, July. Banksiola dossuaria (Say). (WB); (SC); June, July. Ptilostomis postica (Walker). (WB); June, September.

#### Molannidae

Molanna blenda Sibley. (WB), (SC); July. Molanna tryphena Betten. (C), August.

#### VOLUME 79, NUMBER 4

# Odontoceridae

Psilotreta indecisa (Walker). (WB); May, June.

#### Leptoceridae

Triaenodes abus Milne. (WB); June, July.

Triaenodes frontalis Banks. (SC), June.

Triaenodes ignitus (Walker). (WB), (SC); June to September.

Triaenodes marginatus Sibley. (WB), (SC); May to September.

Triaenodes nox Ross. (WB); June, July.

Ceraclea alagma (Ross). (C); (WB); June, July.

Leptocerus americanus (Banks). (WB), June to August.

Nectopsyche diarina (Ross). (C), July.

Oecetis osteni Milne. (C), July.

Mystacides longicornis (Linnaeus). (C), July.

# Goeridae

Goera stylata Ross. (S), (WB); May to July.

## Limnephilidae

Ironoquia lyrata (Ross). (WB), (SC); August, September.
Ironoquia parvula (Banks). (WB), October.
Neophylax concinnus McLachlan. (WB); September, October.
Neophylax oligius Ross. (WB); September, October.
Limnephilus consocius Walker. (WB); June, September, October.
Limnephilus indivisus Walker. (WB); May, September, October.
Platycentropus radiatus (Say). (WB); June, July.
Hydatophylax argus (Harris). (WB); (SC); June, August.
Pycnopsyche divergens (Walker). (WB); May, September.
Pycnopsyche guttifer (Walker). (WB); September, October.
Pycnopsyche lepida (Hagen). (WB), August to October.
Pycnopsyche scabripennis (Rambur). (C), (WB), (SC); July to October.

# Acknowledgments

We wish to thank Dr. O. S. Flint, Jr., Smithsonian Institution, and Dr. G. B. Wiggins, Royal Ontario Museum, for their assistance in identification of difficult specimens. We thank also J. Wilke and Dr. J. Olive of the University of Akron for permission to use data from their collections along the upper Cuyahoga River.

# Literature Cited

- Gordon, A. E. 1974. A synopsis and phylogenetic outline of the Nearctic members of *Cheumatopsyche*. Proc. Acad. Nat. Sci. Phila. 126:117-160.
- Horwath, A. B. 1964. Insects of Gibraltar Island in relation to their habitats. M.S. Thesis, Ohio State University, Columbus, Ohio. 59 pp.
- Marshall, A. C. 1939. A qualitative and quantitative study of the Trichoptera of western Lake Erie (as indicated by light trap material). Ann. Entomol. Soc. Amer. 32:665–687.
- McElravy, E. P. 1976. The caddisflies (Trichoptera) along the upper portion of the West Branch of the Mahoning River, Portage County, Ohio. M.S. Thesis, Kent State University, Kent, Ohio. 198 pp.
- Resh, V. H. 1975. A distributional study of the caddisflies of Kentucky. Trans. Ky. Acad. Sci. 36:6–16.
- Ross, H. H. 1944. The caddisflies, or Trichoptera, of Illinois. Ill. Nat. Hist. Surv. Bull. 23:1-326.

———. 1966. Two new species of *Oecetis* occurring in eastern North America (Trichoptera, Leptoceridae). Trans. Ill. State Acad. Sci. 59:11–14.

Tkac, M. A. 1973. The Plecoptera and associated aquatic insects of Stebbins Gulch. M.S. Thesis, Kent State University, Kent, Ohio. 217 pp.

Department of Biological Sciences, Kent State University, Kent, Ohio 44242.



Mcelravy, E P, Arsuffi, Thomas L, and Foote, B. A. 1977. "New Records Of Caddisflies (Trichoptera) For Ohio." *Proceedings of the Entomological Society of Washington* 79, 599–604.

View This Item Online: <u>https://www.biodiversitylibrary.org/item/55068</u> Permalink: <u>https://www.biodiversitylibrary.org/partpdf/56792</u>

**Holding Institution** Smithsonian Libraries and Archives

**Sponsored by** Smithsonian

**Copyright & Reuse** Copyright Status: In copyright. Digitized with the permission of the rights holder. Rights Holder: Entomological Society of Washington License: <u>http://creativecommons.org/licenses/by-nc-sa/3.0/</u> Rights: <u>https://biodiversitylibrary.org/permissions</u>

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at https://www.biodiversitylibrary.org.