NEW STATE AND PROVINCIAL RECORDS FOR NORTH AMERICAN SMALL MINNOW MAYFLIES (EPHEMEROPTERA: BAETIDAE)


ABSTRACT: New record data are contributed for 49 species of baetid mayflies from North America north of Mexico. A total of 209 newly documented locales constitute 115 new state or provincial records involving 30 USA states and five Canadian provinces.

KEY WORDS: New state, new provincial records, North America, small minnow mayflies, Ephemeroptera, Baetidae

As part of the mayflies of North America project, we are attempting to document complete ranges of the nearly 700 species in the region. Most species of the family Baetidae, or small minnow mayflies, have been especially poorly documented during the approximately 200 years of taxonomic and faunistic work on the mayflies in North America (see McCafferty 2001), and yet they are one of the most common and important groups of mayflies in both lotic and lentic aquatic habitats (e.g., Edmunds et al. 1976, McCafferty 1981). This is due mainly to the fact that these particular mayflies have been historically difficult if not impossible to identify. For example, it was not until 1979 that a number of species began to be identifiable in the more commonly collected aquatic, larval stage (Morihara and McCafferty 1979). The purpose of the present study has been to begin to shore up this shortcoming in distributional data, and thereby make these species more accessible for biogeographic studies as well as studies of biodiversity and conservation biology. As such, we are able to contribute 209 new locale records involving 49 of the 122 baetid species currently known to occur in North America north of Mexico. In all, 115 new state and provincial records are provided.

Species for which new data are documented are listed alphabetically. States and provinces are given in upper case. Most collection materials associated with the distributional data reside in the Purdue Entomological Research Collection; any other collection sources are indicated within brackets at the end of a data citation. Other collection sources include Arkansas State University [ASU], Louisiana State University [LSU], Illinois Natural History Survey [INHS], University of Iowa Hygienic Laboratory [UIHL], Massachusetts Audubon Society [MAS], and the J. M. Webb personal collection [WC]. Life stages associated with the data are given as (L) for larvae and (A) for adults.

RECORD DATA

Acentrella ampla Traver


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Mailed on December 21, 2004
Acentrella insignificans (McDunnough)


Acentrella parvula (McDunnough)


Remarks. North Carolina data for this species are given here because the only other published record of that species in North Carolina (Pescador et al. 1999) lacked locale data.

Acentrella turbida (McDunnough)


Acerpena maccunnoughi (Ide)


Acerpena pygmaea (Hagen)

New data. MASSACHUSETTS, Hampshire Co, South Hadley Township, Bachelor Cr, IX-30-1993, B Colburn (A) [MAS].
**Baetis bruneicolor McDunnough**


**Baetis flavistriga McDunnough**


**Baetis intercalaris McDunnough**


**Baetis notos Allen and Murvosh**


**Baetis pluto McDunnough**


**Baetis rusticans McDunnough**


**Baetis tricaudatus Dodds**


**Callibaetis californicus Banks**

New data. OKLAHOMA: Garfield Co (L) (no other data).

**Callibaetis ferrugineus (Walsh)**

**Callibaetis floridanus Banks**


**Callibaetis fluctuans (Walsh)**


**Callibaetis pallidus Banks**


**Callibaetis pretiosus Banks**


**Callibaetis skokianus Needham**

*New data.* WISCONSIN, Dane Co, Madison, VII-08-1916, JG Sanders, and VI-03-1929, MH Doner (A); Door Co, Sturgeon Bay, VII-29-1957, RL Giese (A).

**Centroptilum alamance (Traver)**

*New data.* ILLINOIS, Pope Co, Lusk Cr, 1.82 km NE Waltersburg, VI-26-1997, and Golconda, IV-03-1946, and Herod, III-14-1946 [INHS].

**Centroptilum album McDunnough**

*New data.* OKLAHOMA, Cherokee Co, Spring Cr, Timberlake Ranch, V-01-1997, RK Heth (L).

**Centroptilum bifurcatum McDunnough**


**Centroptilum conturbatum McDunnough**

**Centroptilum minor McDunnough**


**Centroptilum rufrostrigatum (McDunnough)**


**Centroptilum triangulifer (McDunnough)**


**Centroptilum victoriae McDunnough**


**Cloeon dipterum (Linnaeus)**


**Dipetor hageni (Eaton)**


**Falceon quilleri (Dodds)**


**Heterocloeon anoka (Daggy)**


**Remarks.** The present recognition and generic disposition of this species is being elaborated elsewhere by R. D. Waltz and WPM; however, it first appeared as given here in Webb and McCafferty (2004).

*Paracloeodes minutus* (Daggy)

New data. LOUISIANA, Lasalle Par, Trout Cr at White Sulphur Springs, VIII-25-1973 (L) [LSU].

*Plauditus bimaculatus* (Berner)

New data. LOUISIANA, Washington Par, Silver Cr, 6 mi NE Franklinton, V-05-1974 (A) [LSU].

*Plauditus cestus* (Provonssha and McCafferty)


*Plauditus dubius* (Walsh)


*Plauditus gloveri* McCafferty and Waltz


*Plauditus punctiventris* (McDunnough)

New data. NEW JERSEY, Monmouth Co, Shark Cr, Shark Cr County Park, V-17-2001, MD Meyer (L).

*Plauditus texanus* Wiersema

New data. OKLAHOMA, Pushmataha Co, Panther Cr, at Hwy 2, 3.1 mi N Hwy 2-3 jct, IV-17-1993, DE Baumgardner (L), and Terrapin Cr, III-17-1994 (L).

*Plauditus virilis* (McDunnough)


*Procloon fragile* (McDunnough)

Procloeon pennulatum (Eaton)


Procloeon quaesitum (McDunnough)


Procloeon rubropictum (McDunnough)


Procloeon rufrostrigatum (McDunnough)


Procloeon simplex (McDunnough)


Procloeon viridoculare (Berner)


Remarks. The Oklahoma records for P. viridoculare are given here because no detailed locale data appeared with the only other published record of this species from Oklahoma (Wierenga and McCafferty 2004).

Pseudocentropiloides usa Waltz and McCafferty


Pseudocloeon dardanum (McDunnough)

Remarks. The South Carolina record is significant in that it extends the known range of this species into the southeastern region of North America. Larvae of this species were described by Soluk (1981), at which time the species was thought to be primarily western. Thus, the much-used larval key to species of North American baetine mayflies (Morihara and McCafferty 1979) did not include the species, and any larvae of *P. dardanum* would have been keyed to *P. ephippiatum* (Traver) prior to the appearance of the McCafferty and Waltz (1995) key, which incorporated *P. dardanum* larvae for the first time. Since 1995, several records of *P. dardanum* have been confirmed from the Midwest (Randolph and McCafferty 1998), and larval records of *P. ephippiatum* from the East must now be reevaluated using the McCafferty and Waltz (1995) key.

ACKNOWLEDGMENTS

For their various contributions to the study by way of specimen donations and loans, data sharing, or identification assistance, we would like to thank Dave Baumgardner, Betsy Colburn, Ed Dewalt, George Edmunds, George Harp, Kip Heth, Boris Kondratieff, Ellis Laudermilk, Dick Lillie, Pat Randolph, Jay Richardson, Bill Stark, Lu Sun, Bob Waltz, and Nick Wiersema. This study was conducted as part of the Mayflies of North America Project supported in part by NSF grant DEB-9901577.

LITERATURE CITED


