

## ADDITIONS AND CORRECTIONS TO EPHEMEROPTERA SPECIES OF NORTH AMERICA AND INDEX TO THEIR COMPLETE NOMENCLATURE<sup>1</sup>

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**ABSTRACT:** Heretofore unpublished additions, deletions, and changes to the main checklist of valid North American Ephemeroptera species are provided as are corrections and additions to the nomenclatural index of all names historically associated with them. Index modifications include the addition of 44 new entries and corrections to 21 previous entries.

Subsequent to the appearance of "The Ephemeroptera Species of North America and Index to Their Complete Nomenclature" (McCafferty 1996), certain omissions and minor errors have been discovered. These emendations have come to light primarily as a result of preparing the database of Nearctic Ephemeroptera reflected in McCafferty (1997a), which is strictly predicated on original orthography of species, and of close scrutiny of the literature associated with the Canadian fauna currently under study. Data revealed specific synonyms that had not appeared previously as well as additional name usage (spelling and combinations) found for certain species. In order to maintain the highest degree of utility of the North American index to mayfly species nomenclature (McCafferty 1996), these pertinent modifications are presented below. Additional recent significant changes and corrections to the list and index not covered below can be found respectively in the revision of *Ameletus* by Zloty (1996) and adjustments to names by McCafferty (1997b); however, for all changes published since McCafferty (1996), particularly with regard to occasional new species and synonyms being published, the regularly updated "The Mayflies of North America" found at the Mayfly Central World Wide Web cite <<http://www.entm.purdue.edu/entomology/mayfly/mayfly.html>> should be consulted. Additions and corrections are given below both for the main numerically sequenced checklist of species and for the alphabetical index. In the index, species names appear in italics only for the current valid form of the name as per the McCafferty (1996) format.

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**MODIFICATIONS TO THE  
NUMERICAL CHECKLIST**
**Delete**

003. *Choroterpes ferruginea* Traver, 1934  
 004. *Choroterpes fusca* Spieth, 1938  
 005. *Choroterpes hubbelli* Berner, 1946  
 132. *Brachycercus floridicola* Soldán, 1986  
 137. *Brachycercus pini* Soldán, 1986

**Corrections**

016. *Leptophlebia bradleyi* Needham, 1932  
 363. *Baetis moffatti* Dodds, 1923  
 574. *Heptagenia adaequata* McDunnough, 1924  
 636. *Rhithrogena notialis* Allen & Cohen, 1977  
 671. *Stenonema terminatum terminatum*  
 (Walsh), 1862

**MODIFICATIONS TO THE  
ALPHABETICAL INDEX**
**Additions**

- Baetis curiosus* (McDunnough), 1923 - 432  
*Baetis moffatti* Dodds, 1923 - 363  
*Baetis pallidula* McDunnough, 1924 - 357  
*Baetis persecuta* McDunnough, 1939 - 367  
*Blasturus cupidus* (Say), 1823 - 018  
*Blasturus grandis* Traver, 1932 - 019  
*Brachycercus pallidus* (Ide), 1930 - 133  
*Callibaetis tessellatus* (Hagen), 1861 - 399  
*Campsurus manitobensis* Ide, 1941 - 092  
*Cloeon chlorops* McDunnough, 1923 - 355  
*Cloeon punctiventris* McDunnough, 1923 - 371  
*Cloeon virilis* McDunnough, 1923 - 378  
*Ecdyonurus fuscus* (Clemens), 1913 - 672  
*Ecdyonurus peterseini* Lestage, 1930 - 542  
*Ecdyonurus werestschagini* (Tshernova),  
 1952 - 619  
*Ecdyurus hyalinus* Esben-Petersen, 1916 - 542  
*Epeorus undulatus* Banks, 1924 - 642  
*Ephemerella fuscata* (Walker), 1853 - 179  
*Eurycaenis pallida* Ide, 1930 - 133  
*Heptagenia abnorme* Tshernova, 1949 - 542  
*Heptagenia abnormis* Tshernova, 1949 - 542  
*Heptagenia adaequata* McDunnough,  
 1924 - 574  
*Heptagenia luridipennis* (Burmeister),  
 1839 - misidentification of 667  
*Heptagenia verticis* (Say), 1839 - 085

*Heptagenia werestschagini* Tshernova,  
 1952 - 619

- Iron petulans* Seemann, 1927 - 635  
*Isonychia annulata* Traver, 1932 - 515  
*Isonychia aurea* Traver, 1932-524  
*Isonychia thalia* Traver, 1934 - 515  
*Leptophlebia concinna* (Walker), 1853 - 018  
*Leptophlebia hebes* (Walker), 1853 - 018  
*Leptophlebia ignava* (Hagen), 1861 - 018  
*Leptophlebia pallipes* (Walker), 1853 - 018  
*Oreianthus* sp. 1 Traver, 1937 - 126  
*Paraleptophlebia compar* Traver, 1934 - 033  
*Paraleptophlebia pallipes* (Hagen), 1875 - 049  
*Potamanthus rufus* Argo, 1927 - 082  
*Pseudocloeon virilis* (McDunnough),  
 1923 - 378  
*Rhithrogena fusca* (Walker), 1853 - 634  
*Rhithrogena imanica* Bajkova, 1972 - 619  
*Siphonurus bernice* McDunnough, 1923 - 509  
*Siphoplecton basalis* (Walker), 1853 - 477  
*Stenonema carolina* (Banks), 1914 - 646  
*Stenonema tessellata* (Walker), 1853 - 672

**Corrections**

- Ameletus montis* Mayo, 1952 - 313  
*Baetis moffatti* Dodds, 1923 - 363  
*Brachycercus floridicola* Soldán, 1986 - 129  
*Brachycercus pini* Soldán, 1986 - 134  
*Brachycercus* sp. A Berner, 1950 - 129  
*Choroterpes ferruginea* Traver, 1934 - 002  
*Choroterpes fusca* Spieth, 1938 - 002  
*Choroterpes hubbelli* Berner, 1946 - 002  
*Cinygma deceptiva* McDunnough, 1924 - 555  
*Cloe mollis* Hagen, 1861 - 051  
*Cloeon vicinum* Hagen, 1861 - 471  
*Epeorus humeralis* Morgan, 1911 - 573  
*Heptagenia adaequata* McDunnough, 1924 - 574  
*Leptophlebia bradleyi* Needham, 1932 - 016  
*Paraleptophlebia bradleyi* (Needham),  
 1932 - 016  
*Pseudocloeon carolina* (Banks), 1924 - 335  
*Pseudocloeon cingulatum* McDunnough,  
 1931 - 353  
*Rhithrogena hespera* Banks, 1924 - 561  
*Rhithrogena notialis* Allen & Cohen, 1977 - 636  
*Rhithrogena petulans* (Seemann), 1927 - 635  
*Thraulius albertanus* McDunnough, 1931 - 077

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## LITERATURE CITED

- McCafferty, W. P.** 1996. The Ephemeroptera species of North America and index to their complete nomenclature. *Trans. Am. Entomol. Soc.* 122: 1-54.
- McCafferty, W. P.** 1997a. Ephemeroptera. Pages 89-117. In: R. E. Poole and P. Gentili (eds.). *Nomina Insecta Nearctica*, a checklist of the insects of North America, Volume 4: Non-holometabolous orders. Entomological Information Services, Rockville, Maryland.
- McCafferty, W. P.** 1997b. Name adjustments and a new synonym for North American Ephemeroptera species. *Entomol. News* 108: 318, 320.
- Zloty, J.** 1996. A revision of the Nearctic *Ameletus* mayflies based on adult males, with descriptions of seven new species (Ephemeroptera: Ameletidae). *Can. Entomol.* 128: 293-346.

## SCIENTIFIC NOTE

## ADDITIONS TO IOWA MAYFLIES (EPHEMEROPTERA)<sup>1,2</sup>

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Klubertanz (1995) recorded 66 nominal species of mayflies from the state of Iowa. Thirty-nine of those records represented new state records. Herein we add 10 new Iowa records. Newly reported materials are deposited at the Purdue Entomological Research Collection, West Lafayette, IN (PERC) or the University of Iowa Hygienic Laboratory, Des Moines, IA (IHL).

New state records include *Baetisca obesa* (Say) [larvae, Black Hawk Co, falls access, VI-9-1973 (PERC)]; *Homooneuria ammophila* (Spieth) [larvae, Ida Co, Maple R, VIII-5-1997 (IHL)]; *Labiobaetis dardanus* (McDunnough) [larvae, Ida Co, Odebolt Cr, VIII-5-1997 (IHL)]; *Leucocuta junco* (McDunnough) [adults, Story Co, Ames, VIII-1-1991 (PERC)]; *Procloeon irrubrum* Lowen and Flannagan [all larvae, all IHL: Dickinson Co, Little Sioux R, IX-4-1996; Webster Co, Lizard Cr, IX-11-1996; Kossuth Co, Black Cat Cr, VIII-13-1997; Shelby Co, West Nishnabotna R, VIII-15-1997; Warren Co, Whitebreast Cr, VIII-1-1997]; *Procloeon rufostrigatum* (McDunnough) [larvae, Webster Co, Lizard Cr, IX-11-1996 (IHL)]; *Procloeon viridoculare* (Berner) [all larvae: Buchanan Co, Bear Cr, VIII-8-1996; Winnishiek Co, Canoe Cr, IX-9-1997 (IHL)]; *Rhithrogena jejuna* Eaton [larvae, Winnishiek Co, Upper Iowa R nr Kendallville, IX-22-1991 (PERC)]; *Stenacron candidum* (Traver) [adults, Black Hawk Co, Cedar Falls, VII-1-1973 (PERC)]; and *Stenacron carolina* (Banks) [adults, Black Hawk Co, Cedar Falls, VI-10-1973 (PERC)].

## LITERATURE CITED

- Klubertanz, T. H.** 1995. Survey of Iowa mayflies (Ephemeroptera). *J. Kans. Entomol. Soc.* 68: 20-26.

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