

## SCIENTIFIC NOTE

ADDITIONS TO THE SOUTH DAKOTA EPHEMEROPTERA<sup>1,2</sup>W. P. McCafferty<sup>3</sup>, B. C. Kondratieff<sup>4</sup>

The mayfly fauna of South Dakota was first treated by McCafferty (1990), wherein 21 species were noted, 19 of which were new state records taken from the Black Hills region. Herein we report an additional 16 species of mayflies from South Dakota. All reported material is deposited in the Purdue Entomological Research Collection, West Lafayette, Indiana (PERC) or the C. P. Gillette Museum of Arthropod Diversity, Fort Collins, Colorado (CSU).

The new state records include *Acerpenna macdunnoughi* (Ide): larvae, Beadle Co, Hitchcock, V-6-1959, PERC, and Minnehaha Co, Big Sioux R, Palisade State Park, IV-10-1996, R. W. Baumann & B. C. Kondratieff, CSU; *Acerpenna pygmaea* (Hagen): larvae, Brule Co, Missouri R, Chamberlain, VI-23-1989, B. C. Kondratieff & M. Harris, CSU; *Baetis bicaudatus* Dodds: larvae, Lawrence Co, Spearfish Cr 5 mi S Spearfish at US Hwy 14A, VI-9-1961, G. F. Edmunds & W. L. Peters, and Spearfish Cr, 8 mi S Spearfish at Hwy 14A, III-25-1968, H. H. Ross & T. L. Harris, PERC; *Baetis magnus* McCafferty and Waltz: larvae, Lawrence Co, False Bottom Cr, 7 mi N Deadwood, VII-24-1968, H. H. Ross & T. L. Harris, PERC; *Caenis latipennis* Banks: male adults, Harding Co, Little Missouri R, Camp Crook, Hwy 20, VII-7-1997, R. W. Baumann & B. C. Kondratieff, CSU; *Drunella doddsi* (Needham): larvae, Lawrence Co, Spearfish Cr, 5 mi S Spearfish at US Hwy 14A, VI-9-1961, G. F. Edmunds & W. L. Peters, PERC; *Epeorus longimanus* (Eaton): male and female adults, Lawrence Co, Jim Cr, Rd 208 E Merritt, VII-11-1997, and stream in Jenny Gulch, N Pactola Reservoir, VII-11-1997, and Pennington Co, Burnt Fork, Rd 208 E Merritt, VII-11-1997, R. W. Baumann & B. C. Kondratieff, CSU; *Heptagenia diabasia* Burks: male and female adults, Brule Co, Missouri R, Chamberlain, VI-23-1989, B. C. Kondratieff & M. Harris, CSU; *Hexagenia limbata* (Serville): male and female adults, Brule Co, Missouri R, Chamberlain, VI-23-1989, B. C. Kondratieff & M. Harris, CSU; *Labiobaetis propinquus* (Walsh): larvae, Lawrence Co, Squaw Cr at confluence with Spearfish Cr, VI-9-1961, G. F. Edmunds & W. L. Peters, PERC, and Little Spearfish Cr, VII-13-1997, R. W. Baumann & B. C. Kondratieff, CSU; *Leptophlebia nebulosa* (Walker): male and female adults, Fall River Co, Cheyenne R, Angostura Reservoir, Angostura State Park, VII-8-1997, R. W. Baumann & B. C. Kondratieff, CSU; *Leucrocota maculipennis* (Walsh): male and female adults, Butte Co, Belle Fourche R, Hwy 79 N Sturgis, VII-15-1997, and Belle Fourche R at Belle Fourche, VII-13-1997, and Harding Co, Little Missouri R, Camp Crook, Hwy 20, VII-7-1997, R. W. Baumann & B. C. Kondratieff, CSU & PERC; *Paraleptophlebia debilis* (Walker): larvae, Pennington Co, Rapid Cr 3 mi below Pactola Reservoir on SD Hwy 40, VI-8-1961, G. F. Edmunds and W. L. Peters, PERC, and male adults, Rapid Cr below Pactola Reservoir, VII-11-1997, R. W. Baumann & B. C. Kondratieff, CSU; *Paraleptophlebia memorialis* (Eaton): male and female adults, Custer Co, Iron Cr, Hwy 16A, Lakota Campground, VII-10-1997, and Pennington Co, stream in Sunday Gulch, Hwy 87, S Hill City, VII-9-1997, and Rapid Cr, Rapid City Golf Course, VII-11-1997, R. W. Baumann & B. C. Kondratieff, CSU;

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*Siphonurus occidentalis* (Eaton): male and female adults, Custer Co, stream entering Sylvan Lake, VII-9-1997, R. W. Baumann & B. C. Kondratieff, CSU; *Stenacron interpunctatum* (Say): male and female adults, Pennington Co, Rapid Cr, Rapid City Golf Course, VII-11-1997, R. W. Baumann & B. C. Kondratieff, PERC.

## LITERATURE CITED

McCafferty, W. P. 1990. Biogeographic affinities of the Ephemeroptera of the Black Hills, South Dakota. Entomol. News 101: 193-199.

## SCIENTIFIC NOTE

DISTRIBUTION OF SIPHILAENIGMATIDAE (EPHEMEROPTERA)<sup>1,2</sup>W. P. McCafferty<sup>3</sup>

The restricted family Siphlaenigmatidae was reported from Australia by Lugo-Ortiz and McCafferty (1998), with the description of *Siphlaenigma edmundsi* Lugo-Ortiz and McCafferty based on larvae labeled as collected by G. F. Edmunds in 1966 from New South Wales. This monogeneric family, which is related to Baetidae, had been known only from New Zealand (Penniket 1962). Because Edmunds collected in New Zealand and Australia on the same trip, and because specimens were sorted at the same time, there has remained a possibility that the material was mislabeled. Other data concerning this possibility have recently come to my attention. According to P. J. Suter (pers. comm.), an Australian mayfly authority, the reported locality of *Siphlaenigma* in Australia is a well-known aquatic collecting site and a presence of *Siphlaenigma* there cannot be confirmed by him, nor has it been confirmed by other field workers in Australia (P. S. Cranston, pers. comm.). Also, the Edmunds Australian field collecting number for the putative locality of *Siphlaenigma* in Australia is the same as his New Zealand field number for a locality from where *Siphlaenigma* was originally taken (W. L. Peters, pers. comm.). More importantly, I have now confirmed that mislabeling between Australian and New Zealand had taken place within the Edmunds collection. I have recently found specimens of the Australian baetid species *Edmundsiops instigatus* Lugo-Ortiz and McCafferty, which had been collected by Edmunds, in vials from the Edmunds collection with New Zealand labels. Baetidae does not occur in New Zealand and the latter specimens are certainly incorrectly labeled. Obviously, there had been some misappropriation of labels when materials were first sorted. Based on all of the above, the family Siphlaenigmatidae should be expunged from Australian records, and I regard *S. edmundsi* as a junior synonym of *S. janae* Penniket.

## LITERATURE CITED

- Lugo-Ortiz, C. R. and W. P. McCafferty. 1998. First report of the genus *Siphlaenigma* Penniket and the family Siphlaenigmatidae (Ephemeroptera) from Australia. Proc. Entomol. Soc. Wash. 100: 209-213.
- Penniket, J. G. 1962. Notes on New Zealand Ephemeroptera III. A new family, genus and species. Rec. Canterbury Mus. 7: 389-398.

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