

NOTE

New and Additional Records of Mayflies (Ephemeroptera) from the Southwestern United States, including a New Country Record

There are currently 64 species of mayflies (Ephemeroptera) known from Arizona (Lugo-Ortiz and McCafferty 1995a) and 78 species documented from New Mexico (McCafferty et al. 1997). These numbers include various recent synonymies and additions to the two states (Lugo-Ortiz and McCafferty 1995b, McCafferty and Silldorff 1998, Baumgardner and McCafferty 2000, Jacobus and McCafferty 2002, McCafferty et al. 2002, Jacobus and McCafferty 2003, Wiersema and McCafferty 2004). An additional two species are herein reported from Arizona, one species from New Mexico (and its first report in the United States), and one species newly reported from Texas. All specimens listed are deposited in the Texas A&M University Insect Collection.

BAETIDAE

Camelobaetidius mexicanus (Traver and Edmunds).—This species is known from numerous localities throughout Mexico, and scattered localities in Texas and Kansas (Lugo-Ortiz and McCafferty 1995b), and most recently from Idaho (Lester et al. 2002).

New state records: AZ: Yavapai Co., West Clear Creek at Clear Creek Campground, ca. 1 mi. from Hwy. 260, ca. 4 mi SE Camp Verde (N34°30'54.7"; W111°45'45.4", Elev. 3,270 ft.), 26.v.2004, DE Baumgardner, 1 larva (DB 04-32). AZ: Graham Co., Gila R. at Ft. Thomas (N33°02'59.0"; W109°58'01.2", Elev. 2,660 ft.), 27.v.2004, DE Baumgardner, 3 larvae (DB 04-38).

Camelobaetidius warreni (Traver and Edmunds).—This is a wide-ranging baetid mayfly, known from as far south as Costa Rica, and throughout much of the western United States (Lugo-Ortiz and McCafferty

1995b). Its presence in Texas was not unexpected.

New state record: TX: Jeff Davis Co., Limpia Ck. @ Hwy. 118, ca. 1.5 mi. W. Ft. Davis (N30°36'05"; W103°54'57"; Elev. 4,980 ft.), 15.v.2002, DE Baumgardner, 22 larvae (DB 02-08).

HEPTAGENIIDAE

Epeorus albertae (McDunnough).—This is a common and widely distributed western Intermountain species (McCafferty et al. 1993). It was known previously from New Mexico (McCafferty et al. 1997) and Colorado (McCafferty et al. 1993).

New state records: AZ: Navajo Co., North Fork White River at SR 55, Whitewater (town) (N33°49'47.4"; W109°57'36.5", Elev. 5,170 ft.), 23.v.2004, DE Baumgardner, 3 larvae (DB 04-26). AZ: Gila Co., Christopher Creek at Hwy. 260, Christopher Ck. Campground, ca. 20 mi. E. Payson (N34°18'27.1"; W111°02'27.3", Elev. 5,500 ft.), 26.v.2004, DE Baumgardner, 47 larvae (DB 04-35).

LEPTOPHLEBIIDAE

Traverella promifrons Lugo-Ortiz and McCafferty.—*Traverella promifrons* was described originally by Allen (1973) as "*Traverella* sp. C", based upon larvae from Mexico and Honduras. It was described formally by Lugo-Ortiz and McCafferty (1996) from larvae collected in Belize and Costa Rica. It was documented most recently in Guatemala (McCafferty et al. 2004). Its presence in New Mexico represents a new record for the USA.

New country record: NM: Catron Co., Willow Creek at Willow Creek Campground (Hwy. 159), ca. 35 mi. E. Glenwood, Gila National Forest (N33°24'37";

W108°34'20", Elev. 7,400 ft.), 17.v.1987, R. Leschen, 5 larvae.

Acknowledgments.—I thank Michael Meyer (Purdue University) for confirming the identification of *Traverella promifrons*, David Bowles (National Park Service) for the donation of material, and W.P. McCafferty (Purdue University) for reviewing an earlier draft of the manuscript.

LITERATURE CITED

- Allen, R. K. 1973. Generic revisions of mayfly nymphs. 1. *Traverella* in North and Central America (Leptophlebiidae). *Annals of the Entomological Society of America* 66: 1287–1295.
- Baumgardner, D. E. and W. P. McCafferty. 2000. *Leptohyphes zalope* (Ephemeroptera: Leptohyphidae): A polytypic North and Central American species. *Entomological News* 111: 49–59.
- Jacobus, L. M. and W. P. McCafferty. 2002. New synonyms for three North American Ephemeroptera species. *Journal of the Kansas Entomological Society* 75: 59–60.
- . 2003. Revisionary contributions to North American *Ephemerella* and *Serratella* (Ephemeroptera: Ephemerellidae). *Journal of the New York Entomological Society* 111: 174–193.
- Lester, G. T., W. P. McCafferty, and M. R. Edmondson. 2002. New mayfly (Ephemeroptera) records from Idaho. *Entomological News* 113: 131–136.
- Lugo-Ortiz, C. R. and W. P. McCafferty. 1995a. Annotated inventory of the mayflies of Arizona. *Entomological News* 106: 131–140.
- . 1995b. Taxonomy of the North and Central American species of *Camelobaetidius* (Ephemeroptera: Baetidae). *Entomological News* 106: 178–192.
- . 1996. New species of Leptophlebiidae (Ephemeroptera) from Mexico and Central America. *Annales de Limnologie* 32: 3–18.
- McCafferty, W. P., R. S. Durfee, and B. C. Kondratieff. 1993. Colorado mayflies (Ephemeroptera): An annotated inventory. *Southwestern Naturalist* 38: 252–274.
- McCafferty, W. P., C. R. Lugo-Ortiz, and G. Z. Jacobi. 1997. Mayfly fauna of New Mexico. *Great Basin Naturalist* 57: 283–314.
- McCafferty, W. P. and E. L. Silldorff. 1998. Reared association and equivalency of *Baetis adonis* and *B. caelestis* (Ephemeroptera: Baetidae). *Entomological News* 109: 261–265.
- McCafferty, W. P., M. D. Meyer, and G. T. Lester. 2002. Significant range extensions for southwestern Nearctic mayflies (Ephemeroptera: Baetidae). *Entomological News* 113: 211–214.
- McCafferty, W. P., D. E. Baumgardner, and J. L. Guenther. 2004. The Ephemeroptera of Central America. Part 1: Guatemala. *Transactions of the American Entomological Society* 130: 201–219.
- Wiersema, N. A. and W. P. McCafferty. 2004. New specific synonyms and records of North American *Centroptilum* and *Procloeon* (Ephemeroptera: Baetidae). *Entomological News* 115: 121–128.

David E. Baumgardner, *Department of Entomology, Texas A&M University, College Station, TX 77843-2475, U.S.A. (e-mail: dbaumgardner@tamu.edu)*