SCIENTIFIC NOTE

Baetica bakeri in Wyoming (Ephemeroptera: Baeticidae). Edmunds, Jensen and Berner (1978) in the Mayflies of North and Central America, U. Minn. Press, Minneapolis report that in the Western United States more than one larva of Baetica have been collected in Washington and Wyoming. The Washington specimen was described by Edmunds (1900, Pan-Pac. Entomol. 3:102) as B. columbiae. The Wyoming specimen was from the Little Laramie River and was too young to determine to species with confidence, but keyed to B. bakeri Neave. On June 18-20, 1987, I collected well over a hundred larvae of Baetica from the Big Laramie River at Laramie, Wyoming and was able to rear a number of these in the laboratory. This apparently isolated population is indistinguishable from Baetica bakeri Neave populations in the Midwest. The known distribution of Baetica bakeri includes Indiana, Illinois, Minnesota, Manitoba, Saskatchewan and Alberta. Lehmkuhl (1972, Canad. J. Zool. 50:1015) has shown that the isolated Alberta/Saskatchewan populations probably entered the drainage as a result of former connections to the Missouri River System. The Laramie River is also a tributary of the Missouri River via the Platte River. It would seem almost certain that other isolated populations of Baetica bakeri will be found in various headwaters of the Missouri River.

The larvae were found in a wide variety of habitats all of which were characterized by coarse sand. They were found most frequently in a coarse sand and peagavel mix (pebbles rarely over 1 cm in length). Larvae settled slightly into the sand up to the lower edge of the carapace; the resemblance of the carapace to a pebble makes them difficult to see. Even in the favored habitat they averaged only about 2 larvae per meter. They were found principally in 10 to 20 cm of water with a current speed of about 20 cm per second. In the gravel the current is slowed, but in the aquarium the larvae settled only where a current washed over them. At the time of the collections, water temperatures were 18-19°C. Some subimagines had already emerged but only about 10% of the larvae were mature and some were only half-grown. — GEORGE F. EDUARDS, JR., Department of Biology, University of Utah 84112