

LETTER TO THE EDITOR

RHYACOPHILA MAINENSIS BANKS IN ELK COUNTY, PENNSYLVANIA (TRICHOPTERA, RHYACOPHILIDAE)¹

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Rhyacophila mainensis, a member of Sibirica group, is distributed in North Central and Eastern North America (Ross, 1956). It lives in large, clear mountain streams. In addition to Pennsylvania, reliable records are known from Maine, Massachusetts, Michigan, New Hampshire, Newfoundland, New Jersey, New York, Quebec, and West Virginia (Weaver, 1990). The most recent list of Trichoptera occurring in Pennsylvania includes 312 species of which 18 belong to the genus *Rhyacophila* (Masteller and Flint, 1992). *R. mainensis* has been reported in Pennsylvania from eight counties, including Centre, Clinton, Crawford, Cumberland, Dauphin, Huntingdon, Potter and Venango (Masteller, 1998).

A total of three specimens of *R. mainensis* larvae (total wet weight 0.03035g) were found in three Surber samples (0.09m²) collected on 19 May 1993 from a station located near the mouth of Wilson Run. The organism was also previously collected from this location by one of the authors in 1986. This is a new record for Elk County.

The Wilson Run station is situated near the community of Wilcox, Elk County, Pennsylvania. The drainage area of Wilson Run is 59 km². The station coordinates are 41°34'33" north latitude and 78°41'32" west longitude, at an elevation of 458 m National Geodetic Vertical Datum. This stream drains an unglaciated portion of the Allegheny High Plateaus physiographic province. It is a tributary of the West Branch Clarion River, which is

tributary to the Clarion River that flows into Allegheny River, in the upper Ohio River basin.

Wilson Run is characterized as a high quality coldwater stream. It is officially classified as "approved trout waters" by the Pennsylvania Fish and Boat Commission, and supports reproducing native brook trout (*Salvelinus fontinalis*). Nearly the entire watershed is forested, mostly by second or third growth Northern Hardwood associations. Acidification due to acid mine drainage from bituminous coal mines, and acid deposition, are serious local problems in the upper Clarion River basin. Even undisturbed headwater streams in this region tend to be at least moderately acidic. However, the pH of Wilson Run on the date the organisms were collected was 7.3; the dissolved oxygen concentration was 10.8 mg/l at a water temperature of 10.4°C, and the conductivity was 83 umhos/cm. Artifacts of late 19th and early 20th century petroleum extraction activities are liberally scattered through the woods over much of the West Branch Clarion River basin. However, Wilson Run as apparently survived various land uses and abuses with its water quality and fauna intact. This is documented by the other Trichoptera larvae collected at this site that included *Neureclipsis* sp., *Cheumatopsyche* sp., *Hydropsyche* sp., *Hydropsyche slossonae*, *H. morosa*, *H. betteni*, *Neophylax consimilis*, *Goera* sp., *Polycentropus* sp., *Dolophilodes distinctus*, *Rhyacophila invaria* (subgroup) and *Agapetus* sp., along with 14 taxa of ephemeroptera, 4 taxa of plecoptera, and 12 other groups of aquatic organisms. We consider the 44 aquatic invertebrate taxa found in the Wilson Run triplicate Surber samples as an extraordinary Surber sample species richness for this region.

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