

NOTES ON THE ECOLOGY AND OCCURRENCE OF THE LEECH *MOOREOBDELLA MICROSTOMA* (ERPOBDELLIDAE) IN TULSA COUNTY, OKLAHOMA

James F. Elder and Roy T. Sawyer

University of Tulsa, Tulsa, Oklahoma and College of Charleston, Charleston, South Carolina

The predaceous leech *Mooreobdella microstoma* (Moore, 1901) occurs primarily within the United States, south of the Great Lakes. Its distribution north and west of this defined area was thought to be limited (1); however, recent records have extended the range of *M. microstoma* as far west as Colorado (2). Harrel and Dorris (3, 4) have reported finding *M. microstoma* in Northcentral Oklahoma.

In the present study, several hundred individuals of *M. microstoma* were collected between June, 1972 and January, 1974 from a small sluggish stream on the eastern boundary of Mohawk Park, Tulsa County (5). This stream is part of the Bird Creek floodplain drainage.

The collection site was similar to Herrmann's (2) and Harrel's (3) localities. Abundant populations of snails, fingernail clams, and Oligochaetes characterized the collection site. The stream bottom consisted of abundant amounts of decaying vegetation and mud. Pollution in the creek was indicated by large quantities of floating and submerged refuse and by a distinct odor. The large population of snails and Oligochaetes are considered to be indicators of pollution (2). *M. microstoma* was found on the surface of the substratum during the summer and several inches below the surface during the winter.

Large numbers of cocoons, assumed to be those of *M. microstoma*, were observed at the collection site. These cocoons were found attached to the undersurface of submerged debris. The leeches laid cocoons of similar appearance in the laboratory. Cocoons that hatched produced normal young. The cocoons were approximately 8 mm in length and took 3-4 weeks to hatch at room temperature. The cocoon production was accelerated when the leeches were collected during the winter and subsequently kept at room temperature.

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Two additional leeches, *Placobdella ornata* (Verrill, 1872) and *Helobdella lineata* (Verrill, 1874) (Glossiphoniidae) were also collected. These species were found attached to floating and submerged debris. These two species have not been reported previously from Oklahoma.

Knowledge about the ecology and distribution of *M. microstoma* is based primarily upon collections from the Great Lakes region and from states further south. No extensive research has been undertaken concerning leeches in Oklahoma. The distribution of *M. microstoma* is probably more widespread than previously believed.

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