

A RECORD OF THE FRESHWATER NEMERTEAN, *PROSTOMA RUBRUM*, IN WISCONSIN

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Prostoma rubrum is the only freshwater species of the acoelomate phylum, Nemertea (Rhynchocoela), which is known to occur in North America. Although Coe (1943) implies they are widely distributed throughout the United States, the only actual sites of occurrence he mentions are some freshwater ponds in the Woods Hole area. Poluhowich (1968) reviewed various aspects of the biology of *P. rubrum* in an attempt to stimulate new collections of this worm and extend the distribution records. In his review he provides references to their occurrence in the Chicago area and in Pennsylvania. He also reported that he collected numerous specimens from a small brook in Stratford, Connecticut. In a recent letter to me, he indicated that he had received word of a few additional reports in response to his publication but not enough to substantiate Coe's claim of nation-wide distribution. The present report appears to be the first record of *P. rubrum* in Wisconsin.

A population of *P. rubrum* was discovered in Silver Creek, in the city of Ripon (Fond du Lac County) from samples brought into the laboratory from a class field trip in early September 1970. The first specimen was isolated by two students, Joan Strewler and Kathleen Spence, and from its general morphology, I tentatively identified it as *P. rubrum*. The identification was confirmed later by observing the involvement of its probocsis in feeding and the deposition of eggs in peculiar mucous tubes secreted by sexually mature worms.

Using the collection method devised by Polohowich (1968), I isolated as many as 35-40 specimens from a liter of substrate on several occasions during the Fall of 1970. The most productive substrate consisted of a mixture of mud detritus, and filamentous algae. In mid-February only two specimens were obtained from substrate samples obtained under snow and ice cover. In early April I found no specimens but this was probably due to the extended period of high water associated with the spring thaw. Although the high water undoubtedly flushed a great deal of the preferred substrate downstream, it is likely that many of the worms migrated deeper in the stream bed. I have not investigated this possibility fully at the present time.

The first specimens were taken approximately 100 yards downstream from the spillway of Gothic Mill Pond, an impoundment in a city park. A student, Mydin Shariff, made a preliminary semi-quantitative study of their distribution in Silver Creek which suggested that the population was confined to that portion of the stream from the pond overflow, downstream to the vicinity of the sewage treatment plant, a distance of a little over one mile. This work will be repeated quantitatively this summer and fall to pinpoint the linear distribution of this species in Silver Creek. Such a study may answer some very interesting questions concerning the physical and biotic factors involved in the dispersal of this species. According to Coe (1943), "The species presumably was carried to the western states with cultivated water plants."

Thus far, attempts to establish laboratory cultures have been unsuccessful although I have maintained individual specimens for up to two months by feeding them a small length of tubifex worm each week.

REFERENCES CITED

- COE, W. R. 1943. Biology of the nemertean of the Atlantic Coast of North America. *Trans.Conn.Acad. Arts and Sci.* 35: 147-327.
- POLUHOWICH, J. J. 1968. Notes on the freshwater nemertean *Prostoma rubrum*. *Turtox News.* 46 (1): 2-7.