Common Name: tubificid worm

Genus & Species: Branchiura sowerbyi

Family: Tubificidae

Order: Haplotaxida

Class: Clitellata

Diagnosis: Branchiura sowerbyi are large, deep red, tubificid worms that are easily distinguished by the presence of dorsal and ventral gill pairs that cover the posterior quarter of the body. The clitellum, a thickened area of the body used in reproduction, is located at body segments 10-12 and dorsal and ventral setae, hair-like structures used for locomotion, differ in size and shape. Species of the genus Branchiura are readily fragmented and anterior pieces are commonly mistaken for a different species, Aulodrilus pluriseta.

Ecology: Like other oligocheates, B. sowerbyi reproduces sexually via the clitellum and asexually through fragmentation; the latter being responsible for the majority of reproduction. Specimens may reach sexual maturity within 4 months with a breeding peak in the summer months of June through July. B. sowerbyi may display a one to two year life cycle, dependent upon temperature, dissolved oxygen and substrate organic content. Fecundity of the species peaks at 15-20°C but begins to decrease again at 25°C. These tubificid worms are benthic detritivores meaning that they live on the lake or river bottoms and feed from the decomposing organic matter in the sediment. As they feed, B. sowerbyi have been known to create intricate burrows up to 20 cm in depth. Once they have depleted an area of nutrients they move on to create another burrow displacing a significant amount of sediment, bringing deeper deposits to the surface and increasing solute transport within the lower water column.

Habitat & Distribution: This species is thought to be native to tropical and sub-tropical Asia but has been documented worldwide including all continents with the exception of Antarctica. Some researchers believe that the native range is wider spread than Asia but temperature and habitat in this area allow for greater detection frequencies. Specimens collected in the United States have been procured from ponds, lakes and rivers at varying depths up to 7 meters. They are most abundant in areas of high organic content in the sediment.

Status: B. sowerbyi were first detected in the U.S. in the 1930s and were thought to have been transported through the aquarium trade. In 1951, they were introduced to the Great Lakes and has since established in Lake St. Claire, Lake Huron and Lake Erie’s western basin and the Lake St. Claire and Detroit Rivers.