



fawnsfoot

Truncilla donaciformis

Kingdom: Animalia
Division/Phylum: Mollusca
Class: Bivalvia

Features

The shell of the fawnsfoot mussel is small, elongate, somewhat oblong, and compressed to moderately "inflated." It is relatively thin. The anterior end is rounded and the posterior is pointed. The ventral margin is smoothly rounded. The umbo (hump near the hinge) is near the middle of the shell and extends past the hinge. The outside of the shell varies in color from yellow to greenish brown with numerous dark green rays made up of smaller broken zigzag lines. The inside of the shell is white and is iridescent toward the posterior end. The fawnsfoot may reach lengths up to two inches. The common name comes from the appearance of the mussel in the bottom substrate.

Natural History

The fawnsfoot is found in large rivers or the lower reaches of medium-sized streams in sand or gravel. Its distribution in Iowa is not well documented. Freshwater mussels have an elaborate reproductive system. During spawning, males release sperm into the water. The sperm are drawn inside the female's shell, where they fertilize eggs in her body. The

fertilized eggs develop into larvae (glochidia) and are stored for a time in the female's gills. When the glochidia mature, the female generally expels them into the water where they must attach as parasites to the gills or fins of fish. Larvae remain on the host fish for a period of weeks or months. Young mussels then detach from their host and drop to the bottom of the body of water. Hosts for this mussel include sauger and freshwater drum. Mussels are filter-feeders, bringing in water and the organic matter it contains through the incurrent siphon, filtering the particles out, then sending the rest of the water away from the body through the excurrent siphon. Particles filtered include plankton and detritus. Mature mussels spend most of their lives, which range from 10 to 100 years, partially or wholly buried in the bottom substrate.

Habitats

Mississippi River; interior rivers and streams

Iowa Status

common; native

Iowa Range

eastern Iowa; outlying population in central Iowa

Bibliography

Iowa Department of Natural Resources. 2001. *Biodiversity of Iowa: Aquatic Habitats* CD-ROM.