giant floater

Pyganodon grandis

Kingdom:	Animalia
Division/Phylum:	Mollusca
Class:	Bivalvia

Features

The shell of a giant floater mussel varies greatly, but it usually is large, somewhat oval or elongated, and “inflated.” It is very thin in young mussels and somewhat thicker in older ones. The anterior end is broadly rounded and the posterior is bluntly pointed. The ventral margin is straight or slightly curved. The outside of the shell is smooth and light yellow or yellowish green with rays in younger mussels, becoming dark green to brown as they age. The inside of the shell also varies – silvery white, cream, pink, salmon, or copper-colored. Giant floaters may reach 10 inches long.

Natural History

Giant floaters live in ponds, lakes, and sluggish mud-bottomed pools of creeks and rivers as well as a variety of other habitats. Freshwater mussel distribution in Iowa is not well documented. They 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 22 common fish. 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; Missouri River; constructed lakes, ponds, and reservoirs; natural lakes and marshes

Iowa Status

common; native

Iowa Range

northeastern two-thirds of Iowa and the Missouri River

Bibliography

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