

deertoe mussel *Truncilla truncate*

Kingdom: Animalia

Division/Phylum: Mollusca

Class: Bivalvia

Order: Unionoida

Family: Unionidae

ILLINOIS STATUS common, native

FEATURES

The deertoe mussel has a triangular shell that tends to be thin to moderately thick. The anterior end of the shell is rounded while the posterior end of the shell is squared. The shell may be yellow, green or brown with green rays. The deertoe mussel grows up to two inches in length. The inside of the shell is white or pink.

BEHAVIORS

The deertoe mussel lives in the mud, sand or gravel bottom of medium to large rivers. This mussel often lives for more than 10 years, and some individuals may live for more than 100 years. The sexes are separate. The males release sperm into the water. The female draws sperm in through the incurrent siphon, along with water and other particles. Eggs are fertilized internally. Fertilized eggs develop into an intermediate larval stage called glochidia. Glochidia are stored in the female's gills, allowing them a safe place to develop and providing plenty of oxygen. In the spring or summer, glochidia are released from the female into the water, where they begin their parasitic stage. Host fish species for the deertoe mussel include the sauger and freshwater drum. Glochidia attach to a fish and form a cyst. Within the cyst, the larva transforms into the adult form, a process that may take from one to 25 weeks depending on the host, water temperature and place of attachment. The adult breaks free of the cyst and drops to the bottom where it begins its adult life, if conditions are favorable. The deertoe mussel is a filter-feeder, 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.

HABITATS

Aquatic Habitats

rivers and streams

Woodland Habitats

none

Prairie and Edge Habitats

none

© Illinois Department of Natural Resources. 2019. Biodiversity of Illinois.