

butterfly mussel

Ellipsaria lineolata

Kingdom: Animalia
Phylum: Mollusca
Class: Bivalvia
Order: Unionoida
Family: Unionidae

ILLINOIS STATUS

threatened, native

FEATURES

The butterfly mussel has a triangular, flattened shell. The shell is thick and solid. The outside of this yellow-brown shell has brown rays that are broken into brown blotches. The inside of the shell is white. The anterior end of the shell is rounded while the posterior end is pointed. The butterfly mussel grows to four inches in length.

BEHAVIORS

The butterfly mussel lives in sand or gravel in large rivers. It often lives for more than 10 years, and some individuals may live for over 100 years. The sexes are separate. The male releases sperm into the water. The female draws sperm in through her 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 ample oxygen. In the spring or summer, glochidia are released from the female into the water, where they begin their parasitic stage. 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 butterfly 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.



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shell

ILLINOIS RANGE



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inside and outside of shell

Aquatic Habitats

rivers and streams

Woodland Habitats

none

Prairie and Edge Habitats

none