

MOLLUSKS AND CRUSTACEANS

FANSHELL

ABOUT

The Fanshell (*Cyprogenia stegaria*) has a roundish shell that is usually less than 3.2 inches (81cm) across, and is light green or yellow with green rays. The inner shell surface (nacre) is silvery white. It is a freshwater mussel that likes to live in free-flowing, clean, well-oxygenated streams or rivers, preferring sand, gravel, or cobbled bottoms. Freshwater mussels eat microscopic organisms such as algae, phytoplankton, and other floating particles. Reproduction for this and most freshwater mussels begins in spring when the male releases sperm into the water and the female siphons them up as she filters food. The eggs are fertilized and develop into larvae (glochidia) within the mother's gills. The glochidia, when released by the mother, will latch onto the gills or fins of a suitable host fish, where they find adequate nutrients to grow. They separate from the fish when ready and fall to their new river bottom location as juvenile mussels. They spend their first couple of years buried in the stream floor and feed themselves with a fleshy (byssal) foot.

DID YOU KNOW?

Fanshell populations are found from the Ohio River basin in Illinois across to Alabama, Virginia, West Virginia, and Pennsylvania. Being stationary filter feeders, they are highly sensitive to any changes in water quality. Their habitat is negatively affected by the creation of dams, levies, manmade channels, and the dredging of rivers. Because they live a long time, any pollution leaves them vulnerable to toxin accumulations. This species is federally endangered and possession of mussels is illegal in West Virginia, with a permit required to collect them for scientific purposes. In addition to all the varied threats to their survival by human activity, the latest problem for freshwater mussels is a non-native species, the Zebra Mussel. This mussel is not dependent on host fish for distribution and spreads very quickly. Zebra Mussels kill the native mussels by encrusting them and intercepting their food and oxygen.

For more detailed information visit: www.wvdnr.gov.

TEST YOUR KNOWLEDGE

What non-native mussel is a threat to American freshwater mussels?

- a) The Ohio Striped Mussel
- b) Prince Edward Island Oyster
- c) The Northern Riffleshell
- d) The Zebra Mussel

Answer is D.

