



MOLLUSKS AND CRUSTACEANS

NORTHERN RIFFLESHELL

ABOUT

The Northern Riffleshell (*Epioblasma torulosa rangiana*) is 2 inches (5.1 cm) long and has a yellow-brown, oblong shell with green rays and ridge. The female has a larger front edge to her shell. Freshwater mussels that live in sand, gravel, cobble, and other mixed material on the bottoms of rivers and streams, they generally need free-flowing, clean, well-oxygenated water and are found in swift flowing shallow water of smaller streams. Reproduction starts in spring when the male releases sperm into the water. The female catches the sperm with her siphon, (through which she also feeds) and once the eggs are fertilized she holds them in her gills until they develop into tiny larvae called glochidia. Due to this nurturing activity, the female's shell in some species has a rear bulge. Once the glochidia (larvae) are released, they latch onto the gills or fins of fish where they derive necessary nutrients. When they are ready, they detach from the host fish and fall to their new location, remaining embedded at the bottom of the stream for the first year or two. Adult mussels seldom move more than a few meters in their lifetime, with some individuals living over 100 years of age. The diet of freshwater mussels contains a variety of microscopic organisms such as algae and other floating particles they filter out of the water.

DID YOU KNOW?

The Northern Riffleshell, like other sedentary filter feeders, are highly vulnerable to any changes in the water quality. They are very rare and listed as federally endangered. The building of dams, levies, channels, and dredging activities have severely degraded the habitats of many species in West Virginia. These human practices can increase silting, thereby smothering the mussels, destroying their food sources, or harming the host fish they need for dispersal. Northern Riffleshells range from the Ohio River and Great Lakes basins, through Michigan and Ontario down into West Virginia and west to Illinois. In some states mussels are still collected for their role in culturing pearls, but it is illegal to possess them in West Virginia.

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

TEST YOUR KNOWLEDGE

What does the female mussel catch the male's sperm with?

- a) Glochidia
- b) Algae
- c) Siphon
- d) Shell

Answer is C.

