

CREATURE FEATURE

Triangle Floater Mussel

New Jersey is home to 12 species of freshwater mussels. Also known as pearly mussels, these creatures are among the oldest living animal on our planet – they can live for over 100 years.

While many people consider their cousins, saltwater mussels, to be delectable, not many people dine on freshwater mussels. That doesn't stop them from being an important food source, as young ones are frequently eaten by birds such as ducks and herons and various species of fish. Older, larger mussels are a staple in the diet of raccoons and muskrats.



All mussels are filter feeders, meaning that they siphon out microscopic particles of food from the water as it passes over them. While straining out food, they also siphon out other suspended materials in the water column, including pollutants. This makes mussels important players in nature's housekeeping efforts, and they are sometimes referred to as Mother Nature's vacuum cleaners!

Freshwater mussels have a low tolerance for water-borne pollutants, so they cannot survive in rivers and streams where the water quality is poor. This makes them an important indicator species – when we find them in a body of water, we can be fairly certain that the water is of relatively high quality.

There is a lot of luck involved in the reproduction of freshwater mussels. Eggs held inside a female are fertilized by sperm that she draws in while siphoning water. For most species, if a male of her kind isn't nearby upstream, she can't reproduce. Once fertilized, the eggs develop into a larval stage and are then released into the water to begin a parasitic stage. The mussel larvae, called glochidia, must attach themselves to a host fish in order to survive. For some mussels, the host is limited to only a few fish species. This generally harmless parasitic stage lasts a matter of weeks before the larvae transform into young mussels and drop off the fish to begin a life in the stream bottom.

The triangle floater is a small, ovate to triangular shaped greenish-black mussel primarily found in streams and rivers in sand and gravel substrates, but it can also live in areas of standing water such as ponds, lakes, and canals. Although the triangle floater is widespread – it can live as far north as Nova Scotia west to the St. Lawrence watershed and as far south as Florida, its numbers have been declining in New Jersey, largely because of human activities that have degraded water quality in our state. It was added to the State's threatened species list in 2001. This designation is given to any species that is likely to become an endangered within the foreseeable future. These endangered and threatened organisms require human assistance to prevent their extinction.

Since 1993, State biologists have been conducting freshwater mussel surveys to try to find populations and determine how to help them survive. They search locations where mussels have been seen in the

past as well as other areas with habitats that are likely to support mussels. Using viewing scopes and snorkeling gear as they wade or swim, they search for mussels in streams, rivers and ponds. They also inspect shorelines for shells and relicts (very old shells) at all survey sites. Once populations are discovered, critical areas are mapped and scientists develop protection strategies for endangered and threatened species by working with local municipalities, landowners, other state and federal agencies, planners, and organizations such as water watch and conservation groups.

We are happy to report that triangle floaters have been found in the Upper Raritan watershed in Somerset County where the Lamington River flows past our Burnt Mills Preserve. In this section of the river, the mussels live amidst fishes including the blacknose dace, common shiner, largemouth bass, pumpkinseed, slimy sculpin, fantail darter, northern hogsucker, and rosyface shiner. All of these fish species can serve as hosts for young triangle floaters, and they are vital to the continued survival of these mussels. When you visit the Preserve, look for them in the water along the shoreline – be sure not to disturb them, and delight in the fact that conditions are sufficient to allow these threatened water purifiers to carry out their important role in the aquatic ecosystem there!

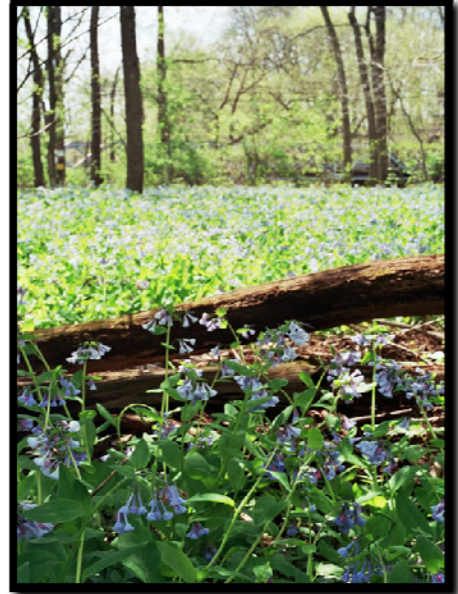
For more information, please visit these links:

[Discover Freshwater Mussels: America's Hidden Treasure](#)

[Massachusetts Division of Fisheries & Wildlife](#)

[Pennsylvania Triangle Floater Fact Sheet](#)

[New Jersey Division of Fish & Wildlife](#)



Burnt Mills Floodplain, Bedminster