

Eastern Pondmussel (*Ligumia nasuta*)

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General Information:

The Eastern Pondmussel is a larger mussel that can reach up to 6 inches in length. It is an elongated/elliptical shaped animal that comes to a blunt point. The shell of the female is more rounded than that of the males.

Although their shell is very, very thin, it is quite strong and can take a beating. Kids trying to break them open to use them for fish bait always struggle getting them open in the first place. When they are young, they have a yellowish-green tint to them, but as they mature and get older they become dark brown. The shell lining, or nacre is usually purple, pink or silvery white.

Where do they live?

It is distributed along the Atlantic coast, from Virginia to New York, and the eastern Great Lakes region. In Massachusetts, it's most common in the southeastern part of the state in coastal ponds and on Cape Cod.



Habitat:

The Eastern Pondmussel lives in streams, rivers and small and large ponds. It does not have a preference when it comes to depth, strength of flow or substrate. It has been found in depths up to 25 feet, and in rivers with very strong currents. It is a species of special concern because it can be abundant when found, but existing populations are rare, especially in Massachusetts rivers and streams. Therefore, in Massachusetts, you will find them mostly in ponds and lakes.



Threats and Protection:

The Eastern Pondmussel is considered a species of special concern in several states, including Massachusetts. There are reasons for this. Since they are filter feeders, they cannot move away when the conditions worsen where they are live. They are also vulnerable to more competitive native and invasive species. They are easy prey and make a good meal for some organisms. Along with their predators, humans contribute to their declining population as well. Urbanization changes the near-shore landscape and causes polluted storm water run off where they live.



Fun (or not so fun) Facts:

- 75% of the mussel species in North America is either rare or imperiled
- 1 in 10 of the fresh water mussel species has already gone extinct

Diet:

They filter plankton, bacteria and other non-living organic particles from the water column.

Reproduction:

Unlike other mollusks, fresh water mussel sexes are different. When they reproduce, the male releases sperm directly into the water. A female will draw in the sperm and fertilize the eggs, which are known as glochidia. The fertilization process can take anywhere from a few days to a few months, but when they are released there can be several million of them. When they are released the need to attach themselves to a host fish right away or they will die. From there it takes between 6 and 160 days for it to fall off and begin its life in the sediment, which can last up to 100 years.

What you can do to help

There are a few things that you can do to help prevent the Eastern Pondmussel from going extinct, and they are:

- Understand and control the effect development has on nearby waters
- Maintain natural river flow and limit water withdrawals.
- Eliminate sources of pollution to the water
- Maintain adequate vegetation riparian buffer along rivers and lakes
- Protect land at sites where the Eastern Pondmussel lives