

# Invasive Species Alert

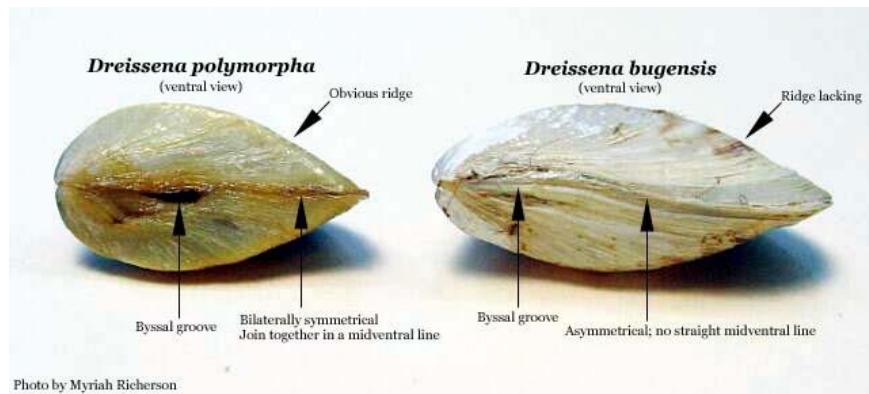
## Zebra & Quagga Mussel

(*Dreissena polymorpha*) & (*Dreissena rostriformis bugensis*)

\*Established in Michigan\*

### Identification:

- Average length of a zebra mussel is about 1 inch, quagga mussels can reach 2 inches
- Zebra shells are triangular in shape and can sit flat on the ventral side
- Quagga shells are more rounded and fan-shaped and won't sit flat on the ventral side
- Colors vary - shell color ranges from almost white to tan or brown in both species, usually have darker concentric rings but are not always pronounced



**Habitat:** Freshwater lakes, rivers, and reservoirs. Zebra mussels require hard substrates to latch onto, while quagga mussels can attach to hard or soft substrates in water depth up to 130 meters. This leads to a less restricted range of suitable habitat than for the zebra mussel.

**Diet:** Mussels are filter feeders that consume algae and phytoplankton in the water. Zebra mussels can filter up to 1 liter of water each day.



**Native Range:** Zebra mussels are native to freshwater rivers and lakes in Eastern Europe and western Asia. Quaggas are native to areas in the Ukraine and the Ponto-Caspian Sea.

**Local Concern:** Filter feeding removes a substantial amount of food for zooplankton, increases water transparency, and leads to an accumulation of pseudofeces. Pseudofeces accumulation creates foul environments. Zebra mussels have been known to colonize on native mussel species in groups of up to 10,000 individuals, rendering the native mussel immobile and unable to survive. There is also an economic cost associated with mussel attachment to pipes and other underwater structures.

**Means of Introduction:** Ballast water from transoceanic vessels

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