

# ZEBRA MUSSEL

*Dreissena polymorpha*

## SPECIES + ORIGIN:

Zebra mussels are native to Eastern Europe and Western Russia; they were introduced to the Great Lakes via ballast water in 1988. Female ZM produce 100,000-500,000 eggs annually. The eggs develop into microscopic, free-floating larvae called veligers, which are just beginning to form their shells. In 2-3 weeks, veligers settle and attach to any firm, submerged surface using "byssal threads".



Credit: MAISRC

## IMPACTS:

ZM can cause problems for lakeshore residents and recreationists: homeowners who take lake water for irrigation may struggle with clogged intake pipes; ZM may attach to motors and clog cooling water areas; ZM shells cause cuts and scrapes to swimmers' feet and pets' paws; anglers may lose tackle cut by sharp shells.

ZM are ultra-filter feeders! They feast on zooplankton in heavy loads, increasing water quality and allowing vegetation to grow densely in deeper water. This mega-filtering impacts the food web within an aquatic ecosystem, reducing food for larval fish.

## ZEBRA MUSSEL INFESTED WATERS:

Andrusia, Beltrami, Big, Big Rice, Buck, Carr, Cass, Irving, Kitchi, Little Rice, Marquette, Mississippi River, Pimushe, Plantagenet, Pug Hole, Red, Shotley Brook, Tamarac River, Turtle River Lake, Wolf

## MEANS OF SPREAD:

ZM attach to boats, nets, docks, swim platforms, boat lifts, and can be transported on any aquatic equipment. They can also attach to aquatic plants, making it CRITICAL to remove all aquatic vegetation before leaving a waterbody. Microscopic veligers may be carried in water contained in bait buckets, bilges, or any other way moved from an infested waterbody.

## WHAT CAN I DO?

Help stop the spread of ZM by inspecting water-related equipment, removing visible ZM + aquatic plants, draining water before transporting from infested waters, + decontaminating equipment before moving to a new waterbody.

## HOW TO IDENTIFY:

ZM are small, fingernail-sized animals. Adults are 1/4 to 1 1/2 inches long, and have D-shaped shells with alternating yellow and brownish colored stripes. They often form dense colonies on firm, submerged surfaces. ZM are the ONLY freshwater mussel that can attach themselves to objects. Keep an eye on submerged equipment + watercraft when transporting from infested waters.