RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

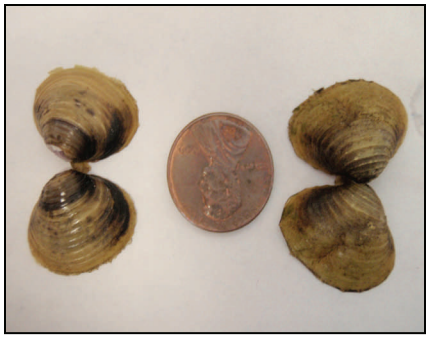
FACT SHEET

Office of Water Resources / June 2009

Aquatic Invasive Species in Rhode Island: Asian Clam

Asian clam

Interior of Asian clam



Asian clam relative to a penny

Species Description/General Information

Asian clam (*Corbicula fluminea*) is an invasive freshwater bivalve. The exterior of the shell is yellow-green to light brown with thick concentric rings while the interior is white to light blue or light purple. Each valve possesses three cardinal teeth with anterior and posterior lateral teeth with fine serrations (see diagram below). Clams reach maturity at 6-10mm and will grow to 50mm. Asian clams can be found at the sediment surface or slightly buried and prefer fine, sandy substrates.

Why is Asian Clam Considered a Nuisance Species?

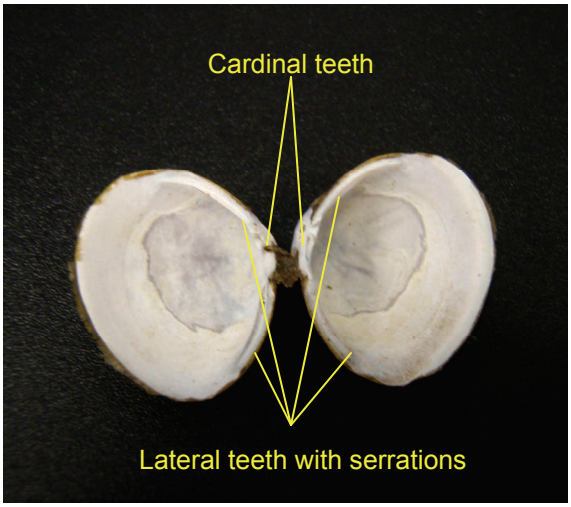
Asian clams are filter feeders and compete with native species for phytoplankton in the water column. When populations reach high densities (densities in the thousands per square meter have been recorded), Asian clams can outcompete other filter feeders and are viewed as a factor in the decline of many freshwater clams and mussels. Large populations are also known to clog the intake pipes of power and water facilities, costing an estimated $1 billion annual in the United States to remove them.

How Did Asian Clam Become Established in Rhode Island?

Asian clam was likely first introduced to the United States as a food source by Chinese immigrants and has since spread across the country. Clams are used as live bait and may be introduced to new water bodies as bait buckets are dumped into the water. Asian clam is also sold as an aquarium species, usually marketed as “gold clam” or “pygmy clam”, and can be introduced when unwanted aquaria is poured into a water body. Clam larvae are released into the water column and can be transported with ballast water or in bait buckets filled with water to new locations.

What Methods Can Be Used to Control Asian Clam?

Once introduced into a water body it is unlikely Asian clam can be eradicated. No effective large-scale control options currently exist. Preventative actions are the best options in the fight against Asian clam. All water should be drained from boats upon exiting the water and bait buckets and aquariums should not be dumped into a water body.



Please Help Prevent the Spread of Aquatic Invasive Species in Rhode Island!

Learn to identify invasive species and be on the lookout for new plants in your lake. It is much easier to manage a small patch of invasive plants than an entire cove covered with plants so early detection is key! The University of Rhode Island Watershed Watch Program, in cooperation with the Rhode Island Natural History Survey (RINHS) and DEM, has hosted training workshops for volunteers interested in learning how to survey and identify plants, including invasives, in lakes. For information on the anticipated availability of AIS training, contact the URI Watershed Watch Program or RINHS (see below).

RIDEM also encourages the use of clean boat hygiene practices. Boats (trailers and motors too) should always be inspected for plant fragments before launching in the water and again after boats have been hauled out of the water. See posted reminders at state boat ramps:

For more information also see:

- Aquatic Invasive Species in Rhode Island: http://www.dem.ri.gov/programs/benviron/water/quality/surfwq/aisindex.htm
- RI DEM Water Quality and Wetland Restoration Team: http://www.dem.ri.gov/programs/benviron/water/wetlands/pdfs/wqwrteam.pdf
- RI DEM Wetlands permit application: http://www.dem.ri.gov/programs/benviron/water/permits/fresh/index.htm
- The URI Watershed Watch Program: www.uri.edu/ce/wq/ww
- The Rhode Island Natural History Survey: http://www.rinhs.org/