Asian Clam

A new invasive species, the Asian clam, has been found in Lake George.

What is the Asian clam?

The Asian clam, *Corbicula fluminea*, is a small bivalve (two shells hinged together) that is native to temperate and tropical areas in southern Asia, the eastern Mediterranean, and Australia. They are small, usually less than 1.5 inches in size, and have a light green/light brown shell with distinctive concentric ridges.

Where was it found?

Asian clams were found off Lake Avenue Beach in Lake George Village on Thursday August 19, 2010 by Jeremy Farrell of the Darrin Fresh Water Institute. Initial concentrations of up to 600 clams per square meter were documented, covering an area of approximately 2.5 acres.

map from www.lakegeorge.com/Area-Map.cfm

What's Next?

Spearheaded by the Darrin Fresh Water Institute, a committee has been formed to help coordinate efforts to respond to this new invasion. Representatives from the Darrin Fresh Water Institute, the Lake George Park Commission, the Lake George Association, the FUND for Lake George, the NYS Department of Environmental Conservation, the Adirondack Park Agency, the Adirondack Park Invasive Plant Program, and the Lake Champlain Basin Program are all working together to pool resources and expertise.

The next step is to determine the extent of the spread of the clam. After the extent of the invasion is mapped, options for eradication or management will be evaluated. We hope that we have found this new infestation soon enough to successfully eradicate it.

Why do we not want Asian clams in Lake George?

What problems could they cause?

The biggest problem Asian clams have caused in other water bodies is biofouling - or clogging of water intake pipes. The clams filter feed on plankton and compete with native mollusks for food and space. While the potential impact of Asian clams becoming established in Lake George is still unclear at this point, they can grow and spread rapidly, displacing native species, reducing biodiversity, and altering the food web. Some fish and crayfish do eat them, but at the densities they can reach, up to 5,000 clams per square meter, it is unlikely such predation would significantly affect their population. Nutrients from the excrement of the clam can feed plant and algal growth. In high densities, Asian clams have been associated with increased algal growth in other bodies of water.

How did they get here?

The Asian clam was first found in North America in 1938 in Washington State. It is thought that it was brought to the U.S. by immigrants as a food source. Since then, it has spread to over 40 states, most likely through the bait and aquarium trade. The juveniles can be moved in flowing water and could easily be moved around in bait buckets and other areas of a boat that holds water. Asian clams invaded western sections of the Erie Canal around 1998 and were found in the Lake Champlain Canal in Ft. Edward near Lock 8 in April 2008. Exactly how the Asian clam was introduced to Lake George or how long it has been here is unknown at this point.

What can I do to help protect Lake George from the Asian clam and other invasive species?

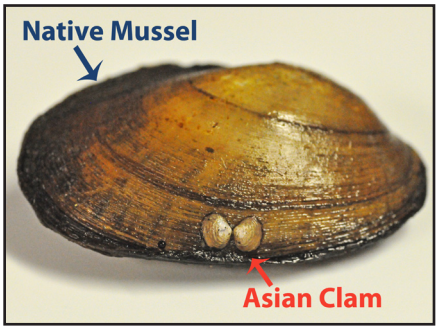
Asian clams are hemaphroditic, meaning a single clam can reproduce alone, and can release hundreds of juveniles per day. In our climate, they typically spawn from July to September and have a life span of up to seven years. Since multiple sizes have been found they have been in the lake a while and have already reproduced. The juveniles do not swim but can easily be moved in water currents or transported by humans.

The clams can vary in size and color - such as the ones shown here found off Lake Avenue Beach.

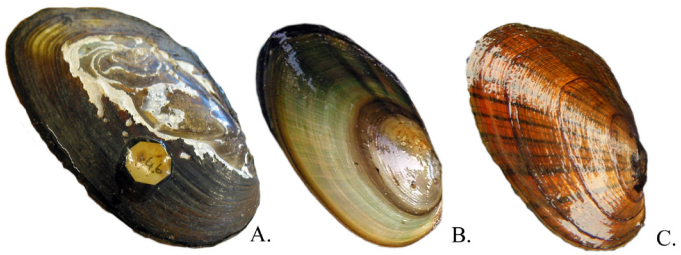
How you can help:

Report Asian Clam Sightings

Learn what the Asian clam looks like. If you find a clam that looks suspicious, get a sample or take a photograph and call the Lake George Association, the Darrin Fresh Water Institute, or the FUND for Lake George. Contact info is below.

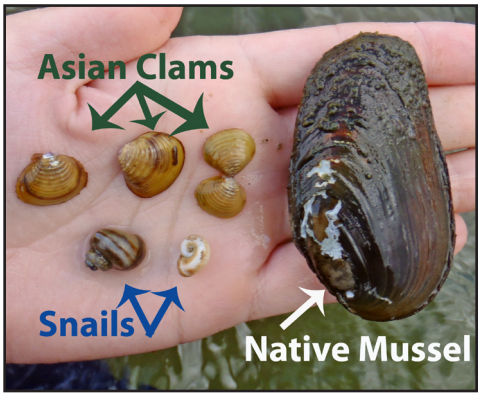


Remember, we also have native mollusks in Lake George. The Asian clam is much smaller and rounder, and you can feel the ridges on the shell with your fingernail. Native clams are sensitive and should not be disturbed.



The Native Mussels of Lake George. A. Eastern Elliptio (*Elliptio complanata*) B. Eastern Floater (*Pyganodon cataracta*) C. Eastern Lamp Mussel (*Lampsilis radiata*). Images courtesy of DFWI.

For more info or to report an Asian clam sighting, call the Lake George Association @ 518-668-3558, the FUND for Lake George @ 518-668-5913 or the Darrin Fresh Water Institute @ 518-644-3541.



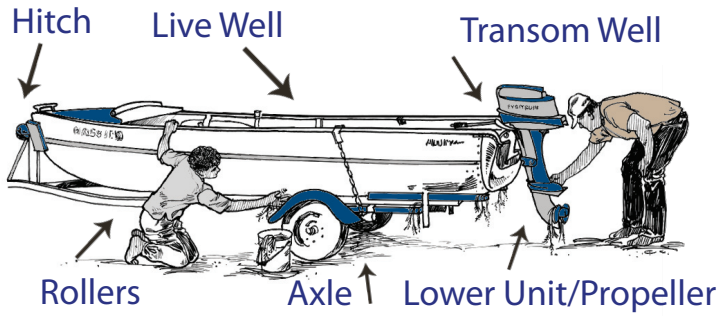
Look for clams in sandy or gravelly bottom areas in shallow, warm water - as this is their preferred habitat.

Help Stop the Spread

of Asian clams & other invasive species

Asian clams are spread by the adult clams being moved or the juveniles being moved in contaminated sediment or water taken from right above the sediment in areas where clams occur. Wash your boat and all equipment before entering and when leaving Lake George. Be sure to drain all water, including live wells and bait buckets. Do not use Asian clams as bait.

WATERCRAFT CHECK POINTS



When you leave a waterway:

Check and remove any visible mud, plants, fish or organisms from boats, trailers, equipment, clothing, dogs, etc.

Clean and eliminate water from equipment.

Dry anything that comes into contact with water.

Never release plants, fish, or other animals into a waterway unless they came from that waterway.

Publication by the Lake George Association in coordination with partner organizations. Photos courtesy of Emily DeBolt, Lake George Association, unless otherwise noted. Resources used: USGS Nonindigenous Aquatic Species Database. “Aquatic Immigrants of the Northeast, No. 4: Asian Clam, Corbicula fluminea”, Connecticut Sea Grant College Program. “Asian Clam: An Exotic Aquatic Species”, Massachusetts DCR.