

ASIAN CLAM

Corbicula fluminea

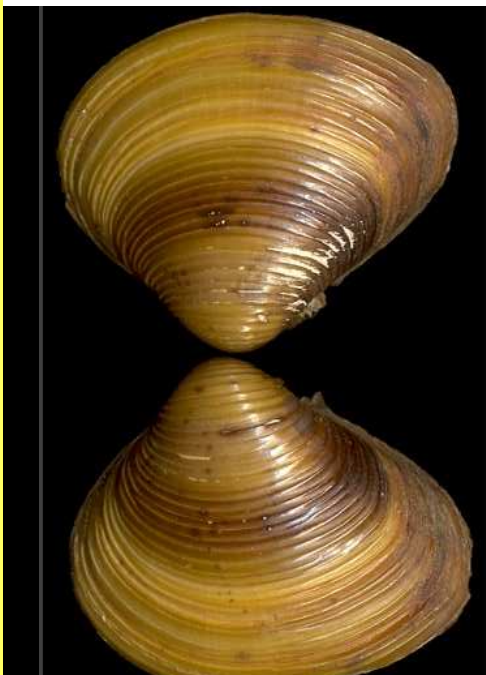


Aquatic Invasive Species: Control and Prevention

Aquatic Invasive Species (AIS) impede recreation, degrade water quality and, once established, are very difficult to control. There currently are invasive plants, invertebrates, mollusks, and fish in Lake Tahoe. Partner organizations around the lake have been implementing preventative measures to ensure that additional AIS are not introduced. Species of the highest concern that are not currently present in the Tahoe Basin include Zebra mussels, Quagga mussels, and New Zealand mudsnails. A diverse group of dedicated partner agencies, including the TahoeRCD, University of Nevada-Reno, University of California-Davis, and the Tahoe Regional Planning Agency, have collaborated to prevent, monitor, and control AIS in Lake Tahoe.

How did Asian clams get here?

Asian clams have spread rapidly throughout lakes, canals, rivers, streams, and reservoirs in North America since they were first detected in the Western United States in 1938. The invasive bivalves were first recognized in Lake Tahoe in 2008 by Tahoe Environmental Research Center (TERC) researchers in nearshore areas of the lake.



Origin: Asia, Africa, Australia, southeast Asian islands

Means of Introduction: Intentional release of aquarium clams, microscopic larvae transferred in un-drained boats

Habitat: Silt, sand, and gravel in near-shore areas from approximately 5 to 250 feet (4 to 10 meters)

Spread: Rapidly reproduce

Characteristics: Small, light-colored bivalve with concentric indentations

Size: 1 to 1 1/2 inches (25 to 40mm)

Food: Filter particles suspended in water including bacteria, algae, and detritus; and pedal feeding from sediment

Why is it a threat to the Tahoe Basin?

- ⊗ Alters benthic substrate and competes with native species for limited resources
- ⊗ Burrow deep in the bottom sediment of Lake Tahoe, thereby affecting the ecological functions
- ⊗ Impacts aesthetic and recreational values of beaches

Current Management

Monitoring and management techniques are being utilized in Lake Tahoe in order to prevent the further spread of Asian clams.

Bottom Barriers: Studies are currently underway in Lake Tahoe to test the effectiveness of bottom barriers at decreasing invasive clam populations.

Research: TERC and UNR, in collaboration with the TRPA and TRCD, have been conducting field surveys, literature reviews, laboratory experiments, and demographic studies.



Photo credit: UC Davis