



Invasive Species Fact Sheet

Golden mussel, *Limnoperna fortunei*

General Description

Golden mussel (*Limnoperna fortunei*) is an invasive bivalve that ranges in color from dark brown to gold. It can reach up to 1 ¾ inches long. Adult mussels form byssal threads that enable them to attach to surfaces. Adult mussels spawn multiple times each year and have the potential to produce thousands of planktonic offspring, called veligers.



Golden mussels, San Joaquin County
Photo: Jeb Bjerke, CDFW

Current Distribution

In October 2024, golden mussels were discovered in the Sacramento – San Joaquin Delta and O'Neill Forebay (Merced County). This discovery was the first known occurrence of golden mussel in North America. Originally from China, Thailand, Korea, Laos, Vietnam, Indonesia, and Cambodia, they have invaded waters of other countries and territories including Hong Kong, Japan, Taiwan, Argentina, Brazil, Bolivia, Paraguay, and Uruguay.

Habitat Suitability

Golden mussel can inhabit fresh and brackish-water lakes, rivers, creeks, wetlands, bays, and canals with water temperatures ranging from 41-95°F. They can establish in waters with a constant salinity of less than 3 parts per thousand (ppt) and can survive fluctuations of higher salinities. They attach to a wide variety of substrates, both man-made and natural, and at various water depths. Golden mussels are not restricted to hard surfaces and have been found colonizing soft substrates and attached to aquatic plants.

Pathways

Pathways are the mechanisms and processes by which invasive species are moved, intentionally or unintentionally, into a new ecosystem. Golden mussel can be carried in ballast water of ocean-going ships and released with that water. Adult golden mussel can be moved overland attached to watercraft and in-water equipment, and veligers and adults can be moved overland in water contained within watercraft and equipment.

Within interconnected waters, golden mussels can expand their range via the flow of water, and attached to, or entrapped within, watercraft and in-water structures moved within that waterway.

Impacts

Golden mussels are highly efficient filter feeders and form dense colonies. They consume large quantities of aquatic microscopic plants and animals that native species and sport fish depend on for food. Their colonization of hard surfaces impedes water flow, clogs pipes, and fouls watercraft motors, and necessitates ongoing, costly removal to maintain operational function. These costs result in economic impacts to water conveyances, energy production, recreation, agriculture, and ultimately the public.

Actions Taken if Found

If you observe golden mussel in California immediately report your sighting to the CDFW Invasive Species Program at <https://arcg.is/10D4G8>, or by email to Invasives@wildlife.ca.gov, or by telephone

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to (866) 440-9530. Please take clear, close-up photos that include something (such as a pencil or hand) to show size.

References

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