

NEW ZEALAND MUDSNAIL

Potamopyrgus antipodarum



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 dedicated, diverse group of 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 could quagga mussels get here?

NOT CURRENTLY IN LAKE TAHOE. The New Zealand mudsnail was first found in 1987 in the Snake River in Idaho. They were most likely introduced to the United States in ballast water or were transferred with the introduction of game fish. They could arrive in Lake Tahoe via contaminated recreational equipment of boaters and anglers.



Photo Credit:
Peter J. Bryant,
UCI

Origin: New Zealand and adjacent islands

Means of Introduction: Transported on recreational equipment, such as watercraft and fishing gear (e.g. waders)

Habitat: Occupy a wide variety of substrate including silt, sand, cobble, and aquatic vegetation from 13 to 130 feet (4 to 40 m)

Reproduction: Live bearers (release embryos, not eggs)

Characteristics: Light to dark brown shell; right-handed opening, typically with 5-6 whorls

Size: Extremely small; typically <1/4 inch (4-5 mm)

Food: Periphyton (algae)

Why is it a threat to the Tahoe Basin?

- ⊗ Competes with and displaces native invertebrates and alters food chains.
- ⊗ Population densities in some infested streams have reached up to 3/4 million individuals per square meter.
- ⊗ Impacts aesthetic and recreational values of beaches.

Current Management

Preventative programs are being utilized in Lake Tahoe to prevent the invasion of New Zealand mudsnails.

ONCE ESTABLISHED, CANNOT BE ERADICATED

Prevention: The lake-wide watercraft inspection program, coordinated by TRCD and TRPA, is an effort to ensure that New Zealand mudsnails are not introduced to Lake Tahoe. To prevent the spread, scrub and thoroughly rinse boat, gear, and equipment before exiting an infested area. Allow everything to dry before entering another body of water.



Photo Credit:
University of
California-
Riverside