

# New Zealand Mudsnail

## *What is a New Zealand mudsnail?*

The New Zealand mudsnail is a harmful invasive species that inhabits a wide range of aquatic environments. They are tiny at about 1/8 inch long and have elongated shells ranging from gray to light or dark brown, usually with 5-6 whorls. The shell opening is on the right side when the narrow end is pointed up and the opening faces the observer. Outside of their native range, they reproduce asexually (as clones). This means that only one snail is needed to start a new population.



Credit: USFWS

## *Why are they a problem?*

In some places, mudsnail densities have reached over 500,000 individuals per square meter. They compete for food and space occupied by native snails and other macroinvertebrates. Studies done in western states indicate they can alter stream food webs, impacting fisheries and native invertebrate populations. New Zealand mudsnails are easily transported and harder to kill than many invasives we have dealt with in the past. By closing the

operculum (a trap door-like structure) over their shell opening, they can survive in cool, damp environments for up to 26 days and survive exposure to toxins like bleach, ammonia and alcohol.

## *Where are they found?*

Originally from New Zealand, mudsnails were first identified in the U.S. in Idaho in the late 1980s. In the fall of 2013, the New Zealand mudsnail was discovered in DNR macroinvertebrate samples collected from Black Earth Creek in western Dane County in 2012, belonging to "Clone 1" from western states. The only other populations in the region are "Clone 2" and have not been expanding, found in Lake Superior's Duluth-Superior Harbor and Lake Michigan's Waukegan Harbor. The extent of New Zealand mudsnail invasion in Wisconsin is currently unknown, but the department is performing surveys to define the distribution of New Zealand mudsnails in Wisconsin.



Credit: Paul Skawinski

***For additional information, visit [dnr.wi.gov](http://dnr.wi.gov) and search for "New Zealand mudsnail"***



Susan Graham  
Wisconsin Department of Natural Resources  
[susan.graham@wisconsin.gov](mailto:susan.graham@wisconsin.gov)  
(608) 275-3329



# What can you do?

Most Wisconsin waters do not have invasive species. To keep Wisconsin's waters and fisheries healthy for the next generation, it is important to follow prevention steps every time you leave the water. By leading with your example and sharing the word, YOU can make a difference to protect Wisconsin streams!

Several effective methods to prevent their spread have been identified. The following guidelines work for both boating and wading equipment.

## **BEFORE leaving a waterbody:**

**INSPECT** equipment and **REMOVE** attached plants and animals (*required by law*)

**DRAIN** all water from equipment (*required by law*)

**SCRUB** equipment with a stiff brush, including crevices, to remove all mud and snails.

**RINSE** equipment with tap water to remove juveniles. Consider keeping a water jug or spray bottle in your car.

## **BEFORE entering another waterbody, switch to a completely different set of gear OR do one of the following disinfection steps:**

**FREEZE** for 8 hours, or

**WASH** with 212°F water (steam clean), or

**SOAK** in 120°F water for several minutes, or

**SOAK** in 2% Virkon solution (2.7 ounces per gallon) for 20 minutes

**Please do NOT use felt soled boots.** They have been proven to harbor more invasive species and to be harder to clean. You can also reduce the spread by fishing from upstream to downstream.



Credit: Larry Roberts/Post-Gazette

**Watch this Clean Angling Video** from the River Alliance of Wisconsin for step-by-step instructions on cleaning your gear:

<http://tinyurl.com/ly6xax6>

