

# FAUCET SNAILS

Help protect Wisconsin streams by preventing their spread



UW  
Extension

## WHY ARE WE CONCERNED?

- The first known occurrences of the invasive New Zealand mudsnail have been identified in Black Earth Creek near Cross Plains
- New Zealand mudsnails are very small and can reproduce asexually by cloning
- Their small size and ability to seal their shells allows them to be easily transported and to survive for extended periods out of water

Faucet Snail  
*Bythynia tentaculata* L.  
©Paul Skawinski

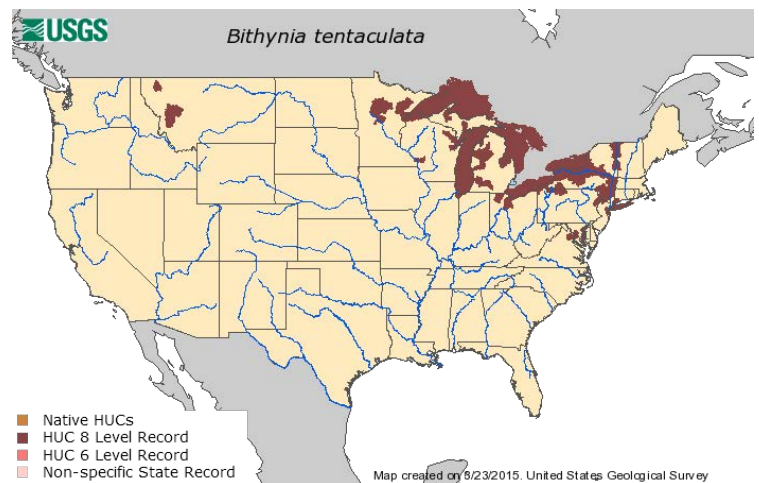


**GOAL:** The goal of this statewide survey is to detect if faucet snails are present in other Wisconsin streams besides locations known. This survey will not attempt to measure the scope of an infestation, if found.

## Background on faucet snails

In October 2013, New Zealand mudsnails (*Potamopyrus antipodarum*) were identified in benthic macroinvertebrate samples collected in 2012 from Black Earth Creek near the Village of Cross Plains. This is one of the first known occurrence of this clone of these snails in the Mississippi River Watershed. (A different clone is found in the Great Lakes.)

New Zealand mudsnails are a non-native invasive species that can have negative impacts in Wisconsin waters. They are very small (no more than 4-6 mm) and can reproduce asexually by cloning. Each female adult is born with about 230 juveniles in brood pouches. They can become superabundant (500,000 snails per m<sup>2</sup>) in highly productive streams. They compete with native invertebrates for space and food and might displace the native benthic community and alter food chains. Fish such as trout can consume New Zealand mudsnails, but these snails' hard shells make them resistant to being digested, allowing them to pass through fish alive and intact. Those snails that are digested provide little nutritional value to consumers.



One component of this plan is to seek volunteer assistance in watching for possible New Zealand mudsnails as spring and fall macroinvertebrate samples are collected for the Water Action Volunteers Stream Monitoring Program.

## EQUIPMENT NEEDED:

- |   |  |
|---|--|
| <input type="checkbox"/> All equipment described in the Citizen Monitoring Biotic Index methods   | <input type="checkbox"/> Stiff bristle brush                     |
| <input type="checkbox"/> One small specimen vial or container with cap per monitoring site        | <input type="checkbox"/> Spray bottle with tap water             |
| <input type="checkbox"/> Above 70% concentration isopropyl alcohol or ethanol (preferably 80-85%) | <input type="checkbox"/> Aquatic Invasive Species Recording Form |
| <input type="checkbox"/> Small piece of white paper (that will fit in vial or container)          |  |

5-6 whorls • Right-side opening • No larger than 12-15 mm

## MONITORING PROCEDURE:

- Follow your usual biotic index monitoring procedure to collect a stream bottom sample from multiple habitats. (See the Biotic Index Methods at: [watermonitoring.uwex.edu/wav/monitoring/methods.html](http://watermonitoring.uwex.edu/wav/monitoring/methods.html))
- When sorting the sample streamside, watch for small snails, pale brown in color, with a right-hand opening.
- If you find any snails matching this description, collect up to five in the small vial or container and preserve with isopropyl alcohol or ethanol.
- Once you have collected the snail(s), make a voucher label. Using a pencil, write the stream name, site description (e.g., Rocky Creek at CTH H), county, date, and your name on the slip of paper.
- Insert the paper into the vial. Cap securely.
- Follow procedures outlined in the box to the right.
- Use the [Aquatic Invasive Species Reporting Form](http://watermonitoring.uwex.edu/wav/monitoring/sheets.html) (available at: [watermonitoring.uwex.edu/wav/monitoring/sheets.html](http://watermonitoring.uwex.edu/wav/monitoring/sheets.html)) to identify the location where you found the specimens and photos you may have taken.

## CLEANING PROCEDURES

*Anytime you monitor, even if just at one stream site;*

**BEFORE LEAVING THE STREAM: INSPECT** equipment and

**REMOVE** sediments, plants and animals **SCRUB** equipment with a stiff brush (including crevices)

**RINSE** equipment with tap water (spray bottle)

**DRAIN** all water from equipment

*If you are moving to another stream site;*

**BEFORE ENTERING ANOTHER STREAM:**

**SWITCH** to a completely new set of gear or

**FREEZE** equipment for 8 hours; or

**STEAM** clean equipment; or

**SOAK** equipment in 120°F water for several minutes

- Repeat the procedure if you collected and submitted any or not.

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