

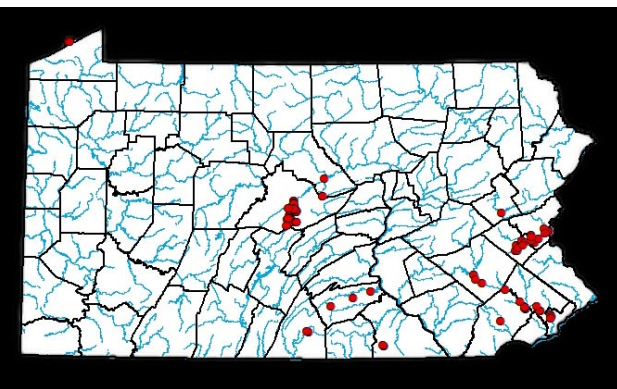
# New Zealand Mudsnail Response Plan Activated At Two State Fish Hatcheries

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HARRISBURG, Pa. (October 27) – The Pennsylvania Fish and Boat Commission (PFBC) announced that the Benner Spring and Pleasant Gap State Fish Hatcheries (SFHs), both located in Centre County, are operating under a special response plan following the detection of invasive New Zealand Mudsnaills on hatchery premises.

During a scheduled staff training at Benner Spring SFH on May 31, 2022, New Zealand Mudsnaills were detected within water supply plumbing inside a hatchery building. It is important to note that while this is the first detection of New Zealand Mudsnaills in a PFBC hatchery, these snails are known to have been present since 2010 in Spring Creek, Centre County, which is adjacent to the Benner Spring facility.



The discovery at Benner Spring SFH prompted the PFBC to immediately activate the New Zealand Mudsnaill Prevention, Monitoring, and Response Plan, which included suspending all transfers of fish into and out of Benner Spring until further notice. Additionally, more thorough inspections were scheduled at Benner Spring and all other state fish hatcheries and cooperative nurseries across Pennsylvania that are connected to or near waters that are known to contain New Zealand Mudsnaills. During this process, New Zealand Mudsnaills were detected at the Pleasant Gap SFH, which is adjacent to the Logan Branch of Spring Creek, a water also known to contain the invasive snails. Inspections at all other SFHs were negative. Four cooperative nurseries operated by volunteer conservation organizations in Northampton, Lehigh, and Franklin counties, were found to contain New Zealand Mudsnaills.

While New Zealand Mudsnaills were not detected in areas of the Benner Spring and Pleasant Gap SFHs which contained fish, under the response plan, immediate action was taken to enhance biosecurity measures at all SFHs and conduct a high-level risk assessment. Actions included the installation, repair, or replacement of bird

netting over fish raceways; installation of additional freezers at the hatcheries to be used for the disinfection of waders; and installation of additional electrical barriers around hatchery facilities to prevent snail movement into the hatcheries. Large scale disinfection operations were conducted at Benner Spring and Pleasant Gap SFHs that included the cleaning and drying of raceways using high pressure and high temperature steam, and the use of propane torches to burn any organic material within the raceways. Quarantine zones were established within the hatchery raceways for the monitoring of groups of fish, and sampling of fish digestive material was conducted on hundreds of fish to detect any presence of New Zealand Mudsnaills.

While continuing to follow these strict operational protocols for several months, there have been several additional detections of New Zealand Mudsnaills at Benner Spring and Pleasant Gap SFHs, although no snails have ever been detected among the fish populations or within the digestive systems of any fish. While disinfection, inspection, and quarantine operations will continue to be conducted at affected SFHs indefinitely as part of the ongoing risk assessment process, trout from the Benner Spring and Pleasant Gap SFHs were deemed to be unaffected by the presence of New Zealand Mudsnaills at the hatcheries. Throughout spring and summer 2022, staff from the PFBC Division of Fisheries Management conducted New Zealand Mudsnaill surveys on select waters that had been stocked with trout from the Benner Spring and Pleasant Gap SFHs prior to the detection at the hatcheries in May 2022, and no snails were found. In October 2022, several thousand fish were removed from quarantine at the affected hatcheries and were approved for use in the PFBC's fall and winter trout stocking operations.

## NEW ZEALAND MUDSNAIL

### Background

New Zealand Mudsnaills (NZM) (*Potamopyrgus antipodarum*) are native to freshwater streams and lakes in New Zealand and the surrounding islands. In New Zealand, NZM do not pose problems because native parasites and predators help to keep their populations in check. NZM have been spread widely into other countries, including the United States, most likely due to anthropogenic intervention. NZM have no natural predators or parasites the United States and, as a result, have become an invasive species in this country.

### Timeline

1987 - First discovered in the U.S. in Idaho's Snake River

2006 - Spread through Western U.S. States and found throughout Lake Erie, as well as four of the five Great Lakes

2010 - NZM detected in Spring Creek in Centre County, PA

2014 - Abundance and distribution of NZM increased in the Spring Creek basin

2021 - NZM populations have been found in many waters throughout the commonwealth (shown below)

The North American NZM can reproduce asexually and can quickly overtake an ecosystem by outcompeting native snails and other macroinvertebrates. Because of their very small size and resistance to desiccation and cleaning agents, NZM can easily be spread on waders and other fishing gear.

## STOP THE SPREAD OF AIS

### Tips for New Zealand Mudsnaills:

Freezing gear for a minimum of six hours.

Soaking gear in hot (>120 Fahrenheit) for at least five minutes

Soaking gear in a 1:1 solution of Formula 409 Degreaser Disinfectant and water (Other typical aquatic invasive species disinfection methods and other 409 brand products are not effective in killing NZM)

Tips for Other AIS:

When retrieving your boat for the day, check the boat, motor and trailer for weeds and other things "tagging along."

Wash your boat's hull with hot water or with a high-pressure spray.

Drain livewells, bilges and other compartments.

Drain all standing water from your boat.

Don't dump leftover bait into the water you're fishing, unless you collected the bait there.