



Minnesota DNR Rapid Response Summary

Faucet Snails

Mahnomen, Becker, and Norman Counties, Minnesota, 2012

DRAFT 12-10-12 by C. Herwig, J. Rendall, and N. Olson

Introduction

This is a summary of an actual rapid response by the Minnesota Department of Natural Resources (MN DNR or DNR) and its partners to a report of a faucet snail (*Bithynia tentaculata*) found in a live bait container in Becker County, Minnesota. At the time of this investigation, faucet snails were classified by the DNR as an unlisted nonnative species, a species that cannot be released into a free-living state but with no additional regulations. On 4 September 2012, faucet snails were classified in *Minnesota Statutes* as a prohibited species, which means importation, possession, transportation, and introduction into the wild is prohibited.

Description of Rapid Response Activities

1. Detection and Surveillance

1.1. Reporting Aquatic Invasive Species (AIS) Discoveries

Details of report - On 9 July 2012, a faucet snail was reported as being found amongst some leeches for use as fishing bait that were purchased from a local bait shop. The faucet snail was originally identified and reported to a DNR Invasive Species Specialist by an intern of the MN DNR. The faucet snail was provided to the Invasive Species Specialist for species verification.

Who was notified – DNR Enforcement was made aware of the snail by the Invasive Species Specialist. Enforcement started an investigation to determine the source of the faucet snails by contacting the bait shop to determine the source of the leeches. During the investigation, it was determined that the source of the faucet snails may be within the White Earth Nation Reservation and White Earth Nation Enforcement and Natural Resources Department staff were contacted. Both the DNR and White Earth Nation worked in collaboration on this rapid response.

1.2. Observers

Not applicable for this incident.

1.3. Reporting (Watch) Information and Reporting Forms

The MN DNR website provides information on the identification and current distribution of faucet snails in Minnesota

www.dnr.state.mn.us/invasives/aquaticanimals/faucet_snail/index.html

Sightings of AIS should be reported to an invasive species expert at

www.dnr.state.mn.us/invasives/contacts.html#aquatic

Online reporting is also available www.dnr.state.mn.us/invasives/report_invasives.html

1.4. Investigate Reports

1.4.1. Species

The snail found in the bait container was examined under a dissecting scope by an invasive species specialist with experience working with faucet snails. This invasive snail can be distinguished from native snails in Minnesota by size, presence of an operculum, and by the annuli pattern on the operculum (Appendix A).

Unlike a typical rapid response when an AIS is detected and reported as present in a water body, this incident required investigation to help determine the source of the faucet snails in the leeches and whether and where new faucet snail populations existed. DNR Enforcement officers visited the bait shop to determine the source(s) of the leeches in the shop. The bait shop voluntarily suspended leech sales while the investigation was ongoing. Officers examined the leeches in the store to look for non-target invertebrates amongst the leeches. They found snails and collected samples for an invasive species specialist to examine. The invasive species specialist determined that faucet snails and native snails were in with the leeches. Enforcement officers also determined the suppliers for the bait shop. The suppliers were contacted and if available, holding tanks were examined; otherwise, the suppliers were asked what ponds they had used recently for leech harvesting. The investigation was long and complicated; a number of leech harvesters and bait dealers (middle men), and bait sellers were questioned and their facilities examined for the presence of faucet snails.

Both holding tanks and leech trapping ponds were examined for faucet snails. Inspections of tanks included visually looking for faucet snail in with the leeches as well as manually sorting through leeches. Suspect snails were collected for further examination or for documentation. The field inspection was completed from kayaks or along shore. Visual inspection of submerged vegetation was primarily used along with sweeping plants or sediment with a fine-mesh net. The shoreline was also examined for shells of dead snails. If leech traps were available, they were examined as well. Each pond inspection was completed in approximately 1 to 3 hours.

1.4.2. Violations

We conducted an investigation to determine if laws were broken. At the time of this incident, faucet snails were classified as an unlisted nonnative species. No citations were issued during the investigation.

1.5. Field Surveying

The Minnesota DNR relies on observations from DNR staff, other agency staff, and citizens to report when they find AIS. No ongoing surveillance or monitoring for new infestations of faucet snails state-wide has been established. Some monitoring has occurred on water bodies known to have faucet snails as well as nearby and connected waters.

1.6. Confirmation

On 13 July 2012, the first pond with faucet snails was located in Becker County on White Earth Nation land. A large number of faucet snails were found on a leech trap as well as faucet snail eggs. The trap was confiscated and brought back to the office so that the snails could be confirmed under a dissecting scope. Additional ponds have been identified that have faucet snails present (see Rapid Assessment of Species and Distribution). See field inspection report in Appendix B for the initial searches that were conducted.

1.7. Databases of AIS Locations

The DNR's official infested waters list was updated following the required procedures for designating infested waters. The revised infested waters list was posted on the DNR website and the new infestations published in the *State Register* (See Implementation Actions – Regulatory below).

2. Rapid Assessment of Species and Distribution

Impacts, current distribution, and means of spread - The faucet snail is an aquatic snail native to Europe and was introduced to the Great Lakes in the 1870s. It was probably brought to North America unintentionally with the solid ballast of large timber transport ships or perhaps with vegetation used in packing crates. This snail is an intermediate host for four intestinal trematodes, or flukes, (*Sphaeridiotrema globulus*, *Sphaeridiotrema pseudoglobulus*, *Cyathocotyle bushiensis*, *Leyogonimus polyoon*) that cause mortality in ducks, particularly scaup, and coots. These parasites have a complex life history and require two intermediate hosts to develop. The faucet snail is the only known first intermediate host. When waterfowl consume infected snails, the adult trematodes attack the internal organs and cause lesions and hemorrhaging. Infected birds appear lethargic and have difficulty diving and flying before eventually dying. Large waterfowl die-offs of thousands of birds can result. Faucet snail populations have established in a few lakes and river in north-central Minnesota and in border waters of the Mississippi River near LaCrosse, Wisconsin. They can spread by attaching to aquatic plants, boats, anchors, decoy anchors, and other recreational gear and equipment placed in the water. Some movement by waterbirds may also spread this invasive species to new waters.

As of November 2012, a total of 41 ponds have been examined and 8 have been found to have faucet snails.

2.1. Identify Resources - Staff and Funding

For this incident it was not necessary to determine resources for in lake responses. For prevention and containment responses, actions were implemented using MN DNR Invasive Species Program staff and Enforcement staff. Funds for public awareness products were

from existing program funds for that purpose. Additional resources were not needed for this incident.

3. Decision for Action

Meetings and conference calls - Several statewide and regional meetings/conference calls were held to discuss the findings of the faucet snails and responses. The discussions included: Jim Dunn, Region 1 Enforcement Manager; Traci Hanson, Region 1 Water Resources Enforcement Officer; Phil Meier, Enforcement Operations; Jay Rendall, Invasive Species Prevention Coordinator; Barry Stratton, Nathan Olson and Christine Herwig, Region 1 Invasive Species Staff, and White Earth Tribal Staff.

Eradication or control - The potential for eradication or other management to control the snails in the new infested waters was discussed by DNR field and central office staff who are knowledgeable about faucet snail biology and management. It was determined that no control efforts were warranted in the ponds off of the reservation. The White Earth Nation, as of August 2012, had also decided not to take control actions at this time. This “no action” decision regarding attempting eradication or control means the rapid response aspect of the incident was over, however prevention and containment responses were deemed urgent.

Prevention and containment - Because the faucet snail’s threat to waterfowl was already known, and the bait pathway was now confirmed to be high risk, it was determined that immediate prevention and containment responses should occur for several activities (see Implementation Actions).

4. Implementation Actions

4.1. Regulatory

Infested waters - The faucet snail was designated as a prohibited invasive species in Minnesota Rules, Chapter 6216 using expedited emergency rules (Appendix C). The newly confirmed infested waters were designated as infested waters using a Commissioner’s Order (see attached order).

Bait shop - The bait shop had on hand a few gallons of leeches worth a few thousand dollars. It was decided that the bait shop had options including: removing and destroying all leeches in the shop or sorting the leeches to remove any snails before sale. Ultimately, a decision was made that it would be appropriate if the bait shop sorted the leeches before sale. The bait shop hand-sorted the leeches to remove any remaining faucet or native snails and sold the leeches.

White Earth Nation - White Earth Nation wanted to review their invasive species laws and update them where necessary to handle this new infestation.

4.2. Management

For ponds with faucet snails found on White Earth Nation land, a temporary closure was issued (see press release, Appendix D) preventing public access and leech harvest. Ponds

were still posted with closures as of early October 2012. No action was taken to remove or eradicate the snails.

4.3. Public awareness

News releases – Press releases were issued by both the DNR and the White Earth Nation (see Appendix D) to inform the public of this infestation.

Presentation to tribal members – The DNR and White Earth Nation collaborated to present information to tribal members on preventing the spread of invasive species with an emphasis on preventing the spread of AIS during leech trapping and wild rice harvest activities. DNR and SeaGrant AIS brochures and information were provided at this event.

Waterfowl regulations booklet – Waterfowl hunters are one user group that may interact with this species and may notice die-offs of waterfowl. To inform this user group, information on the faucet snail was added to the Minnesota Hunting Regulations Waterfowl 2012 handbook (see Appendix E).

Letter and poster to bait shops – Minnesota SeaGrant produced a poster that was about to be distributed to hundreds of bait dealers throughout the state. The poster had several AIS shown, but did not have faucet snails. It was decided that the DNR would have the faucet snail printed on the poster before it was distributed. To inform bait dealers that may be unaware of faucet snails and because of the concern that this species could be transmitted to new waters through the bait industry, the DNR sent a letter and a copy of the Minnesota SeaGrant poster to all licensed bait dealers in the state (Appendix F).

5. Information Sharing

Throughout this process, DNR staff, primarily invasive species program staff and enforcement staff, worked closely with the White Earth Nation on the investigation and dissemination of information. The citizens of Minnesota and White Earth Nation were also made aware of this investigation through press releases.

6. Assessment of Actions

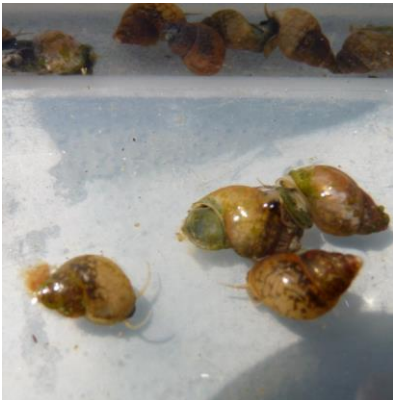
Additional ponds will be evaluated depending on funding and staff availability. An additional 182 ponds could be searched for faucet snails. The need to conduct field investigations at remaining leech harvest ponds will be reviewed annually or prior to the field season.

Appendix A - Faucet Snail Identification

Faucet snails (*Bithynia tentaculata*) are difficult for non-specialists to conclusively identify, because they may look similar to other snail species. The following information may help provide a tentative identification of a suspect snail. Final identification should only be done by specialists who have seen faucet snails.

Adult faucet snails grow to ~1/2 inch in length but are generally smaller. They are light brown to black and may have a dark pattern on the shell (Figure 1A), with 4 to 5 whorls that bulge out distinctively. The shell opening is on the right when the shell is pointed up. This opening is covered with an operculum when the snail is retracted. An operculum is a flat plate-like structure that can seal the body of the snail inside the shell. The faucet snail operculum has lines arranged in a series of separate, successively smaller, rings that are inside one another (concentric). These lines are almost centered on the operculum, like a bull's eye (Figure 1B). Eggs are clear, gelatinous, and arranged in double rows; there can be numerous eggs in a mass, which is ~1/4 inch wide and ~1/2 inch long or longer depending on the number of eggs laid (Figure 1C and D).

A.



B.



C.



D.



Figure 1. Faucet snails showing patterned shell (A), adult where the pattern on the operculum can be seen (B), egg masses (C), and a photograph to indicate relative size of egg masses and adults (D). All photos by the MN DNR.

Appendix B

Field Inspection Report

Inspection by the Invasive Species Program
Division of Ecological Resources
Minnesota Department of Natural Resources

Lake: Multiple in Becker and Mahnomen Co

Dates of inspection: July 10-17, 2012

County: Becker and Mahnomen

Observer[s]: Invasive species specialists: Christine Herwig and Nathan Olson, MN DNR inters for the invasive species program: Justin Mitchell and Mark Ranweiler

Type of inspection: Inspection to find presence of faucet snail (*Bithynia tentaculata*) based on one found among leeches sold from Bait Shop in Perham, MN

Author of report: Christine Herwig and Nathan Olson – Invasive Species Specialists

Date of report: 10 December 2012

Summary: A number of ponds and leech holding tanks were inspected to look for faucet snails. We found faucet snails at 2 establishments and in 8 ponds. A majority of the ponds that were found to have faucet snails had large populations of adult snails, suggesting that the snails have been present for a number of years. At all locations where we encountered leech trappers or sellers, we discussed steps that should be taken to prevent the spread of faucet snails.

Equipment: Snails were sampled by rolling over rocks, woody debris, and other near shore structures and visually observing and sampling snails or by using a kick net and running it on the bottom or through beds of aquatic vegetation. If leech traps (plastic bags or metal tins) were present, staff searched as many traps as possible for the presence of adult faucet snails or eggs.

Identification: Shell 6–13 mm high (adults). There is a flat-lid like structure, called an operculum, that can seal the body of the snail inside the shell. The operculum is not flexible because it has a high concentration of calcium carbonate (calcareous). The operculum is broadly oval to nearly round in shape. The lines on the operculum are arranged in a series of separate, successively smaller, elongate circles that are inside one another (concentric). The concentric lines are almost centered, like the target of a bull's eye. The shell has its opening on the right when narrow end is up (dextral). The whorls of the shell bulge out distinctly on the sides (inflated). This makes the sides of the shell a series of broad curves with deep incisions between the coils (Voshell, J. R. 2002. Freshwater Invertebrates of North America).

Survey Results

July 10, 2012

Nathan Olson and Christine Herwig (Invasive Species Specialists), and Chris Vinton, Mitch Lawler, and Traci Hanson (DNR Conservation Officers) checked a number of tanks in bait shops or private bait sellers in Becker and Mahnomen counties.

Private tanks in Frazee – Only native snails were found, but not in the tanks, as the owner hand sorts the leeches. Snails were found in the backyard where he throws the snails and dead leeches. Only *Helisoma* were observed.

Bait Shop in Perham – Both faucet snails and native snails (mostly *Physa* and *Helisoma*) were observed among the leeches that were bagged and reportedly purchased from a leech seller that operates within the White Earth Tribal boundaries. At least 2 dozen faucet snails were found, which suggested to us that they came from a pond that had a large number of snails.

Leech wholesaler within White Earth Tribal boundaries – No faucet snails were found; only native snails were observed in the holding tanks including *Physa*, planorbids, and *Lymnaea*.

Rush Lake (UTM 281349, 5250149; DOW: 44-0227) – We searched both the shoreline and paddled around the lake to search some of the leech traps. Only native snails (mostly *Physa*, *Helisoma*, *Lymnaea*) were found.

An unnamed pond (UTM 2879881, 5249167; DOW 44-0233) was also evaluated, but faucet snails were not found.

July 11, 2012

Nathan Olson and Christine Herwig (Invasive Species Specialists), Mark Ranweiler (Invasive Species Intern), and Traci Hanson (DNR Conservation Officer) worked in the Mahnomen area. Private tanks from a leech trapper on the White Earth Reservation were searched. Only a few native snails were found in the tanks, but many were not being used and had been flushed out.

Staff along with White Earth Tribal employees stopped by Chief Lake (DOW 44-0224), but tribal employees were confident that no trapping activity was occurring there. We therefore made our way to an unnamed wetland known as Little Chief Lake (DOW: 44-0225) which is within the Chief WPA. The private trapper we had visited earlier was actively trapping the pond. Staff searched rocks, wood, vegetation, and traps in the lake but no faucet snails were found, only native snails.

July 12, 2012

During the afternoon, Nathan Olson and Christine Herwig checked a few ponds in the Detroit Lakes area.

Schultz Lake (DOW: 3-0278) off of MN State Hwy 34 was searched with a few active leech traps being observed and some other traps stashed in the grass. No faucet snails found.

Checked an unnamed pond (UTM X:289834 Y:5190718) near a small mink farm. No faucet snails found.

Checked the west basin of Oar Lake (DOW: 3-0397). A few traps were found that were labeled, and were assumed to be an associate of a larger bait dealer who operates on within White Earth Tribal boundaries. No faucet snails were found. The east basin was later searched by Mark Ranweiler on July 24, 2012, with still no faucet snails being found. Two boats were observed on the lake.

July 13, 2012

Justin Mitchell (Invasive Species Intern) and Christine Herwig went to Tamarac National Wildlife Refuge and other ponds near Mahanomen.

Tamarac NWR –Numerous ponds that are open to leech harvest were checked on the refuge (NE of Chippewa Lake and E of Otter Tail River) and only found native snails of various species.

Unnamed pond (UTM 302233, 5220610) – Checked a few traps and found faucet snails. There were at least 50 attached to the trap that they were found on. The trap was confiscated to take back to the office. Native snails were also observed on the lake.

July 14, 2012

Traci Hanson and Christine Herwig went to view private tanks in the Vergas and Ebro areas.

Private tanks in the Vergas area – No faucet snails were found in the tanks, only native snails (*Physa*, planorbids, and *Amnicola*). However, when the sorting table was examined, some dead and dried up faucet snails that had been removed from sorted leeches were observed.

Private tanks in the Ebro area – No faucet snails were found in the tanks, only native snails (mostly *Amnicola*).

July 17, 2012

Nathan Olson and Mark Ranweiler worked in southern Mahanomen and northern Becker County inspecting private bait dealer facilities and ponds.

Staff visited a bait dealer located on McCraney Lake (DOW: 44-0080) who had traps in the pond found to have faucet snails on July 13. No faucet snails were found at the facility, but the season was winding down and some tanks were dry. The facility did have several types of screens used to grade the leeches and staff discussed other methods that the dealer could use to minimize the spread of faucet snails.

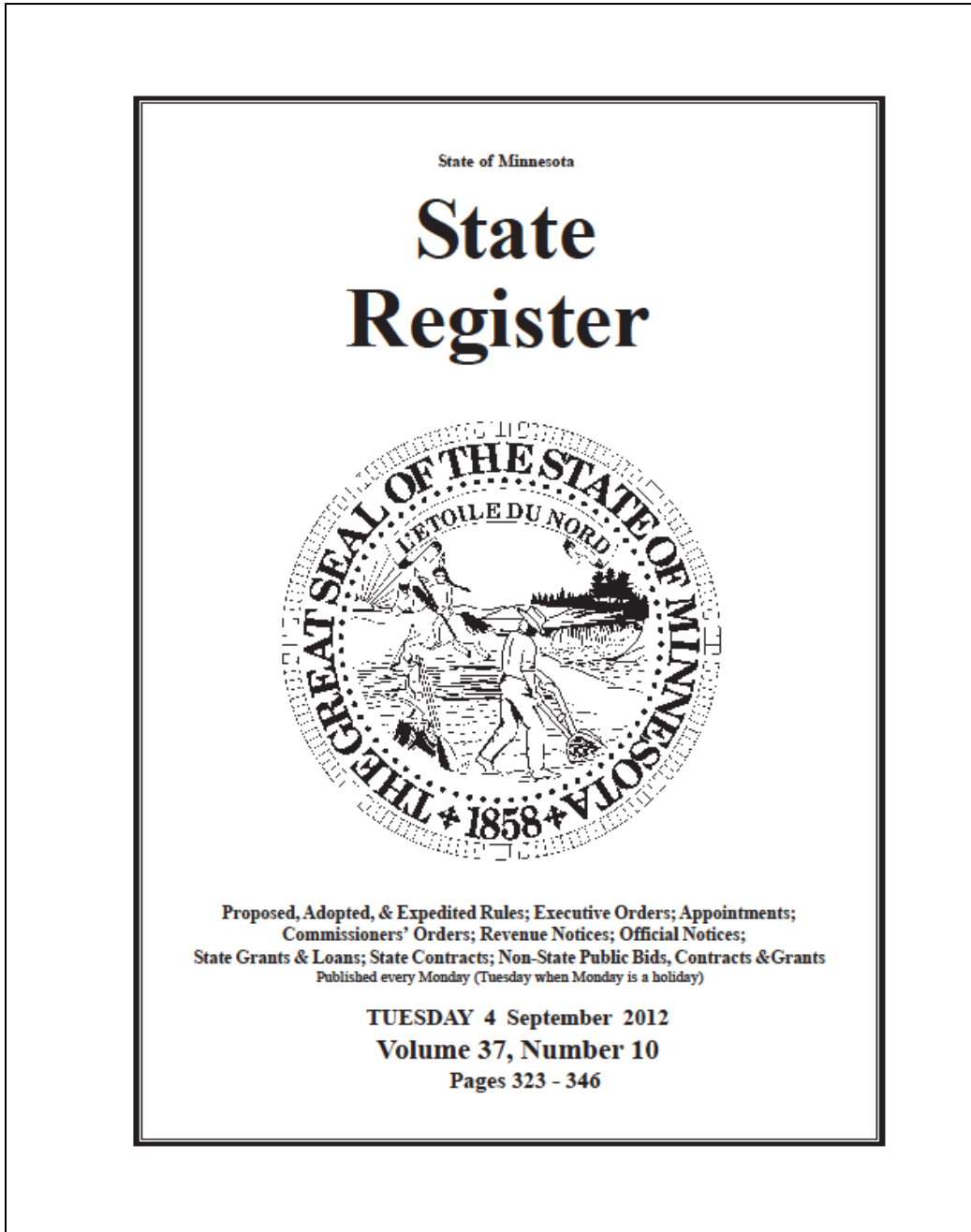
Following the visit with the dealer, staff made their way back to the area where the first faucet snail pond was found on July 13. Staff made their way back into a gravel pit that was near a pond being trapped by the dealer that was visited earlier in the day. Olson and Ranweiler launched canoes into an unnamed pond (DOW: 03-0230) and found faucet snails attached to vegetation. By viewing aerial photos, it appeared that this pond was attached to Unnamed pond (DOW: 03-0231) and another unnamed wetland. Following this field work and work by staff with the White Earth Tribe, 7 ponds were designated as infested with faucet snails. The tribal council closed these ponds to leech harvest until further action could be taken (e.g., a special training to leech trappers to help them understand how they can prevent the spread of faucet snails).

Appendix C

State Register – Tuesday, 4 September 2012
Volume 37, Number 10

Listing the faucet snail as prohibited invasive species

http://www.comm.media.state.mn.us/bookstore/stateregister/37_10.pdf



Appendix D - Press Releases

White Earth Reservation Tribal Council

Public Relations
PO Box 418, White Earth, MN 56591

News Release

Gary W. Padrta – garyp@whiteearth.com
218-983-4640 Ext. 5903

Wednesday, July 25, 2012
#7-12-05

Faucet snails found in small ponds on White Earth Reservation and county lands

WHITE EARTH RESERVATION, MINN. – On July 9, the White Earth Nation and Minnesota Department of Natural Resources (DNR) conservation officers responded to a report that faucet snails had been discovered in a container of leeches purchased at a bait shop in the Otter Tail/Becker County area.

Officials including White Earth conservation officers, White Earth aquatic invasive species personnel, DNR conservation officers and DNR aquatic invasive species specialists immediately began inspections to trace the origin of the leech source. A series of small ponds that are used for leeching and duck hunting were sampled.

After sampling, faucet snails were found in several ponds located on tribal and non-tribal lands in the area. In an effort to prevent the further spread of faucet snails, White Earth officials have temporarily closed the infested tribal land ponds to public access and leeching until further investigations are completed. Additional inspections are underway.

White Earth Natural Resources and the DNR are asking that all leech harvesters, bait dealers and anglers, tribal and non-Indians, thoroughly inspect their leeching equipment, boating equipment and bait containers for faucet snails, as well as any other aquatic invasive species, to further prevent their spread.

“People should be aware that even a small amount of water can transport invasive species,” said Nathan Olson, DNR aquatic invasive species specialist. “By law, anglers must dump their bait water before leaving accesses or shoreline property. With regards to leech water, we suggest that they dump it on shore away from the water’s edge and if they find aquatic species other than leeches in the leech water while they are out on the lake, they should avoid throwing it in the lake.”

The faucet snail is an aquatic snail native to Europe that was introduced to the Great Lakes in the 1870s. Presently, the faucet snail is classified as an unlisted non-native species and introduction into the wild is

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illegal. Because of its potential impacts to waterfowl, the DNR is currently in the process of designating the faucet snail as a prohibited invasive species, which means importation, possession, transport and sale will also be prohibited.

All previously known waters containing faucet snails, such as Lake Winnibigoshish, have been designated as infested waters. The newly discovered waters and any connecting streams will be designated infested by the end of July. Once any water is designated as infested, a permit is required for all commercial harvest of bait or transport of water from the infested water body. Individual bait harvest is prohibited.

Impacts: Faucet snails carry a parasite that is known to cause mortality in ducks and coots. Infected birds appear lethargic and have difficulty diving and flying before eventually dying. Faucet snails also compete with native snails, and may clog water intake pipes and other submerged equipment. There is no evidence that other wildlife besides waterfowl, including any fish species, are adversely affected by faucet snails. Anglers can eat fish from infested waters without worry of the parasite. Faucet snails are not known to be co-hosts for the swimmers itch fluke.

Where to look: Faucet snails are found on rocky shorelines, river and lake bottoms, aquatic plants, docks, and other objects placed in the water.

Means of spread: They can spread by attaching to aquatic plants, boats, anchors, decoy anchors, other recreational gear and equipment placed in the water. Some movement by water birds may also spread this invasive to new waters.

How to identify it: Faucet snails are difficult for non-specialists to conclusively identify. Native snail species and young non-native mystery snails could look similar to faucet snails. Adult faucet snails can grow up to 1/2 inch in length, but are generally smaller. They are light brown to black, with 4 to 5 whorls and a cover on the shell opening. The shell opening is on the right when the shell pointed up. Specimens of suspected snails should be submitted to the White Earth Natural Resources or the DNR Invasive Species Program for identification.

How you can help Stop Aquatic Hitchhikers:

- Clean off aquatic plants, animals and mud from boats and equipment before transporting from one water body to another.
 - Drain all water from bilge, livewell, motor, ballast tanks and portable bait containers before leaving water accesses or shoreline property.
 - Remove the drain plug, open water draining devices, and drain bilges and live wells; the drain plug must be removed or open when transporting a boat on public roads.
 - Dry/spray It is also recommended that people spray or rinse boats with high pressure and/or hot (120F) water, or let them dry thoroughly for five days before transporting to another body of water.
 - Boaters are also reminded of the new law that went into effect July 1, 2012, regarding boat lifts and docks.
 - A boat lift, dock, swim raft or associated equipment that has been removed from any water body may not be placed in another water body until a minimum of 21 days have passed.
- More information about aquatic invasive species is available at www.mndnr.gov/ais.

A list of infested waters can be found at http://files.dnr.state.mn.us/eco/invasives/infested_waters.pdf. An updated list with the new designations will be available soon.

The White Earth Nation will be hosting an educational training session on Aquatic Invasive Species for all leech and wild rice harvesters in the near future.

Faucet snails found in small ponds on White Earth Nation and county lands

On July 9, White Earth Nation and Minnesota Department of Natural Resources (DNR) conservation officers responded to a report that faucet snails had been discovered in a container of leeches purchased at a bait shop in the Otter Tail/Becker County area.

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After sampling, faucet snails were found in several ponds located on tribal and non-tribal lands in the area. In an effort to prevent the further spread of faucet snails, White Earth officials have temporarily closed the infested tribal land ponds to public access and leeching until further investigations are completed. Additional inspections are underway.

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“People should be aware that even a small amount of water can transport invasive species,” said Nathan Olson, DNR aquatic invasive species specialist. “By law, anglers must dump their bait water before leaving accesses or shoreline property. With regards to leech water, we suggest that they dump it on shore away from the water’s edge and if they find aquatic species other than leeches in the leech water while they are out on the lake, they should avoid throwing it in the lake.”

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Anglers can eat fish from infested waters without worry of the parasite. Faucet snails are not known to be cohosts for the swimmers itch fluke.

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Appendix E

Waterfowl Regulations Handbook Excerpt

MINNESOTA HUNTING REGULATIONS

WATERFOWL

2012

SAVE THE WETLANDS

\$7.50

© 2012 MINNESOTA DEPARTMENT OF NATURAL RESOURCES

MNDNR.GOV
1-888-646-6367

Minnesota
DEPARTMENT OF
NATURAL RESOURCES

Turn In Poachers — 24-hour hotline 1-800-652-9093
(Verizon customers can type #TIP (847) to report violations)

The poster features a large illustration of a canvas duck with a blue bill and black and white head, set against a background of water and reeds. A smaller inset shows a waterfowl stamp with a similar duck illustration. The Minnesota Department of Natural Resources logo is in the bottom right corner.

GENERAL WATERFOWL REGULATIONS

NEW FOR 2012

General

- The early goose season will be held Sept. 1-21.
- The daily bag limit for Scaup has been increased to four.
- Motorized decoys controlled by remote may be used for taking migrating waterfowl and doves when and where they are otherwise legal.
- The Sandhill crane season (northwest zone only) will be open Sept. 15-Oct. 21.
- The regular waterfowl season will open statewide on Sept. 22. The season will then be split in the central and south zones to provide additional hunting opportunity. See page 20 for details.
- Shooting hours will be one-half hour before sunrise until 4 p.m. from Sept. 22 through Oct. 6 and until sunset thereafter.
- Goose season will run concurrent with duck season, but will close in December, depending on zone.
- Youth waterfowl day will be Sept. 8. (see page 20).
- Falconry waterfowl season will run concurrent with the open duck season with a split in the late season. See page 20 for details.
- The Rochester goose zone is no longer necessary due to the late season closure in the south zone.

LICENSE VALIDATION/APPRENTICE HUNTER

- License validations for state migratory waterfowl stamps are legal for hunting without the pictorial stamp. Purchasers can request the optional pictorial stamp for a fee but it is not required for hunting.
- Apprentice hunter validation is now available for Minnesota residents who would normally be required to possess a firearms safety certificate to hunt small game or deer. See pages 13 and 30 of the *2012 Hunting and Trapping Regulations Handbook* for details.



AQUATIC INVASIVE SPECIES ALERT!

The invasive faucet snail is an increasing threat to waterfowl populations and could be inadvertently spread on waterfowl hunting equipment — by directly attaching to equipment, within mud, and by attaching to aquatic plants. These small snails (up to 1/2 inch, but usually smaller) are a co-host for a parasite that kills diving ducks and coots. They caused thousands of waterfowl in Minnesota to die in recent years. They are designated as a prohibited invasive species and are illegal to transport. Hunters are required to remove faucet snails and other prohibited invasive species from boats, waders, push poles, decoys and decoy anchors before leaving the water access to avoid their spread. The snails can live out of water for more than 5 days, so double checking for snails and cleaning off equipment before reuse is also strongly recommended.

Appendix F - DNR Letter and 11 x 17 Sea Grant Poster Sent to Bait Shops

Minnesota Department of Natural Resources

500 Lafayette Road • St. Paul, MN • 55155-4020



August 6, 2012

Dear Licensee:

Special Faucet Snail Alert!

Faucet snails, which are an aquatic invasive species (AIS), were recently found in a number of new waterbodies in Becker County. This finding was the result of a report that a container of leeches sold at a bait shop contained faucet snails. It was later confirmed that faucet snails were present in source waterbodies, a bait processing facility, and another retail bait container. The purpose of this letter is to make you aware of the incident and encourage you to prevent the spread of faucet snails via live bait, especially leeches and through the transfer of equipment among waterbodies.

There is much concern because faucet snails are a co-host for a parasite that kills ducks and coots. Tens of thousands of scaup (bluebills) and coots have died in recent years after eating the snails at infested waters such as Lake Winnibigoshish and the Mississippi River in southern Minnesota. A fact sheet about faucet snails is enclosed that provides more information about identification and harmful impacts of the snails.

Minnow Retailers

Please help ensure that all snails and other aquatic invasive species that may incidentally make it to your bait shop are not sold to the consumer along with their bait. You are our last line of defense to check for invaders. Included with this letter, please find a poster that can be hung up in your bait shop to raise awareness about aquatic invasive species. It is a static cling poster that you can place on a smooth surface in your facility. If you remove the backing it will attach without adhesive. Please post it where your staff and anglers can see it.

Minnow Dealers


Please take extra precautions to remove all snails and other aquatic invasive species at the point of harvest. You should also be checking your bait for any nontarget species and AIS at other points of handling, including transport, processing, and sale. And as required for all water users in Minnesota: 1) remove aquatic plants and animals from boats, trailers, and equipment when transporting them; 2) remove drain plugs from boats when transporting them; and 3) do not transport water from infested waters.

Be advised that to legally harvest minnows (leeches are defined as minnows) in designated infested waters that contain faucet snail, Eurasian watermilo, zebra mussel, spiny waterflea, or flowering rush, you are required to obtain a special permit. The permit lists specific infested waterbodies where you are allowed to harvest, and requires that you tag your gear and equipment for use exclusively in those waters. Please contact us for more information on permits to harvest minnows in designated infested waters.

Applicants for infested waters permits must attend a training class once every three years and pass a yearly exam before they are issued a permit. Permit applicants that have attended a training session within the last three years also will need to pass a take-home exam before their annual permit is issued to work in infested waters. Employees of permittees who will be working in designated infested waters are subject to the same training and testing requirements, but will be trained online, at: <http://www.dnr.state.mn.us/fishing/commercial/mdeinvasivetraining.html>.

www.dnr.state.mn.us

AN EQUAL OPPORTUNITY EMPLOYER

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On Monday, July 30, 2012, the list of designated infested waters on the DNR Web site was updated. The newly designated infested waters with faucet snail include those below:

Becker County

Name	DNR Public Waters Inventory Number
Unnamed pond located in Sections 14 and 15, Township 142, Range 39W	03-0231
Unnamed pond located in Section 15 Township 142, Range 39W	03-0231
Unnamed pond located in the NW 1/4 of NE 1/4 of Section 22, Township 142N, Range 39W	none
Unnamed pond located in the NE 1/4 of NW 1/4 of section 22, Township 142N, Range 39W	none
Unnamed pond located in the NE 1/4 of SE 1/4 of Section 15, Township 142N, Range 39W	none
Unnamed pond located in the SW 1/4 of SW 1/4 of Section 14, Township 142N, Range 39W	none
Unnamed pond located in the SE 1/4 of the SW 1/4 of Section 15, Township 142N, Range 39W	none

Additional waters that are confirmed, including the pond below, will be designated later this summer.

Norman County

Unnamed wetland located in Section 2, Township 143, Range 43W 54-0001

The White Earth Band has temporarily closed these waters to harvest by band members. These newly infested waters also are closed to non-band members until we have a chance to further assess the risks associated with faucet snails attaching to gear and equipment used during leech harvest.

The most current infested waters list of all designated infested waters is available online at: http://files.dnr.state.mn.us/eco/invasives/infested_waters.pdf

If you have any questions, please feel free to contact Jay Rendall, Invasive Species Prevention Coordinator, or Paula Phelps, Aquaculture and Fish Health Consultant.

Sincerely,



Jay Rendall
Invasive Species Prevention Coordinator
651-259-5131



Paula Phelps
Aquaculture and Fish Health Consultant
651-259-5213



STOP AQUATIC HITCHHIKERS!™

Prevent the transport of aquatic invasive species.

Clean all recreational equipment.

www.ProtectYourWaters.net

Help Bait Dealers Prevent the Spread of Aquatic Invasive Species

PROTECT YOUR WATERS!

- ✓ **Inspect** bait for hitchhikers during dip net transfer.
- ✓ **Remove** plants, non-bait fish and other species.
- ✓ **Dispose** of unwanted bait and worms in the trash, not on land or in water.
- ✓ **Drain** bait container before leaving a water access, and replace with tap or spring water.

If you see any of these, remove them from your bait.



Rusty Crayfish



Eurasian Watermilfoil



Faucet Snail



Spiny Waterflea



Threespine Stickleback



Juvenile Asian Carp



Zebra or Quagga Mussels



Round Goby

Do Not Release Live Bait!



Minnesota Fish and Bait Farmers