

Rapid response actions following the discovery of round gobies in Little Lake Butte des Morts



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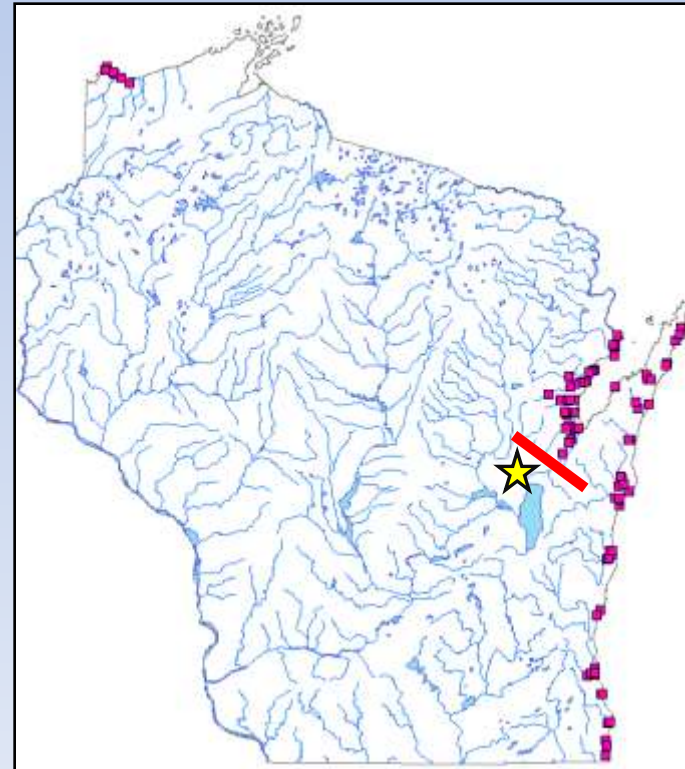
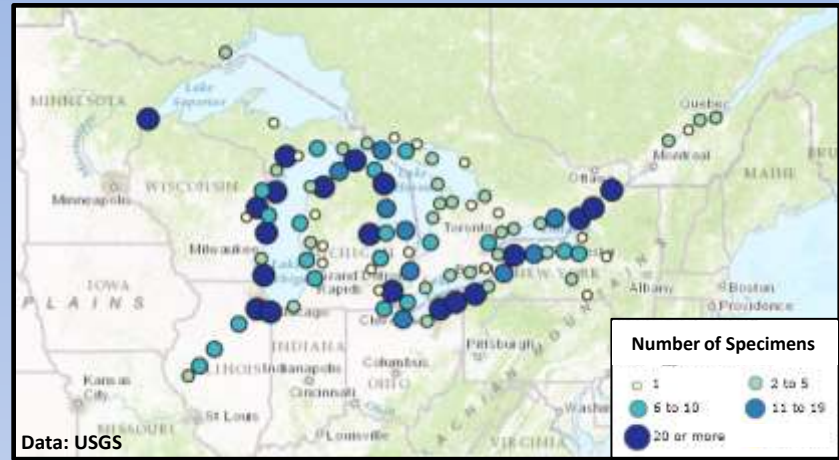
Round Goby Impacts

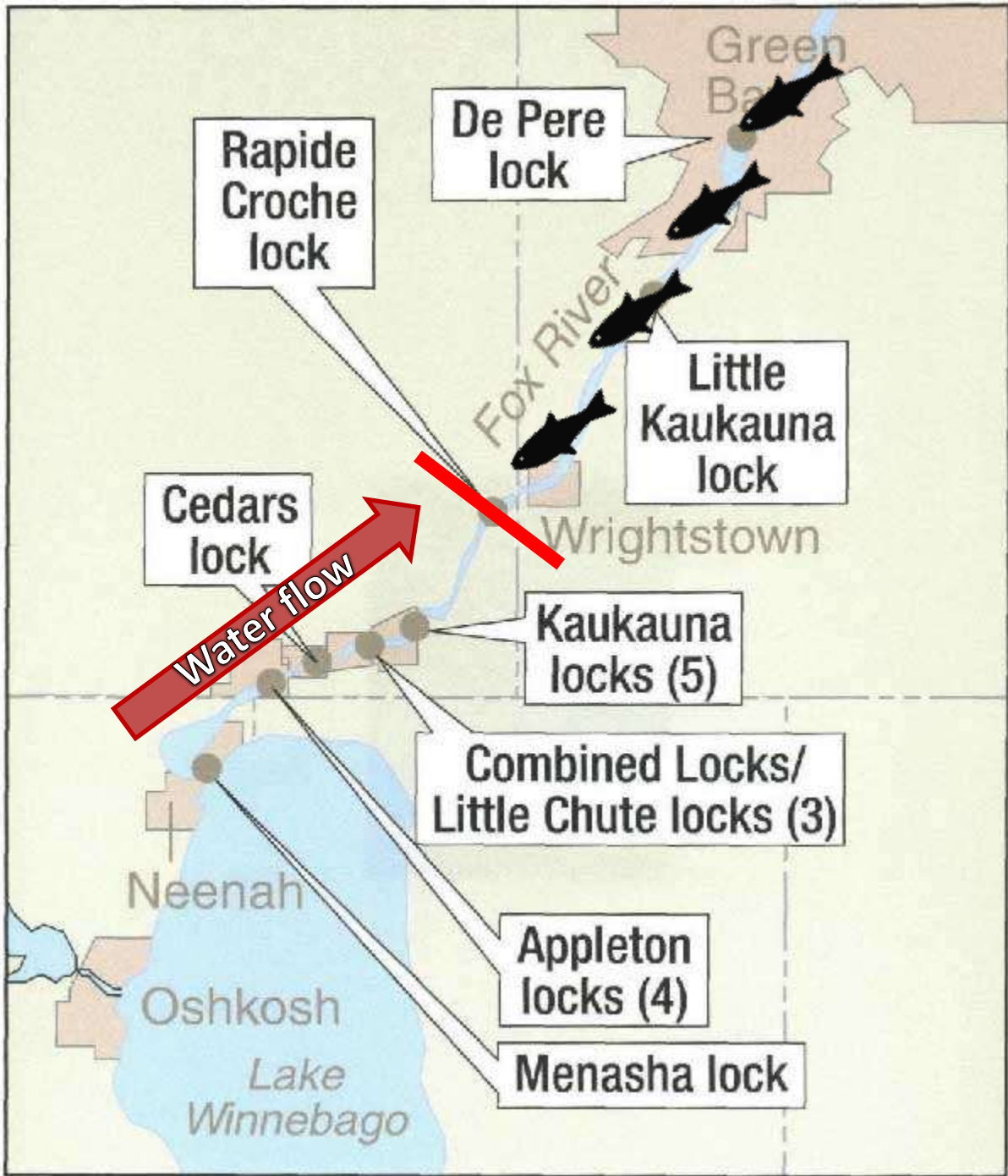
- Aggressive territorial fish with a voracious appetite
- Eats the eggs and young of native fish
- Influences spawning of other fish species
- Alters the food web
- Can reproduce up to 6x in a season
- 'Bait-stealing' nuisance



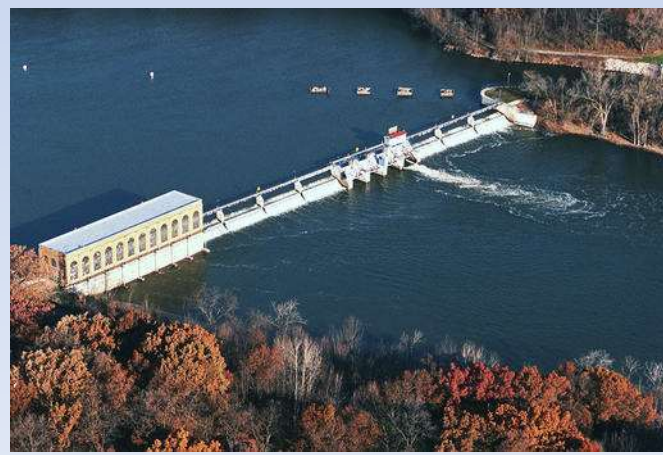
Round Goby Invasion History

- First observed in the St. Clair River and Lake Huron in 1990, and by 1995 was found in all the Great Lakes.
- Until recently, believed to only have spread to inland rivers up to the first impassable barrier.
- In the Fox River only found downstream of the Rapid Croche dam.
- In August 2015, an angler reported catching a goby immediately below the Neenah Dam in Little Lake Butte des Morts.





- Rapid Croche Lock operated from 1850's until 1988.
- During the 1970's and 1980's, the sea lamprey and other AIS began to establish in the Great Lakes.
- Rapid Croche Lock was closed and a solid barrier placed and maintained at the lock site.
- Goby reported upstream of Rapid Croche in August 2015.



Dam and Channel Layout



Preliminary Reconnaissance

- On September 2, 2015, WDNR Fisheries and AIS Teams angled in numerous locations near the original report, and caught two gobies immediately below the Neenah Dam.
- WDNR Fisheries crews also deployed minnow traps, mini-fyke nets, and electroshocked to determine the range and extent of the population.



Closing and Decontamination of the Menasha Lock

- On September 4, 2015, the Department worked with the Fox River Navigation System Authority (FRNSA) to close the Menasha Lock in order to prevent to upstream movement of gobies into the Lake Winnebago system.
- This sudden closure of the locks stranded eight large recreational vessels from navigating to their overwintering dry-dock locations.
- A decontamination plan was developed to allow a one-time passage through the Menasha lock, in conjunction with a Rotenone treatment to kill any gobies which may be present in the lock chamber.



Education and Outreach

- Round goby 'watch' signs posted at public access sites and various bait shops in the area.
- Outreach to hundreds of individual anglers.
- High level of traditional and social media coverage.
- WDNR staff follow-up on all angler submitted calls and reports.



Round Goby Trapping Locations



Round Goby 'Standardized Angling'

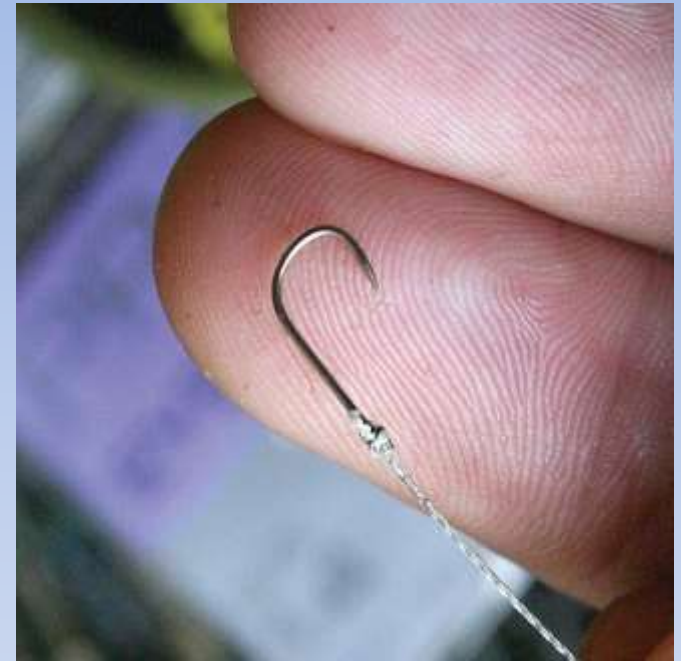


Round Goby Angler Reports



UW-Oshkosh CBCW Angling

- UW-Oshkosh Clean Boats Clean Waters (CBCW) interns conducted angling for gobies in between interactions with boaters
- Provided goby 'wallet card' to all boaters with information on goby identification and what to do if they catch one
- Angling used standardized gear (size #14 hooks, Berkley Gulp! maggots, etc.)
- No gobies caught – data entered in SWIMS



Education and Outreach (cont.)

- Don't use/transport round goby signs posted at shore access sites in multiple languages.
- Discussions on placing signage at critical barriers between LLBDM & Winnebago.



Winter 2016/2017 Activities

- Education and outreach push during sturgeon season and other area fishing tournaments (i.e. Party on Poygan, Battle on Bago, etc.)
- Sturgeon stomach analysis for presence of gobies?
- Continued planning for 2017 Monitoring, Response, and Outreach activities



Next Steps

- DNR continues to work in partnership with FRNSA to explore long-term strategies related to operation of the Menasha lock given the presence of invasive gobies.
- Among the cooperative projects was a study by USGS on the effectiveness of a carbon dioxide (CO₂) barrier to prevent goby movement upstream. Preliminary results are currently under internal review.
- Use rhodamine dye to examine potential historical 'cross-connections' between channels that may allow for potential goby movement.

Cross-connections?

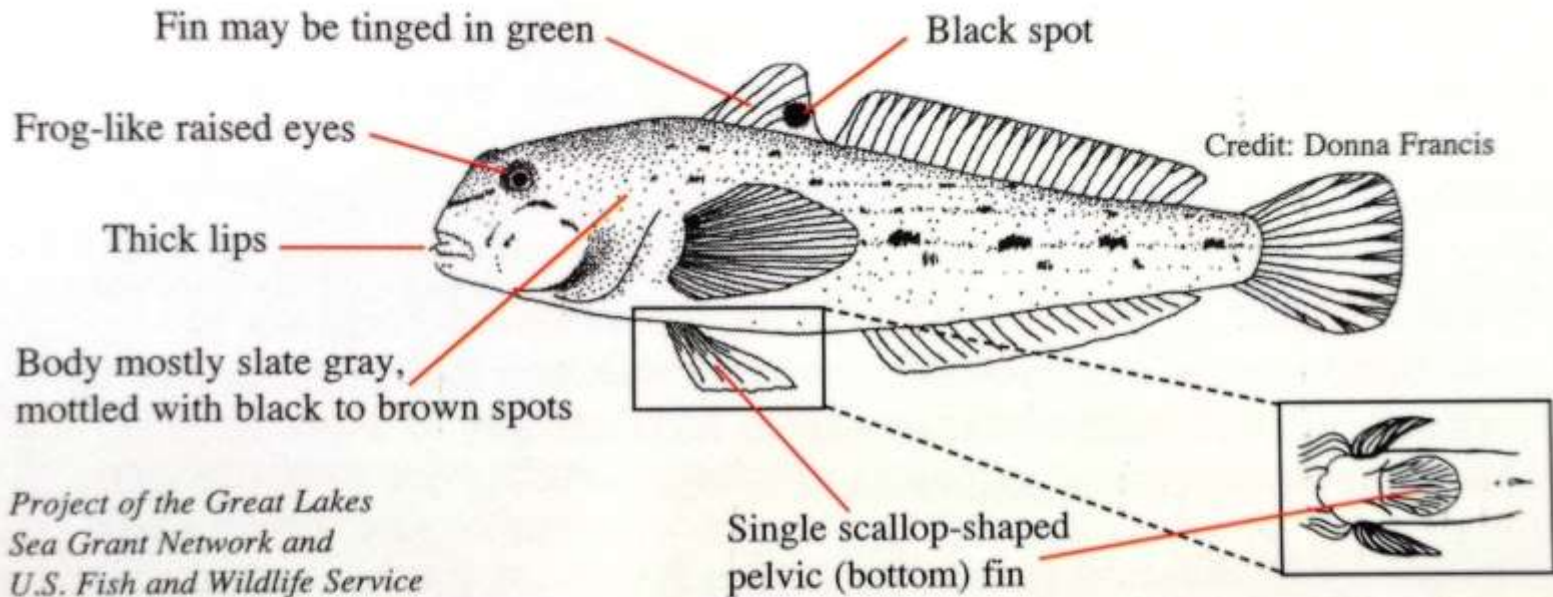


Next Steps

- Continue education, outreach, and encouraging angler reporting through various media outlets and the online goby reporting tool
- Continue to collaboratively conduct presence/absence detection monitoring for round gobies on Lake Winnebago and Upper Pool Lakes
- Continue exploration of long-term strategies to prevent gobies from entering the Winnebago system or other inland waterbodies
- Continue strengthening relationships between both internal and external partners

What can you do to help?

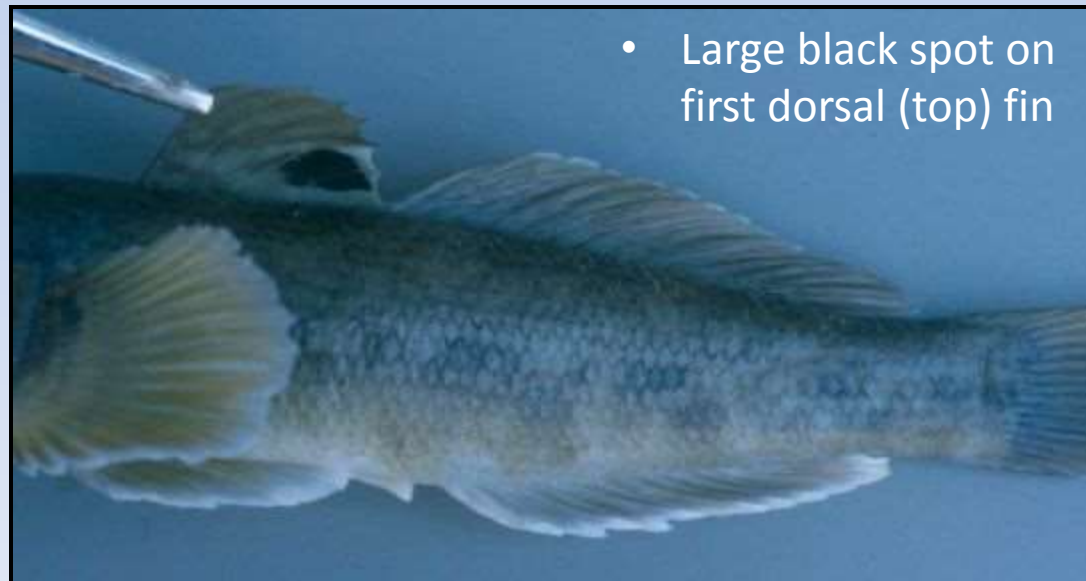
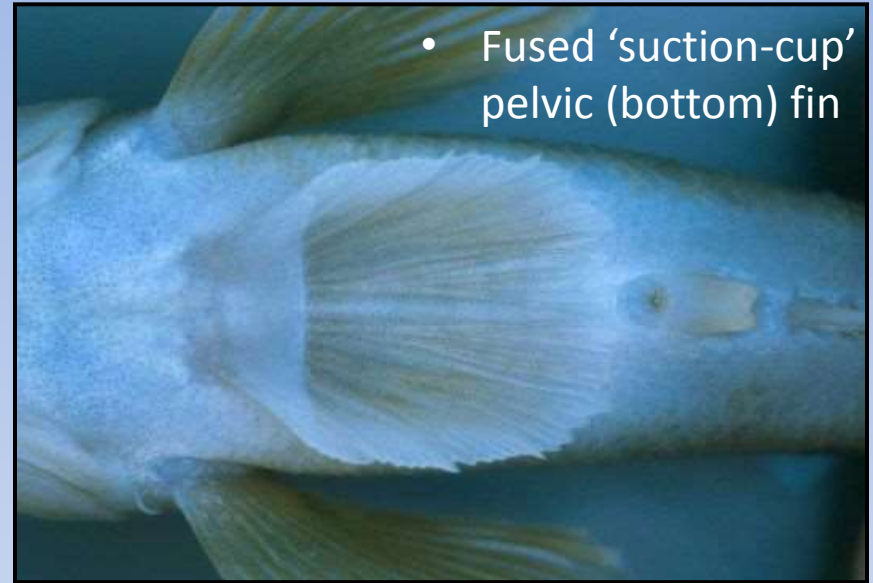
How to Identify a Round Goby (adult shown)



General Characteristics

- No native fish in the Great Lakes has the single pelvic fin
- Young are solid slate gray
- Usually 3-6 inches (7.6 - 15.2 cm) long; may be up to 10 inches (25.4 cm)

How to Identify a Round Goby



Report Sightings to WDNR



WDNR Fisheries Biologists

Kendall.Kamke@wisconsin.gov

920-424-7880

Adam.Nickel@wisconsin.gov

920-424-3059

Ryan.Koenigs@wisconsin.gov

920-303-5450

<http://22.selectsurvey.net/DNR/ReportGobies#>

Screenshot of the Wisconsin DNR website's "Invasive species" page. The page features navigation links (Business, Licenses & Regulations, Recreation, Education, Contact, Join DNR), a search bar, and a "Learn", "Report", and "Order" section. A paragraph describes the impact of invasive species. A sidebar includes "Updates by email" and "Plans & Reports". The "HEY ANGLERS!" graphic is visible in the sidebar.

<http://22.selectsurvey.net/DNR/ReportGobies#>

<http://dnr.wi.gov/topic/invasives/>

Follow the Law!

- Do NOT use round gobies for bait!
- Never move live fish away from a waterbody.
- Empty bait buckets in the trash before going to another location*.
- Buy minnows from a Wisconsin bait dealer.
- Drain all water from boats, livewells, and equipment.

*You may take leftover minnows away from any state water and use them again on that same water. You may use leftover minnows on other waters only if no lake or river water or other fish were added to their container.

**PREVENT THE SPREAD OF
INVASIVE SPECIES
IT'S THE LAW**

PENALTIES MAY EXCEED \$2000

Before launching and before leaving YOU MUST:

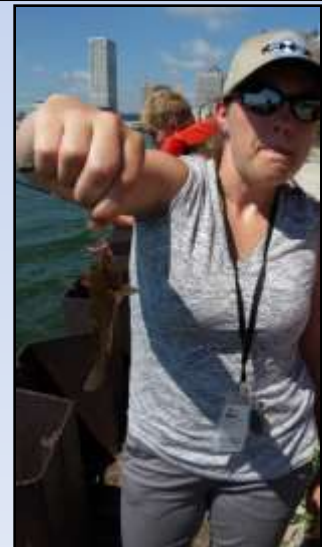
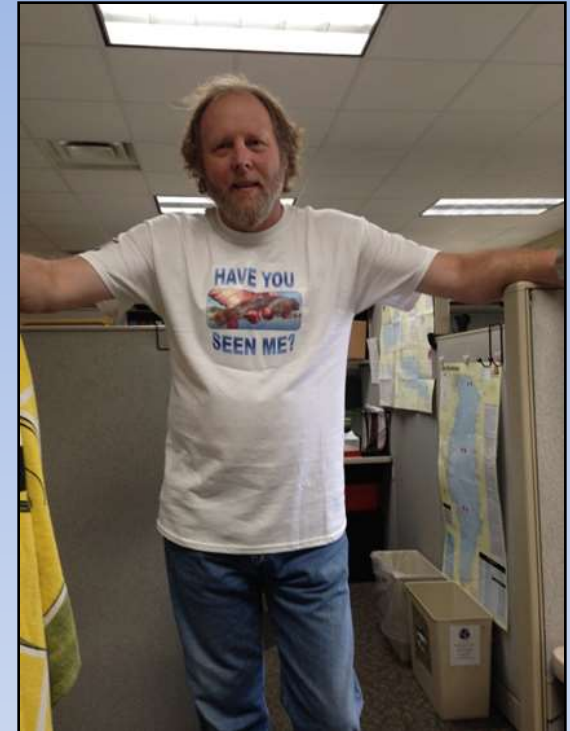
- ✓ **INSPECT** boats, trailers, and equipment.
- ✓ **REMOVE** all attached aquatic plants and animals.
- ✓ **DRAIN** all water from boats, vehicles, and equipment.
- ✓ **NEVER MOVE** plants or live fish away from a waterbody.*

STOP AQUATIC HITCHHIKERS!
Prevent the spread of invasive species, it's the law

Wisconsin DNR logo *Limited exceptions apply. Visit WWW.DNR.WI.GOV and search for "BAIT LAWS."

Acknowledgements

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- Aimme Crittendon (WDNR)
- Kevin Olson (WDNR)
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When the other fish aren't biting...



Photo: Paul Skawinski