

Help Protect Minnesota Waters

Learn how to protect Minnesota waters from
zebra mussels and other AIS



Boating, fishing, hunting, and watching wildlife are traditions we enjoy and want to preserve for our children and grandchildren. Today, these traditions are at risk because of aggressive aquatic invasive species (AIS) that wreak havoc with the natural ecosystems.

The good news is that the vast majority of lakes and rivers in Minnesota are not yet infested — and by understanding the threat, taking responsibility, and working together we can keep it that way.





You can prevent the transport of AIS

Aquatic invasive species (AIS) are nonnative animals and plants that do not naturally occur in our waters and cause ecological or economic harm. Once introduced into an ecosystem where they have few natural predators, they can do irreparable damage to lakes, streams, and wetlands — and their native inhabitants. They harm our environment, outdoor recreation, and Minnesota's economy, which all depend upon healthy water resources.

How they spread

The main way aquatic invaders spread is by hitching rides on watercraft and equipment used by anglers, boaters, and others. They are often extremely small and easily overlooked at the water access

How they harm Minnesota waters

Once aquatic invaders move in, it's nearly impossible to get them out. They spread uncontrollably, displace native species, harm fish populations, damage habitats, impair water quality and water recreation, and can cost millions of dollars to manage — and millions more in lost revenue for business and recreation.

What you can do

Aquatic invasive species cannot move across the land without help, but when given a lift they can spread almost anywhere. There are a few simple, but effective, steps you can take to keep AIS out of our waters.

Learn to recognize aquatic invaders, understand the harm they cause, and know how they spread. Follow the laws and take precautions to make sure you are not transporting AIS to a new location. Comply with watercraft inspectors and share the CLEAN DRAIN DRY message with everyone you know who spends time enjoying Minnesota's lakes and rivers.



Make a commitment

Over the last two decades, preventative actions taken by boaters, anglers, lake associations, and local government to Stop Aquatic Hitchhikers! has helped in the fight against aquatic invasive species. It's time for everyone to become part of the nationwide effort to stop the spread of AIS.

To help protect Minnesota's lakes, rivers, and wetlands, I will:

- ✓ Learn to recognize aquatic invasive species
- ✓ Follow Minnesota's AIS laws and regulations
- ✓ Clean and drain my boat and equipment before I leave a water access
- ✓ Throw all unwanted bait, worms, and fish parts in the trash.
- ✓ Share this brochure with others who spend time fishing, boating, or recreating in Minnesota

Report new infestations

If you suspect a new infestation of an aquatic invasive plant or animal, note the exact location, take a photo or keep the specimen, and call a DNR AIS Specialist at 651-259-5100, or contact a local fisheries office or MN Sea Grant office.

Every person who uses Minnesota's lakes and rivers for outdoor recreation has a responsibility to help prevent and curb the spread of AIS . . . because it is preventable. Make a pledge to do your part.



STOP AQUATIC HITCHHIKERS!™

Take these decontamination actions required by law:

✓ CLEAN

Clean visible aquatic plants, zebra mussels, and other prohibited invasive species off all watercraft, trailers, and water-related equipment *before* leaving a water access or shoreland property. It is illegal to transport aquatic plants, zebra mussels, or other prohibited species whether dead or alive.

✓ DRAIN

Drain water-related equipment (boat, ballast tanks, portable bait containers, motor) *and* drain bilge, livewell, and baitwell by removing drain plugs *before* leaving a water access or shoreland property. **Keep drain plugs out and water-draining devices open while transporting watercraft.** It is illegal to transport a watercraft or water-related equipment without draining water.

✓ DISPOSE

Dispose of unwanted bait, including minnows, leeches, worms, and fish parts in the trash. If you want to keep live bait, drain bait containers and refill with bottled or tap water. **It is illegal to release live bait into the water or to release worms on the ground.**

You can help prevent the introduction and spread of AIS by following both the **required** and **recommended** actions listed below.

Additional recommendations:

✓ DRY

To further decontaminate your watercraft and equipment, it's important to spray, rinse, or dry everything before going to another waterbody, especially if your boat has been in the water or moored for more than 24 hours – or if you have recently been in zebra mussel and spiny waterflea infested waters. Do one or more of the following:

- **Spray with high-pressure water**
- **Rinse with very hot water***
- **Dry for at least 5 days**

- **Run motor and personal watercraft** for a few seconds to discharge water *before* leaving a water access.
- **Transport fish on ice** — be prepared, bring a cooler.

* These water temperatures will kill zebra mussels and some other AIS: 120°F for at least 2 minutes; or 140°F for at least 10 seconds.



Know the Law.

You may not ... transport watercraft without removing the drain plug • arrive at a lake access with drain plug in place • transport aquatic plants, zebra mussels, or other **prohibited invasive species** such as faucet snails, ruffe, and round goby • launch a watercraft with prohibited species attached • transport water from Minnesota lakes or rivers; or release live bait into water.

There are also many **regulated invasive species** – such as spiny waterfleas, rusty crayfish, and mystery snails, that may not be placed into another waterbody. Docks and boatlifts must be dried for 21 days before placing in another waterbody. Violating these regulations may result in fines up to \$1,000.

Clean In, Clean Out.

There is also a risk of spreading AIS by other water recreation. In addition to the required and recommended actions listed in this brochure, take these specific steps when engaging in the activities below:

Sailing

- Clean aquatic plants and animals from hull, centerboard or bilgeboard well, rudderpost, trailer, and other equipment *before* leaving water access.

Personal watercraft

- Avoid areas with aquatic plants *before* trailering personal watercraft.
- Run engine for 5-10 seconds on the trailer to blow out excess water and vegetation from internal drive, and then turn engine off.
- Clean aquatic plants and animals from hull, trailer, water intake grate, and steering nozzle, *before* leaving water access.

Shore and fly-fishing

- Clean any visible aquatic plants, animals, and mud from waders and hip boots.
- Scrub any visible material off footwear with a stiff brush.
- Use non-felt-soled boots instead of felt-soled footwear to further reduce the risk of spreading AIS.
- Dispose of unwanted bait, worms, and fish parts in the trash. When keeping live bait, drain bait container and replace with bottled or tap water.

Waterfowl hunting

- Clean aquatic plants, animals, and mud from boat, motor, trailer, waders or hip boots, decoy lines, hunting dog, anchors (elliptical and bulb-shaped anchors can help reduce snagging aquatic plants), pushpoles, and ATVs.
- Cut cattails or other plants above the waterline for blinds or camouflage in accordance with regulations.

Scuba diving

- Clean aquatic plants, animals, and mud from all equipment *before* leaving water access.
- Drain water from buoyancy compensator, regulator, cylinder, boot, and any water-containing devices.
- Rinse inside and outside of gear with hot water.



UNDERSTAND THE THREAT

Aquatic invasive species such as zebra mussels, spiny waterfleas, Eurasian watermilfoil, faucet snails, and viral hemorrhagic septicemia (VHS) now inhabit a small percent of waters throughout the state. Other harmful species, such as hydrilla and Northern snakehead, may be on the way and will create new problems if they are introduced in Minnesota.



Zebra mussels attach to native mussels, plants, and watercraft. They cut the feet of swimmers and dogs, clog water intakes, and damage ecosystems by reducing food for young fish. Their microscopic larvae can be moved in bait buckets, livewells, and other boat areas if not drained.



Eurasian watermilfoil causes problems in lakes by displacing native plants and producing extensive mats on the surface, especially in clear waters less than 15 feet deep. It is spread from one lake to another when plant fragments attach to boat trailers and other water-related equipment.



Silver (pictured) and bighead carp from Asia are threats to aquatic ecosystems and water recreation. Silver carp can jump out of the water, injuring boaters and waterskiers. Because young silver carp look similar to native minnows, they could accidentally be spread if live bait is released into the water.



Round gobies are aggressive bottom-dwelling fish from Europe. They drive out native species, attack bait, and eat the eggs of other fish, such as smallmouth bass. This behavior contributes to the decline of valuable sport fish.



Curly-leaf pondweed can form dense mats that interfere with boating and other water recreation. It also can displace native aquatic plants.



Faucet snails carry parasites that infect waterfowl. When snails are consumed, a waterfowl's internal organs are attacked by the parasites, eventually causing death.



Spiny waterfleas can be a problem for anglers because they form gelatinous globs on fishing lines, lures, and downrigger cables. It is important to remove spiny waterfleas from all equipment because their eggs can live out of water for more than 12 hours under typical summer conditions. To make sure these eggs are dead, thoroughly dry all equipment for 24 hours before reuse.

Report a Violation

To report a violation, contact a local peace officer or a DNR conservation officer. To locate a conservation officer in your area scan the QR code for the CO Locator page or visit mndnr.gov/officerpatrolareas.



Learn More

For more information about aquatic invasive species contact one of the following resources:

Minnesota Department of Natural Resources

Aquatic Invasive Species Program
651-259-5100



For current AIS regulations, a list of infested waters, species information, and local DNR contacts, visit www.mndnr.gov/ais.

University of Minnesota Sea Grant Program

Aquatic Invasive Species Information Center
218-726-8712



For field guides, species profiles, articles, and AIS resources for educators visit www.seagrants.umn.edu.



**STOP AQUATIC
HITCHHIKERS!**TM

www.ProtectYourWaters.net

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Silver carp photo courtesy of *The Columbus Dispatch*

Eurasian watermiloil close-up courtesy of Alison Fox, University of Florida