

Aquatic Nuisance Species

New Rules for Keeping North Dakota's Lakes and Rivers Clean

The threat of aquatic nuisance species expanding in North Dakota is greater than ever.

In just about every direction, some type of harmful aquatic plant, animal or disease exists that someone could easily and unknowingly transport across the border. And those don't even include ANS already living in North Dakota that are best confined to their current locations.

In the past, the Game and Fish Department has promoted guidelines for reducing the likelihood of ANS transfer. After a year-long process involving public input and legislative committee hearings, some of those previous recommendations are now rules that will affect most people who fish from boats or from shore, and also those who use boats and other watercraft for recreation or even work purposes.

"These laws are important because it's very easy to innocently transport an unwanted plant or animal to another body of water," says Game and Fish ANS coordinator Lynn Schlueter. "We need anglers and boaters to make these practices part of their routine on every outing. It only takes one slip to move an aquatic problem that could cost thousands of dollars to deal with."

New aquatic nuisance species prevention laws are highlighted on the following pages.



CRAIG BHRLE

North Dakota's new aquatic nuisance species rules require removal of all aquatic vegetation from boats, motors, trailers and other equipment before leaving a body of water. Below: make sure to inspect under the boat and trailer as well.



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NEW RULE #1

Official wording: *Equipment. Upon leaving any water body or while in transit, all watercraft, watercraft motors, watercraft trailers, and recreational and commercial equipment used in fishing, hunting and watercrafting or construction equipment shall be free of prohibited or regulated aquatic nuisance species, as defined in the state's aquatic nuisance species list. All equipment is subject to inspection by a duly appointed agent of the director.*

What it means: Transporting aquatic nuisance species, whether known or unknown, is illegal, and all water-related recreational or commercial equipment can be inspected by game wardens or fisheries personnel.

NEW RULE #2

Official wording: *Aquatic vegetation definition. Aquatic vegetation includes all obligate submergent species of aquatic plants.*

What it means: Aquatic vegetation includes only plants that grow from the bottom up to and also float on the surface. Emergent plants like cattails and bulrushes are not included in this definition, meaning you don't have to get all the cattails out of your duck boat, but that's a good idea anyway.

Aquatic vegetation defined under this law is those plants that grow below and up to the water's surface. Inset: Cattails, bulrushes and other plants rooted in water but growing above the surface are not covered by this law.



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NEW RULE #3

Official wording: *Aquatic vegetation prohibited. No aquatic vegetation or parts thereof shall be in or on watercraft, watercraft motors, watercraft trailers, and recreational, commercial or construction equipment when out of water. Watercraft, and recreational, commercial or construction equipment on lifts suspended above the water from which they originated are excluded. Time out of the water needed to clean aquatic vegetation from the watercraft, watercraft motors, watercraft trailers, and recreational, commercial or construction equipment at the immediate water access area (e.g. boat ramp) is allowed. All built-in structures to boats including livewells and bait compartments and containers used to transport legal live bait must be free of aquatic vegetation.*

What it means: Once you pull a boat or other craft out of the water, you need to remove all aquatic vegetation (see definition above) from the craft and the trailer. If no one is waiting, do this on the ramp, otherwise pull up into the ramp parking area. Put the plant parts back in the water. By the time you are on the public road leading away from the access area, you need to have all vegetation removed from watercrafts and fishing equipment, i.e. no plant fragments still attached to lures, ski equipment, etc.

NEW RULE #4

Official wording: *Aquatic vegetation transport. No person may transport any aquatic vegetation to or from any waters of the state without approval from the director. No person may transport any aquatic vegetation into the state.*

What it means: In addition to boats and trailers, you can't have aquatic vegetation in bait containers, coolers, etc. It's illegal to have any aquatic vegetation on boats, trailers and equipment when crossing the border into North Dakota.

NEW RULE #5

Official wording: *Water prohibited. All water must be drained from watercraft, recreational, commercial, and construction equipment bilge(s) and/or confined spaces when out of water and/or upon entering the state. Water used for transportation of fish in watercraft livewells and bait buckets within the state are excluded. Potable and sewage water are excluded.*

What it means: Pull the plug from your boat or pump out the bilge when it's out of the water. Drain your livewell unless you have fish in it. Discard bait water unless you are keeping live bait.

NEW RULE #6

Official wording: *Inspections. Operators and haulers of all watercraft and recreational, commercial or construction equipment must inspect their equipment for aquatic nuisance species when removed from waters of the state or upon entering the state. If present, the aquatic nuisance species must be physically removed immediately.*

What it means: Physically walk around your boat and look for plants or plant fragments. Look underneath the boat.

Penalty: Any person violating a provision of this chapter for which a penalty is not specifically provided is guilty of a noncriminal offense and shall pay a \$100 fee.



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Drain all water from bilges and livewells unless the livewell contains fish.

It only takes a minute to walk around your boat and remove all plant fragments before leaving a boat ramp area.

CRAIG BIHRLE

Aquatic Nuisance Species in North Dakota

Internal and External Threats

WHAT'S ALREADY IN NORTH DAKOTA

EURASIAN WATER MILFOIL

Status: Discovered within and downstream from Dead Colt Creek Reservoir in Ransom County in 2005. Discovered in Sheyenne River at Valley City in 2007. Game and Fish will evaluate short-term control efforts.



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What's the problem? Grows in thick mats that shade out native plants and develops into a monoculture unfavorable to production of game fish. Stunted fish can occur as heavy cover shields small fish from natural predation. Infestations can start from just small plant fragments. Chemical or mechanical control, which also can kill native and desirable plants, is expensive and often unsuccessful.

Eurasian milfoil, shown here in Sheyenne River near Valley City, develops into thick mats at the water's surface, impeding boating traffic and crowding out beneficial native plants.

CURLY LEAF PONDWEED

Status: Common in Lake Audubon, Lake Sakakawea and backwater and slack areas (marinas, etc.) along the Missouri River below Garrison Dam. Isolated populations also found in a few small lakes and in Sheyenne River at Valley City. Also found in many lakes in Minnesota so risk of transport is heightened.

What's the problem? Sprouts in the fall, green under the ice, and grows soon after ice-out, depriving later-growing plants of nutrients. Quickly establishes a monoculture unfavorable for fish and wildlife, and forms thick surface mats that inhibit boating, swimming and wading. Would do well in most North Dakota waters that are not extremely salty. Chemical control is expensive with no assurance of effectiveness, and mechanical control causes seed pods to dislodge and float to new areas.



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COMMON CARP

Status: Introduced in late 1800s to major river systems, unintentionally transported to numerous other waters via bait buckets. Major effort underway to keep carp out of Devils Lake watershed.

What's the Problem? They out-compete game fish for food and space and can reduce game fish populations by 75 percent or more. Can be eliminated in small waters via expensive chemical treatment, but that also means the fishery has to start over as well.

Common carp, introduced in the late 1800s, may have been North Dakota's first aquatic nuisance species. They are a good example of a problem getting out of control.

ANS JUST BEYOND THE BORDER

EXOTIC WATER FLEAS

Status: Established in Lake of the Woods drainage and other waters in northern and northeastern Minnesota.

What's the problem? They feed on small zooplankton, the same food items needed by small game fish. Not eaten by small fish because of spines on their tails. Adults are less than half an inch in length and are easily overlooked when inspecting fishing line, nets, bait water, etc. Adults or eggs survive for extended periods under damp conditions.



DAVE BRENNER, MICHIGAN SEA GRANT

Exotic water fleas are not palatable to small game fish because of hard spines on their tail.

ASIAN CARP

Status: Closest documented Asian (bighead/silver) carp is Missouri and James rivers in southeastern South Dakota, and Mississippi River south of Minnesota.

What's the problem? Out-compete native and other game fish in large river systems. They eat phytoplankton, a food item used by zooplankton, which in turn are eaten by small game fish. They concentrate below dams and can drive out desirable fish. May jump several feet out of the water when frightened and poses a danger to boaters and skiers. Once established in a large river system they would be impossible to eliminate.

ZEBRA MUSSELS

Status: Established in some lakes in central Minnesota and much of the Mississippi River in Minnesota. Also Missouri River in southeastern South Dakota.

What's the Problem? Zebra mussels attach in great numbers to hard surfaces such as rocks, boat docks and bridge pilings and can clog pipes such as those used for municipal or industrial water supply systems. They feed by filtering organic material from water, and consume small zooplankton needed by young game fish. Can also displace native bivalves like clams. Free-swimming larvae in water are easily overlooked and easily transported to other waters. They can survive in bilges, livewells and other damp places for more than two weeks.



MINNESOTA SEA GRANT

If zebra mussels got into the Missouri River System in North Dakota, they could clog water intake systems on which several communities depend.

VHS VIRUS

Status: Viral hemorrhagic septicemia is a contagious fish virus. It has caused fish kills as far west as some inland lakes in Wisconsin.

What's the Problem? It can kill many different kinds of fish, in large numbers under the right conditions, and is easily transported in bilges, livewells, infected bait and bait water from an infected lake.

A HOST OF OTHERS

Status: Goby, rudd, ruffe, New Zealand mudsnail – all of these are invasive species that exist in neighboring states.

What's the Problem? They take up space and food needed by game fish and can disrupt lake ecosystems.

Other Problem Species

(These are not on ANS prohibited species list but can still cause problems if introduced to new areas.)



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Purple loosestrife.



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Salt cedar growing along Missouri River southwest of Williston.

PURPLE LOOSESTRIFE

Status: Found along Missouri, Red, Sheyenne, Mouse and other rivers as well as tributaries, wetlands and lakes. This plant is spreading in North Dakota. On State Agriculture Department list of noxious weeds.

What's the problem? Grows along edges of marshes, wetlands, rivers and streams. Most states and provinces report purple loosestrife infestations. Tiny seeds spread by water, wind, birds, mammals and humans via shoes, vehicles and boats. Broad-spectrum herbicides can be used to remove large stands, but application is expensive, not always effective, and kills desirable plants. Still grown as an ornamental plant by some homeowners.

WHITE SUCKER

Status: Native to North Dakota river systems, introduced into many clean reservoirs as discarded bait. Unwarranted introductions much less common since use as bait restricted to Red River only.



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White sucker are no longer allowed as baitfish in all of North Dakota except the Red River.

What's the problem? White suckers outgrow their usefulness as bait or forage fish after one or two years. In large systems they co-exist with other species but in small waters they can out-compete game fish and greatly reduce fishing potential. Suckers can be eliminated in small waters via expensive chemical treatment, but that also means the fishery has to start over as well.

SALT CEDAR

Status: Found in many locations along the Missouri and Yellowstone rivers and Lake Sakakawea. Original seeds likely came from Montana via rivers. Grows on dry land but seed distributed by moving water. On list of state noxious weeds.

What's the problem? Out-competes native plants such as willow and cottonwood. Drops salt-laden leaves in fall that poison soil and prevent other plants from growing. Dense stands are difficult to penetrate and of little benefit to wildlife. Uses up to 300 gallons of water daily, 10-20 times the amount used by native plants. Seeds can wash downstream and colonize a new area. Seeds also transported in feathers of birds, animal fur and feet, mud on shoes and vehicle tires. Chemical spraying and hand cutting may be effective, but are time-consuming and expensive.

ANS Questions and Answers

Why are ANS such a big deal?

ANS can greatly degrade or ruin habitats and compete with native or desirable species for food and space. Not only can recreational fisheries suffer but so can industries that rely on water supply. Once established, the cost of controlling ANS would far exceed the minimal costs required to keep from spreading into or within North Dakota. Fish stocking cannot overcome ANS problems.

Why have regulations that affect all anglers and boaters when only a handful of lakes have ANS?

The regulations are designed to prevent movement of ANS to new locations. For example, the Missouri River System is infested with curly leaf pondweed. People from across the state come to fish or boat on Lake Sakakawea and the Missouri River. If they don't have to follow ANS rules where they live, they may not be in the habit of cleaning their boat, trailer, etc. of weeds and water when they leave the Missouri River System. As such they could easily transport curly leaf pondweed to their home-area fishing water. With thousands of boats using the Missouri every year, it's easy to envision that happening accidentally.

Also, an ANS in a lake may become well established before it is found or reported. People may already be moving it to other areas before it is even discovered. A statewide regulation is simple to understand and easier to enforce.

Can I use the boat's baitwell or livewell for bait fish, or to keep fish alive and fresh until I get home?

Yes, but the water must be free of all aquatic vegetation. The bilge must be drained when you are off the water.

Do I have to run my motor dry also before I leave a lake?

No. The amount of water in the motor's cooling system is so minimal that it holds a small risk of containing ANS. As you exit a lake, lower the motor to let gravity drain the lower unit, then raise to transport. The intake screen should also be inspected and free of aquatic vegetation, just like rest of the boat.

Can I drain water from my boat anywhere?

No, you must drain the water (pull all plugs, etc) back to where it originated. This must be done at the access site before you leave.

Do I need to dispose of the weeds or can they be thrown on the ground/parking lot?

Dispose of weeds back into the water from which they originated, to keep parking lots and access areas clean.

As a resident who lives on the North Dakota border, and the nearest bait vendor is across the border in another state, can I cross the state line to purchase bait and import it back into North Dakota?

No. Aquatic bait, including fathead minnows and leeches, may not be imported into North Dakota. This law has been on the books for several years.

Why doesn't the Game and Fish Department provide staff to inspect boats?

North Dakota has more than 300 public ramps and only about 150 Department staff – (34 wardens, 23 fisheries staff). Access sites are open 24 hours a day. Reasonable rules coupled with a knowledgeable and concerned public are a much better solution to the ANS threat.

Besides the new laws, what else can I do to help prevent the spread of ANS?

You can disinfect your boat by adding hot water to the livewell along with enough household chlorine bleach to reach a solution of one part bleach to 20 parts water. Run the recirculation pumps and use a brush (a toilet brush works well) to scrub under the lid and in the corners. Rinse out the bleach in an appropriate location, not into the lake.

Air drying can also be effective in preventing ANS transfer. The livewell, bilge and equipment must be allowed to completely dry, which may take a few days for the bilge. However, some ANS produce hardy seeds and eggs which can withstand extended periods out of the water; in these cases, air drying is not the answer.

Power-washing can remove lake scum and unseen hitchhikers, such as small plant fragments or egg masses, from hard-to-reach places such as trailer frames and livewells. Use a commercial car wash that runs water through a sewage treatment system. If done at home, be careful that the wash water does not run down the street and into the storm sewer that empties into the local river or lake.

What if I observe boats, trailers, jet skis, etc., that have weeds hanging from them away from a lake?

The best thing you can do is spread the word on the risk of ANS. If the boat owner/operator is present and willing, ask that he/she clean the boat and trailer. If the owner/operator is unwilling to cooperate, then call to report the violation.



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