

Lake Service Provider Training Sheet on Aquatic Invasive Species – Lake Minnetonka

Prepared by the Minnesota Department of Natural Resources - August 9, 2010

Q. What are Aquatic Invasive Species?

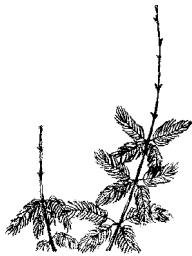
A. Species that have been introduced, or moved, by human activities to a location where they do not naturally occur are called "exotic," "nonnative," "alien," and "nonindigenous" species. When nonnative species cause ecological or economic problems, they are termed "invasive". Minnesota's natural resources are threatened by aquatic invasive species (AIS) such as the zebra mussel, Eurasian watermilfoil, faucet snails, spiny waterfleas, and purple loosestrife.

Q. What AIS are in Lake Minnetonka?

A. Eurasian watermilfoil, flowering rush, and zebra mussel present in Lake Minnetonka. Orange Invasive Species Alert signs at public water accesses indicate which AIS are in Minnetonka and other designated infested waters.

Q. What problems do they cause?

A. AIS often lack natural predators or controls. They can achieve dense populations that can crowd out or eliminate native species, alter natural systems, and interfere with recreation. Each of the AIS has unique problems that they cause. Below are some examples.

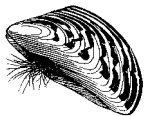


Eurasian water milfoil can form thick underwater stands of tangled stems and vast mats of vegetation at the water's surface in nutrient-rich lakes. In shallow areas the plant can interfere with water recreation such as boating, fishing, and swimming. The plant's floating canopy can also crowd out important native water plants.

Flowering rush (right) forms dense stands that may interfere with swimming and other use of lakes. Resource managers are concerned that flowering rush may become an aggressive competitor and displace native emergent vegetation, such as hardstem bulrush.



Zebra mussels can cause problems for lakeshore residents and recreationists. Homeowners that take lake water for watering lawns can have their intakes clogged. Mussels may attach to motors and possibly clog cooling water areas. Shells can cause cuts and scrapes if they grow large enough on rocks, swim rafts and ladders. Anglers may lose tackle as the shells can cut fishing line. Zebra mussels can also attach to native mussels, killing them. Zebra mussels filter plankton from the surrounding water. This filtering can increase water clarity, which might cause more aquatic vegetation to grow at deeper depths and more dense stands. If a lake has high numbers of mussels over large areas, this filter feeding could impact the food chain, reducing food for larval fish.



Q. How do AIS spread?

A. There are many pathways of introduction and spread of invasive species. Trailered watercraft and associated recreation equipment are a high-risk pathway in the state for introduction and spread of aquatic species such as Eurasian watermilfoil, flowering rush, and zebra mussel that are in Lake Minnetonka. Movement of boat lifts, docks, and other objects

from infested waters are also potential pathways of spread for zebra mussels and invasive snails. Waders and hip boots can spread AIS such as New Zealand mudsnails, faucet snails, and zebra mussels in sediment trapped in the soles of the boots. Aquatic invasive species, such as spiny waterfleas and zebra mussel larvae, can also be spread in water. Zebra mussels can attach to aquatic plants. Zebra mussels can attach to objects in the water.



Zebra mussels attached to a boatlift



Tiny zebra mussels can attach to plants

Q. What regulations apply to boats, trailers, equipment, and water as they enter or leave lakes and rivers, or when transported on a public road?

A. State Regulations related to invasive species are located in Minnesota Statutes, Chapter 84D and Minnesota Rules, Chapter 6216. Under those regulations:

- It is **illegal** to transport any aquatic plants or prohibited invasive species (e.g., Eurasian watermilfoil, flowering rush, zebra mussels) on boats, trailers, and equipment (including weed rollers, boat lifts, docks, swim rafts) on public roads.
- It is **illegal** to transport water from all designated infested waters without a permit.
- At all waters, boaters **must** “*drain boating-related equipment holding water and live wells and bilges by removing the drain plug before transporting the watercraft and associated equipment on public roads. Drain plugs, bailers, valves, or other devices used to control the draining of water from ballast tanks, bilges, and live wells must be removed or opened while transporting watercraft on a public road. Marine sanitary systems and portable bait containers are excluded from this requirement.*”
- At zebra mussel or spiny waterflea infested waters, water **must** be drained from bait buckets, live wells, bilges (by removing the drain plug), and any other area of a boat containing water.
- It is **illegal** to launch or attempt to launch a boat/trailer with aquatic plants or prohibited species (e.g., zebra mussel) attached.

Professional Lake Service Provider Checklist

Stay Aquatic Invasive Species Free!

1. Inspect boats and trailers and **remove** all visible aquatic plants, animals, and mud before leaving the water access.



2. Remove all plants and animals attached to boat lifts or docks before transporting to another location.



3. Drain water from boat bilge, livewell, bait containers, ballast tanks, and motor. **Remove drain plug and open water-draining devices when transporting.**



4. Dispose of aquatic plants, animals, and unwanted bait in the trash



5. Spray watercraft and trailers with high-pressure, hot water (120° F) – especially moored boats



6. Clean (spray and brush) boots, waders, anchors, and any other equipment to remove sediment and AIS before using at another water



7. Dry equipment after working in zebra mussel or spiny water flea infested waters



8. Report new sightings to DNR if you suspect a new infestation



STOP AQUATIC HITCHHIKERS!

