



AQUATIC INVASIVE SPECIES (AIS)

STATE OF STAR LAKE REPORT - APRIL 2022

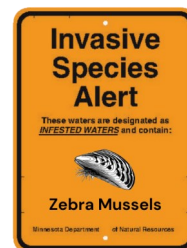
(PULLOUT SECTION)



This update has been prepared by the AIS Committee of the Star Lake Property Owners Association Board. The update is meant to provide an accurate AIS status (as of April 2022) for the waters of Star Lake and provide property owners with critical knowledge, language, and actionable steps to manage existing AIS and prevent (or prolong) the introduction of additional AIS into our waters.

A New Reality (2019)

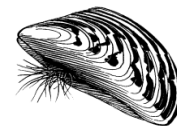
The dreaded scourge that many MN lake property owners have heard about, perhaps researched a bit, and, if on Star Lake, are likely experiencing – or soon will; **Zebra Mussels**. In 2019 the Minnesota Department of Natural Resources (MN DNR) placed those hard to miss ORANGE SIGNS at the public boat accesses on Star Lake declaring the lake as being infested with Zebra Mussels (ZM). This also happened to Round, Dead & Walker Lakes as all are downstream from West McDonald lake which was infested earlier. Otter Tail Lake was also infested earlier because of upstream infestation. The Otter Tail River of course flows eventually to the Red River and on it goes....



According to Otter Tail County (OTC) AIS Specialist Spencer McGrew, as of Dec 2021 OTC currently has 92 water bodies designated as infested with AIS, 89 of which have ZM and 3 have Flowering Rush (FR). Nine of the ZM infestations were new in 2021 – which computes to an OTC annual growth rate of plus 10%. **The good news is that OTC has no Eurasian Watermilfoil, Faucet Snails, Starry Stonewort, or Spiny Water Flea; other AIS of concern in MN.** We all need to practice due diligence to keep it that way!

Zebra Mussel Present in Star Lake (2021)

Last fall (2021) Star Lake Property Owners may have discovered ZM on their docks or lifts. In some cases, they were located under steps or in shaded areas away from the sun. Unfortunately, ZM will likely get worse before they will get better. It seems ZM abate a bit after 3-5 years (this from discussions with local lake service providers vs. any scientific data). Star is a clear water lake already, but ZM consume plankton which usually makes water clearer, thereby allowing sunlight to penetrate deeper, thereby promoting more plant growth at increased depths.



Zebra Mussel
(Dreissena polymorpha)

A Growing and Nearby Risk: Curly-Leaf Pondweed (CLP)

CLP is an old but persistent invasive plant introduced in the U.S. in the 1800's likely from Eurasia, Africa, & Australia. This is an AIS that begins its growth cycle in late summer & grows well in cold water under the ice. This gives it an early spring growth advantage over competing plants. It thrives in water 15' or less and completes its growth cycle in late spring, with stalks disappearing by mid-July after flowering and dropping seed. Like most AIS there currently are no efficient methods to eradicate. However, CLP can be controlled via annual herbicide applications.



Did you know that 60% of the 4,721 acres of Star Lake water surface is 15' or less. This puts at risk most of the south arm, a good portion of the west arm, and certainly both sides of the channel at the Hwy 41 bridge. According to an article in the Pelican Press the terrible algae bloom on South Lake Lida in 2018 was attributed largely to CLP. It resulted in the waterway under Hwy. 108 becoming nearly impassable to boat traffic. Annual herbicide treatments in 2018-19-20 were funded by the POA at approximately \$20,000/year. The proposed annual budget for the new Lake Lida LID is \$50,000, of which \$30,000 is now designated for CLP control.

Curly-Leaf Pondweed is a significant risk to Star Lake.

Curly-leaf Pondweed is a prohibited invasive species in Minnesota, which means it is unlawful (a misdemeanor) to possess, import, purchase, transport or introduce this species except under a permit for disposal, control, research or education. View this interactive map to see how many of the lakes around Star Lake have CLP contamination. Most notable are Lizzie, North and South Lida, Dead, East Spirit, Otter Tail, Pine Lakes, West Battle, Clitherall, and many others. www.eddmaps.org/distribution/viewmap.cfm?sub=6219

AQUATIC INVASIVE SPECIES (AIS) Continued

Read below for simple steps that you can take to manage the spread of AIS into or out of Star Lake.

YEAR ROUND AIS AWARENESS

- ◆ Use this link to obtain a copy of MNDNR's current list of infested waters; then consult it PRIOR to your trip: www.dnr.state.mn.us/invasives/ais/infested.html
- ◆ To learn more about AIS current events, visit the following websites:
 - ⇒ Star Lake Property Owners' Association (SLPOA): www.starlakeassociation.com/invasive-species
 - ⇒ Minnesota Lakes & Rivers (MLR) www.mnlakesandrivers.org
 - ⇒ Otter Tail County Coalition of Lake Associations: <https://ottertailcountycola.org>
 - ⇒ Otter Tail County AIS Department: <https://ottertailcountymn.us.department/aquatic-ivasive-species/>
 - ⇒ Minnesota Aquatic Invasive Species Research Center: www.maisrc.umn.edu
 - ⇒ Minnesota Department of Natural Resources: www.dnr.state.mn.us/invasives/ais/index.html

IN TIMES OF TRANSITION (FALL/SPRING)

- ◆ If hiring someone to install or remove your dock and lifts, please ensure they are a certified "Lake Service Provider" (LSP). THIS IS A STATE LAW. Ask to see their LSP Certification Card. Also LSP's should have a window sticker on the lower left side of the windshield of their vehicle.
 - ⇒ See link for list of authorized LSP's: www.dnr.state.mn.us/lsp/index.html
- ◆ If transporting water based equipment or motor craft that have invasive species attached, OTC requires you to obtain a permit that authorizes the transport of that equipment or motor craft.
- ◆ You may use one of the following general permits if you own a boat or equipment that requires transport to a location away from the water access for cleaning, repair, or storage. You may also use one of the following general permits if you are a shoreland owner transporting aquatic plants to a disposal location. These permits:
 - ⇒ Are for non-commercial use only (commercial users may need a Lake Service Provider Permit);
 - ⇒ Authorize the one-way transport of a boat, equipment or aquatic plants; and
 - ⇒ Are valid only one day.
- ◆ Contact OTC Land & Resource to download and print related permits:
 - ⇒ www.dnr.state.mn.us/invasives/ais_transport.html
- ◆ A tip on cleaning zebra mussels from your equipment at the end of the season: let them dry for several days and then brush them off.

IN TIMES OF ACTIVE LAKE USE (FALL/SPRING/SUMMER)

- ◆ When practical, do not leave anything in the water for an extended period of time. Zebra mussels attach to hard surfaces and occasionally to plants. Once attached to an object, zebra mussels rarely move, and if they do only a few feet.
- ◆ When leaving boats on lifts, raise your motor out of the water.
- ◆ Always practice ***CLEAN**DRAIN**DRY**DISPOSE!**
- ◆ Discourage "lake jumping". Likely not a popular proposal to some, but if you do visit another lake, plan on leaving your boat on the trailer and allow for it to dry for a minimum of five consecutive "dry days" prior to relaunching in Star Lake or any other lake.