



NFCRWD AIS BOAT INSPECTION REPORT

2018 Boat Inspection Summary

January, 2019

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The North Fork Crow River Watershed District (NFCRWD) hired Lamb Labor Services to staff Level 1 watercraft inspectors, May—October during 2018. The inspectors were trained by the MN DNR to inspect boats entering and exiting public boat accesses on the District's recreational lakes. Contributors to the project included the MN DNR, Meeker County, Paynesville TWP, Koronis Lake Association, Rice Lake Association, City of Paynesville, Grove Lake Association, Union Grove TWP, Stearns County, Pope County and the NFCRWD. The MN DNR also staffed watercraft inspectors at Lake Koronis and Rice Lake during 2018. During 2018, survey data from incoming boaters, indicated boats came from over 319 different water bodies, prior to entering district inspection locations.

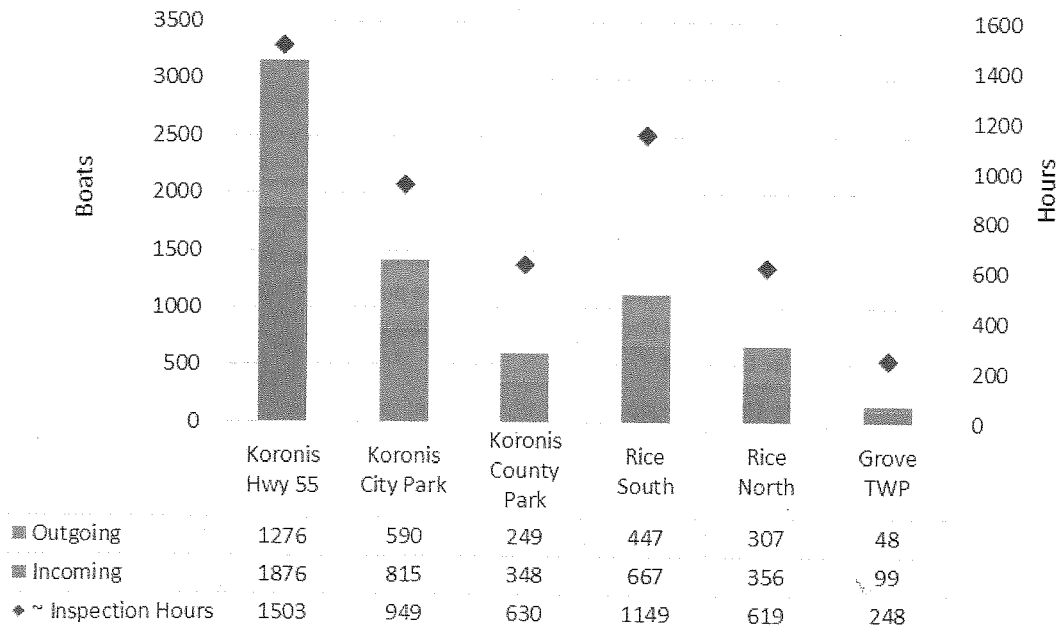
Why are We Inspecting Boats?

Boats are inspected to reduce the risk of spreading Aquatic Invasive Species (AIS) into the District lakes and rivers. Invasive species are those that when moving into a new locale tend to spread rapidly, outcompete resident species, and cause — or likely cause — ecological or economic harm or harm to human health. They are Eco-system engineers and change the ecological environment impacting local plants and animals.

During each watercraft inspection, the inspectors complete a DNR survey (results of questions are represented in tables and graphs), discuss MN AIS laws with boaters and complete a visual and physical inspection of boats entering or exiting waterways. Completing these processes with boaters increases the knowledge of AIS and self-inspection techniques, reduces the risk for AIS infestation in District waters, and can stop AIS contaminated boats from launching. Two of the lakes in the District waters have an invasive called Starry Stonewort. This is a grass-like form of algae that are not native to North America. The plant was first confirmed in Lake Koronis in 2015 and Rice Lake in 2016. Starry stonewort can interfere with recreational and other uses of lakes where it can produce dense mats at the water's surface.

"The mission of the NFCRWD is to improve and enhance water quality, to control water flow, to reduce erosion and sedimentation, to promote wise public, private and natural use of water while maintaining, enhancing and preserving public and private drainage for present and future residents of the Watershed District."

Boats Inspected vs Inspections Hours at NFCRWD Accesses



Starry stonewort is an invasive green alga that has spread rapidly within some northern-tier lakes. It can grow tall and dense, forming mats on the surface that interfere with recreation and potentially displacing native plant species. MAISRC researchers are currently performing ecological niche modeling to assess risk of spread in Minnesota as well as laboratory experiments to assess how long it can survive out of water and to evaluate the efficacy of herbicides and algaecides while minimizing non-target impacts.

What it is

The scientific name for starry stonewort is *Nitellopsis obtusa*. It is a type of freshwater green algae known as a charophyte, a group that also includes muskgrasses and stoneworts (Chara and Nitella species) that are native to Minnesota. Starry stonewort is native to parts of Europe and Asia.

What it affects

Where starry stonewort grows densely and forms surface mats, it can interfere with boating and other recreational activities. Dense growth may also displace native plants and could potentially have impacts on fish and other animals. Starry stonewort's ecological impacts are not well understood, and there has been little published research to date.

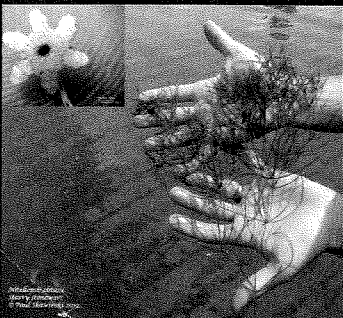
How it spreads

Starry stonewort appears to be spreading vegetatively in the U.S. (by bulbils and fragments). Accidental movement by people is the most likely means of dispersal. Many of the known infestations occur in high-use waterbodies and near boat accesses.

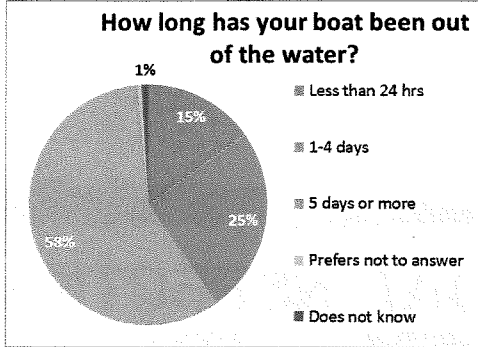
(University of Minnesota)

<http://www.maisrc.umn.edu/starry-stonewort>

Lake Koronis and Rice Lake both have active programs in place to control/manage Starry Stonewort.



What was Learned from Inspections?



STOP AQUATIC HITCHHIKERS!
Be A Good Steward. Clean. Drain. Dry.

Drain Plug on Arrival

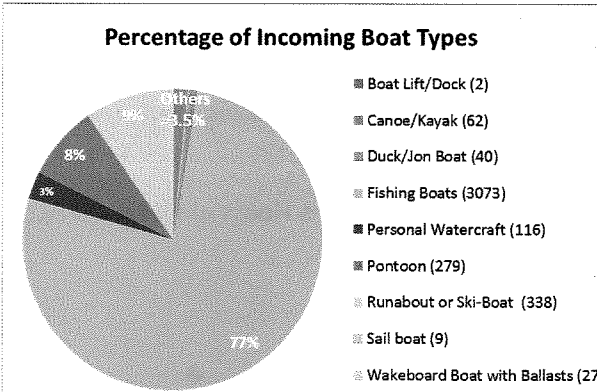
Plug Status	Percentage
In	3%
Out	97%

Why is this Important?

Zebra Mussels are transferred when attached to boats, trailers, docks, boat lifts or other equipment that are placed in water. The juvenile mussels can be transferred from lake to lake in a very small amount of water. Having a drain plug in a boat can greatly increase the spread of zebra mussels. Zebra Mussels can also survive out of water on boats or other water equipment for 31 days, depending on weather conditions. A boat or other water equipment coming from a contaminated lake that is not completely dry or decontaminated (high pressure wash with 140°F water) can spread zebra mussels. Ecologically, they filter enormous quantities of microscopic algae and alter energy flow through aquatic ecosystems — with potentially large impacts on fish populations — and they smother and cause extinctions of native bivalve mollusks.

Anything Found on In-coming Boats or Trailers?

Category	# of Boats	Percent
Yes - Plants	39	0.98%
Yes - Water	5	0.05%
Yes - Animals	1	0.03%
Yes - Mud	3	0.08%
No	3964	98.86%



Grant Funds and Contributions 2018 AIS Program

Stearns County	\$31,000
RLA	\$5,200
GLA	\$300
City of Paynesville	\$4,300
Pope County	\$3,960
Meeker Co (thru KLA)	\$12,500
Paynesville TWP	\$6,000
Union Grove TWP (thru KLA)	\$1,500
KLA	\$18,005.75
2018 Total	\$82,765.75
NFCRWD In-Kind Hours	~ 83 hrs

Watercraft Decontamination:

Decontamination units are self contained, high pressure, high heat wash units that allow watercraft to be decontaminated at the public water access without allowing any of the wash water to run off.

Why Decontaminate? To ensure that zebra and quagga mussels and other AIS are killed and removed. (MNDNR)

Find Decon Stations Here:

https://webapps15.dnr.state.mn.us/ais_decon_sites

