

2022 Online AIS Workshop Series

Hosted by the Minnesota Department of Natural Resources

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February and March 2022

Background

A series of four two-hour online workshops each focused on a specific topic of interest that will include a handful of short presentations primarily from local programs and a facilitated discussion.

Why attend?

- Network with local AIS program managers across the state.
- Share information about your AIS prevention and management strategies, so that others can learn from your experiences.
- Learn about new AIS initiatives locally, regionally and statewide.
- Engage in active discussions about the successes achieved and challenges encountered while coordinating a county-wide AIS prevention program.

Who should attend?

- Staff and stakeholders involved in developing and implementing local AIS programs. This includes, but is not limited to: tribal and local government staff overseeing a county's AIS Prevention Aid or local AIS program, watercraft inspection staff, local AIS task forces/committees members, state and federal agency staff, regional and statewide partners, non-government organizations, businesses, Minnesotans active in AIS work, etc.

Behavior Change for AIS Prevention

Monday February 7th from 1-3PM

Background: Community-Based Social Marketing (CBSM) is a social science approach to foster sustainable, environmentally beneficial behaviors over the long term. CBSM reaches beyond traditional information and awareness campaigns by targeting individual behaviors, bridging the gap between awareness and action. To this end, the DNR has been leading statewide [Preventing AIS through Behavior Change](#) initiatives and local organizations have taken on local initiatives as well.

Behavior Change for AIS Prevention

- **Tina Fitzgerald, DNR AIS Planner** Tina.Fitzgerald@state.mn.us
- The DNR followed CBSM steps to better understand stakeholder knowledge, attitudes, behaviors, barriers, motivators, and communication preferences specific to activities they participate in and the AIS prevention actions we need them to adopt. Research included literature reviews, expert panels, surveys of target audiences, a workshop for local partners, and grants for local pilot projects. The DNR also used Community Asset Mapping to identify existing resources, organizations, programs, individuals and their interconnections related to protecting and celebrating Minnesota water resources. With the baseline data collected, the DNR and partners can craft the right messages, use trusted messengers, and use preferred messaging channels to promote the adoption and consistent practice of AIS prevention behaviors by target audiences in Minnesota.

Check-In / Check-Out for AIS Prevention

- **Justin Townsend, Ramsey County** justin.townsend@co.ramsey.mn.us
- This talk will focus on results from a pilot project with the goal of developing a web-based application that will serve as a self-inspection system which compliments the current watercraft inspection program. Discussion will include planning elements, implementation hurdles, and lessons learned for future iterations.

Lake Pledge App

- **Tony Brough, Hennepin County** Tony.Brough@hennepin.us
- www.Lakepledge.com

FiveStar Lake Service Provider Initiative

- **Bill Grantges, Itasca SWCD** bill@grantges.net
- FiveStar is the Itasca AIS Program strategy to create trust-based relationships with Itasca area businesses and to raise AIS awareness and the quality of AIS Safeguards practiced by those businesses. FiveStar LSPs are DNR-certified and agree to apply additional AIS best-practices and Safeguards when moving from one lake or river to another. Additionally, this trust-based relationship is meant to enable the AIS Program and participating lake associations to identify, learn, and disseminate AIS prevention best practices.

Control Grants + Species-Specific Topics

Thursday February 10th from 1-3PM

Background: Understanding the biology, phenology and ecology specific to an invasive species is key to preventing spread and minimizing impacts. The goal of invasive aquatic plant management is to minimize harmful effects caused by invasive plants while also protecting the natural resources and their use in Minnesota.

AIS Control Grants

- **Jake Walsh, DNR AIS Grants and Research Coordinator** Jake.Walsh@state.mn.us
- Through the [AIS Control Grant Program](#), the DNR provides grant support to local entities such as lake associations, local units of government and tribes for invasive aquatic plant management control projects. In 2022, up to \$1.25 million is available for all local entities. This includes \$850,000 in special one-time funds specifically for lake associations, as well as up to \$400,000 in regular program funds for other organizations such as local units of government and tribes. The application period is now open, and DNR will be accepting applications until the deadline at 9:00 a.m. on Monday, February 21. This presentation will cover the details about the 2022 program, including the one-time additions to the program, eligibility, project scope and work plans, and how to apply for a grant.

Starry Stonewort Control

- **Chris Jurek and Keegan Lund – DNR Invasive Species Specialists** christine.jurek@state.mn.us; keegan.lund@state.mn.us
- Updates on recent management efforts to combat starry stonewort including pesticide, hand-pulling and combination projects. We have learned that we can successfully contain small-scale infestations if they are discovered early, but challenges still exist with large-scale infestations and long-term management.

DASH (Diver Assisted Suction Harvesting)

- **Meg Duhr, Minnesota AIS Research Center at the University of Minnesota** mduhr@umn.edu
- **Raining White, Leech Lake Band of Ojibwe** raining.white@llojibwe.net
- **Kate Hagsten, Leech Lake Band of Ojibwe** Kate.hagsten@llojibwe.net
- **Ron Petrusson, Crooked Lake in Crow Wing County** rpetrusson@yahoo.com
- Diver-assisted suction harvesting (DASH) is an emerging tool for invasive aquatic plant management and can be particularly useful for situations where fragmentation of the target species is of high concern, where precision removal methods are required, or where herbicides cannot be used. In this presentation, you'll get a quick overview of how a DASH system operates and hear two case studies of applications of this method in Minnesota: one project that involved constructing a DASH system from the ground up and then operating it for Eurasian watermilfoil removal at Crooked Lake of Crow Wing County and another project implemented by the Leech Lake Band of Ojibwe using DASH to remove starry stonewort within wild rice beds in Leech Lake.

Golden Clam

- **Megan Weber, University of Minnesota-Extension** mmweber@umn.edu
- **Dan Cibulka, Sherburne County SWCD** dcibulka@sherburneswcd.org
- MAISRC and Sherburne SWCD have completed a year-long assessment of golden clams (*Corbicula fluminea*) in Briggs Lake, Sherburne County, following a 2020 discovery during Starry Trek. Visiting the lake monthly during winter and open water seasons, they have documented that the clams survived harsh winter conditions in the lake – even though the literature suggests they would not be able to do so without thermal regulation aid. Furthermore, the data collected suggests that multiple age classes are present. Whereas previously thought improbable, the study indicates that golden clams may be able to tolerate cold winters of the northern United States. Factors such as species adaptation and climate change may play a role in this new discovery.

Non-Native Phragmites Control

- **Wendy Crowell, DNR AIS Management Consultant** wendy.crowell@state.mn.us
- **Julia Bohnen, University of Minnesota's Fisheries, Wildlife, and Conservation Biology Research Unit** bohne001@umn.edu
- The University of MN and MNDNR have teamed up to lead a coordinated response to invasive Phragmites in Minnesota. We worked with partners from other state agencies, local government, and private citizens, to deploy contractors throughout the state in fall 2021 to treat Phragmites. Approximately 70% of all documented populations were treated in 2021 (or previously). Work will continue in 2022 to document, monitor and treat invasive Phragmites to halt spread and reduce its ecological and economic impacts.

Public Engagement

Thursday March 3rd from 10AM-12PM

Background: It is critical to keep people that use and enjoy Minnesota lakes and rivers well-informed on AIS issues and prevention best practices. The COVID-19 pandemic has impacted in-person opportunities and therefore programs have needed to find new ways to engage their audiences. Additionally, multi-organization collaborations provide the opportunity to broadcast AIS communications at larger scales.

AIS Volunteers and Ambassadors Program Overview

- **Adam Doll, DNR Watercraft Inspection Program Coordinator**

- Residents who are interested in informing the public about AIS and how to slow their spread can receive free training from the DNR. The DNR will provide a brief overview of the program and discuss how local organizations can get involved or support the work in their local areas.

Improving the Efficiency of Watercraft Inspections through Coordination and Cooperation

- **Dr. Amy Kinsley, Assistant Professor in the Department of Veterinary Population Medicine at the University of Minnesota** carr0603@umn.edu
- A brief update on this Minnesota AIS Research Center funded [project](#), with a focus on identifying potential reciprocal relationships between multiple organizations.

Multi-Organization Collaboration Round-Robin

Round-robin with anyone that wants to share an outreach or education example (less than 5 minutes). For example:

- **[AIS prevention video for shoreland owners and shoreline equipment](#) by Holly Kalbus with Le Sueur County** hkalbus@co.le-sueur.mn.us
 - A multi-county collaboration event to develop an aquatic invasive species shoreland owner training video. I will discuss how this project first started, the process of collecting financial and in-kind contributions, successes, and challenges.
- **Bait bags with “Don’t Let It Loose” messaging by Spencer McGrew with Otter Tail County** smcgrew@co.ottertail.mn.us
- ***All participants are invited to share!***

Public Engagement Round-Robin

Round-robin with anyone that wants to share an outreach or education example (less than 5 minutes). For example:

- **Wayzata Sailing Project by Tony Brough with Hennepin County** Tony.Brough@hennepin.us
 - Creation of unique sails on Lake Minnetonka highlighting AIS issues – featuring artwork by local and diverse artists to add gravity to a lake that has been valued by many different groups, for thousands of years, highlighting the impact we have on future generations. And a special presentation on a 2022 AIS Art Sails project growing on the success from last summer.
- **Mobile interactive AIS display by Emily Gable with Dakota County** Emily.Gable@CO.DAKOTA.MN.US
 - In 2020 and into 2021, Dakota County hired Tuhura Communications to develop a portable AIS Display. The project had 3 main goals: provide education about why aquatic invasive species are harmful, be portable in a manner that one person could handle setting up and taking the display down, and to ultimately influence behavior change in order to prevent the spread of AIS. After collaborative meetings with Jane Beattie and Kathy Lepley of Tuhura Communications, we landed on several elements for the portable AIS display. The display consists of handheld information cards, a chalkboard “find the AIS” game, a hidden maze game, origami, and a standup/table display.
- **Signs in the Boundary Waters by Doug Jensen with Minnesota Sea Grant** djensen1@d.umn.edu
 - The BWCAW Coalition, a multi-agency team from the Arrowhead region, identified the need for new AIS signage at public water accesses located at waters on the edge and trailheads leading to the BWCAW. Signage use is highly recommended because surveys by Minnesota Sea Grant and others continue to show that signs are the top source of information for recreationalists who use our waterways. In response, Sea Grant is leading an initiative in collaboration with the BWCAW Coalition to develop a new AIS sign with a watershed protection message. The new sign was selected using a mixed method approach of qualitative and quantitative assessment. The process serves as a model for the development of AIS outreach materials by counties and their partners.
- ***All participants are invited to share!***

Early Detection and Response + Organisms in Trade

Thursday March 17th from 1-3PM

Early Detection and Response Background: Detecting new populations of AIS early enough so that a response is possible is a crucial second line of defense to prevent establishment and minimize impacts. Successful responses depend upon effective early detection monitoring and AIS reporting programs. Managers must be prepared and committed to take action.

Organisms in Trade Background: The horticulture, pet, food, bait, and classroom and laboratory biological supply trades are some of the known pathways for invasive species, otherwise known as [invasive organisms in trade](#). Buyers and businesses alike can take action to protect Minnesota from new introductions of invasive species.

Infographic for Early Detection and Response in Sherburne County

- **Dan Cibulka, Sherburne County SWCD** dcibulka@sherburneswcd.org
- The Sherburne County Coalition of Lake Associations (SC COLA) and Sherburne Soil and Water Conservation District (SWCD) have collaborated to create a unique and visual-based AIS Early Detection and Rapid Response plan. The plan includes different elements that allow everyone from the casual lake user to the knowledgeable AIS manager to follow EDRR protocols for documenting a new infestation, communicating that infestation, gathering appropriate individuals to evaluate the situation, and chart a course for response. This plan serves as a template for Sherburne County lake groups to take and customize to fit their local needs.

Using eDNA to detect AIS

- **Josh Dumke, University of Minnesota-Duluth** jddumke@d.umn.edu
- Environmental DNA (eDNA) could be a useful tool for AIS early detection and monitoring. However, application of eDNA as an AIS detection method is still relatively new, and we need to learn what combinations of methods and sampling strategies optimize detection potential before eDNA monitoring becomes widely accepted. This talk will summarize our insights, lessons learned in our first year, and our ongoing work on the project [Optimizing eDNA Detection for Multiple AIS](#).

Starry Trek and AIS Detectors

- **Megan Weber, University of Minnesota-Extension** mmweber@umn.edu
- The Aquatic Invasive Species Detectors program at the University of Minnesota works to empower Minnesotans to become part of the solution to invasive species problems. Two of our most popular and long-standing programs are the AIS Detectors Core Course and Starry Trek. The AIS Detectors Core Course is an introduction to our volunteer network and now offers a new professional track as well. Starry Trek is a one-day, annual statewide search for starry stonewort and other AIS. Come learn more about these two statewide programs, how they are adding additional capacity to aquatic invasive species work in the state, how they've contributed to early detection efforts, how you can get involved, and how to tap into our volunteer network for your invasive species projects.

Stop Spiny Campaign and Spiny Waterflea Monitoring Pilot 2022

- **Meg Duhr, Minnesota AIS Research Center at the University of Minnesota** mduhr@umn.edu
- [Stop Spiny Campaign](#) materials are available for individual organizations to implement.
- MAISRC is launching a citizen science spiny water flea surveillance pilot project this summer. To learn more, please visit the [program overview flyer](#).

Recent Trade-Pathway Invasive Species Prevention Efforts in Minnesota

- **Chelsey Blanke, DNR AIS Pathways and Plans Analyst** Chelsey.Blanke@state.mn.us
- Global trade is responsible for invasive species introductions and spread worldwide. This presentation will include key findings and opportunities for improving invasive species prevention, following recent Minnesota DNR trade pathways projects, such as a workshop and surveys of businesses and hobbyists, and an in-store assessment of the availability of invasive species at Minnesota aquarium shops and live seafood markets.

Pet and Garden Store Inspections and Education

- **Tony Brough, Hennepin County** Tony.Brough@hennepin.us
- Summary of findings from Hennepin County AIS in pet stores and garden centers. An inspection and education project. And a special presentation piloting a 2022 AIS online course which includes a pledge to protect strategy.