Great Lakes Panel on Aquatic Nuisance Species Research Coordination Committee Meeting December 3, 2024 1:00 – 2:30 PM EST

Attendees

Lindsay Chadderton, TNC, Committee Chair Nick Phelps, MAISRC, Committee Vice Chair Rochelle Sturtevant, NOAA GLANSIS Debra DiCianna, Lake Carriers Association Brian Schoenung, IL DNR Kate Wyman-Grothem, USFWS Mike Langendorf, CORA Kurt Kowalski, USGS Jesica Goldsmit, Ministère des Forêts, de la Faune et des Parcs Andrew Tucker, TNC Brook Schryer, *OFAH* Eric Fischer, IN DNR Aubree Szczepanksi, IN DNR Andrew Tucker, TNC Doug Jensen, MN DNR Liz Tanner, WI DNR El Lower, GLANSIS Lindsay Yoder, NY DEC Ceci Weibert, MI EGLE

Staff (Great Lakes Commission)
Theresa Gruninger
Sam Tank
Nichole Angell
Autumn McGowen

Meeting Startup

- Chadderton led a round of meeting introductions
- No changes to the agenda were made

Member updates

Members on the call were asked to answer the question "Share 1-2 key AIS challenges faced by your jurisdiction where knowledge or a lack of solutions is impeding management". Responses are summarized below.

- WI: They sat on a call yesterday regarding research on New Zealand mudsnails (NZMS) and fish consumption. Starry stonewort (SSW) and NZMS management still have gaps
- QB: Lack of money and funding. Government priorities are frequently changing. Lack of knowledge in taxonomy and how to properly ID species (i.e. they have found round goby does not always have the black spot on dorsal fin, which is a common ID feature)
- OFAH: Lots of new AIS discoveries in the province and prioritizing all the different projects has been a challenge

- Water solider, hydrilla, Procambarus species, eradicating marbled crayfish in Burlington.
 Gap is pesticide acceptance in Cananda for crayfish. New report of red swamp crayfish
- MI: Crayfish control and trapping. Establishing realized impacts of NZMS and GL impacts. Intersection with preserving and protecting unionidae with mussel infested lakes. SSW control
- IN: Dealing with IAP control and continuing with trials of herbicide application techniques.
 Looking for the best control you can get for the money. New species (SSW and Hydrilla) management. Working on evaluating outreach and understanding what works, who you are reaching and how to prioritize it. Outside of the basin, where carp reproduction is occurring, an evaluation of changing control structures on the Ohio River to effect reproductive success of carp
- IL: Manpower and resources are always a challenge. All federal funding is obligated to specific action (cannot stockpile money). Need to figure out a way to get the public invested in the messaging and understanding the cost of AIS introductions. How do we create an emotional connection with the public?
- CORA: Supporting experimental mussel control on the reefs and figuring out how this can be expanded to new areas. There are gaps to fill in the relationship between invasive mussels and whitefish reductions
- MAISRC: MAISRC finalized their list of priorities last week. Document is not public yet but will be Jan 1. They also have a new finalized strategic plan and they will be focusing on the translation of research into action. There needs to be a path toward implementation on research projects
- GLANSIS: Microbial populations are not well mapped. For some rare non-natives, there is a struggle to know whether they are still there or not. Are they still a self-sustaining population? Missing a lot of parasite and disease organisms that could be potential invaders. Interested in communication gaps in the social media world (i.e. with the death of "science twitter", what can we use to replace that?)
- USGS: As the RNA interference *Phragmites* work has progressed, it has been hard to keep up the energy and visibility of programs (and species) that have been around a long time
- USFWS: Reiterates GLANSIS' prompt of many small species that do not get adequate attention
- MN: SSW pathways, control, impacts each infestation is unique and like Eric mentioned, so are the responses. A research-based decision-tree is needed. Goldfish are topping the list of AIS being released into lacks but there are no studies of how the effect the ecology. There is a need for ZM control and management and a reference study with non-target impacts. Agrees with the problems of AIS ID and crayfish in particular is very tricky. How to use MN watercraft data to model and determine when and where watercraft inspections should take place

2026 GLRI IJ project brainstorming

- First meeting in late January with following meetings in March
- Full project proposals will be submitted in April
- This year, there is a slight shift with a focus on actionable projects
- MI: A lab out of MSU contacted Lucas Nathan about a project on genetic analysis and location sourcing of golden mussels. They are looking for funding to do so. But there needs to be something actionable that comes out of this
 - Would need to make sure the west coast is not already doing that genetic analysis
- MI: Brian Thum has presented an interest in addressing the ProcellaCOR gaps presented in the IAP research agenda
- USFWS: The pathway of hitchhikers on organisms. There are a lot of questions there that need to be answered
 - o Would metabarcoding methods allow us to look at some of those contaminates?

- MI is doing a pet store blitz to see what is being sold in store, what hitchhikers they get, and what they do with them. This will be primarily visual photo identification
- WI agreed that this is a need. Especially in feeder goldfish shipments (which is where they find a lot of them)
- Where does USGS stand with pathway perception?
 - o RNAI is not genetic biocontrol, so it needs to stand apart from genetic biocontrol. There are opportunities to take Jason's work to the next level
 - Nick Phelps added that this a long game (might not be best for a two-year GLRI project)
 - MI added that they just hired a social scientist for the invasive species program, and genetic biocontrol is one of her top issues
- Brian might have more info about the IL-IN Sea Grant waterfowl pathway project to see what their work plan contains. Brian shared the information about the project below
 - A2: Goal: Evaluating Illinois' Waterfowl Hunters AIS Prevention Messaging Needs
 Objectives:
 - By 2023, 3 focus groups of waterfowl hunters will be hosted.
 - By 2024, 500 Illinois waterfowl hunters will be surveyed about their AIS prevention needs.
 - By 2024, a report and presentation will be produced to disseminate results on recommended AIS-prevention outreach programming for waterfowl hunters. Waterfowl hunters are able to spread aquatic invasive species through contaminated equipment. Illinois waterfowl hunter population's attitudes, beliefs, and sources of information on AIS are poorly understood, making the delivery of AIS prevention outreach difficult. We will work with a social scientist to review published literature and expert opinions of state and academic biologists, host focus groups of waterfowl hunters, develop and deliver a survey, and analyze data to create a needs assessment of AIS prevention messaging for Illinois waterfowl hunters. These results will be disseminated to Great Lakes audiences through a presentation at a relevant conference such as the International Conference on Aquatic Invasive Species. After this work is completed, we will seek additional funds outside this scope of work to apply the research results to develop Be A Hero outreach tools and distribution plan. Additionally, this data will allow for a measure of campaign messaging effectiveness by creating a baseline for compliance to behaviors. Objective progress will be tracked through the number of focus groups hosted and surveys deliver and the completion of the report.
- Waterfowl hunting is newly refreshed priority pathway for MI
- Might be the reason behind the spread of hydrilla
- Where does the research lie?
 - Scale and scope of hunter's travel and highlight movement with surveillance effort and more about gear risks
 - Can this data just be grabbed from Ducks Unlimited?
 - Unsure if they have that data
 - O How many non-resident hunters are coming across jurisdictional borders?
 - QB is working on a pilot project to track cell phone information of those on the lake to see where they are travelling (one waterbody to another). Testing with 2023 data to see where watercraft washing stations can be set

- There is a gap of ponds less than 10 hectares and urban streams for EDRR mapping. These small private ponds and urban ponds and streams seem to be where we are seeing new species (hydrilla and crayfish) pop-up. Would have to be coupled with surveys across the basin
- Opportunity to send projects back to the RCC after the state and tribal meetings to develop research questions. We can offer, as the RCC, to help work on project proposals if state or tribes are interested

Start initial brainstorming for the next GLP Work Plan (2025-2028)

Did not reach this agenda item due to time. Item will be added to the next RCC meeting

Wrap-up and adjourn

- After all GLP committees have had their IJ brainstorm session, it might be necessary to reconvene topics with the full panel
- Reminder that a meeting to fill out and finalize the RCC Charge document will be Tuesday January 14th, at 2:00 ET