

Meeting of the Great Lakes Panel on Aquatic Nuisance Species

October 5-6, 2015
Ann Arbor, Michigan

Meeting Summary

Approved May 3, 2016

Additional meeting information including a final agenda and presentations are available on the Great Lakes Panel website (<http://qlc.org/projects/invasive/panel/glp-meetings/>).

Monday, October 5, 2015

Welcoming Remarks and Call to Order

John Navarro, Ohio Department of Natural Resources (DNR), Great Lakes Panel (GLP) Chair

- Navarro called the meeting to order.
- Welcoming remarks were provided by Debbie Lee, director of the National Oceanic and Atmospheric Administration – Great Lakes Environmental Research Laboratory (NOAA GLERL).
- There was a round of introductions and a quorum was confirmed.
- Navarro reviewed the agenda, which was approved with no changes.

Great Lakes Panel (GLP) Business

John Navarro, Ohio DNR, GLP Chair

Erika Jensen, Great Lakes Commission (GLC), GLP Coordinator

- The April 2015 meeting summary was reviewed and approved with no changes.
- Action items from the April meeting were reviewed.
- The spring 2016 meeting was tentatively planned for the week of May 2, 2016 in Traverse City, Mich.,
- The GLP agreed to offer to host the Aquatic Nuisance Species Task Force (ANSTF) at the spring meeting.
- An update on GLP membership changes and current vacancies was provided.
- Information on biannual GLP officer and at-large member elections was reviewed.
 - The nominating committee was announced to include John Navarro, Jim Grazio, Kevin Irons and Becky Cudmore.
 - There are four open positions, one vacant at-large position, and two at-large members up for re-election.
- ACTION ITEMS:
 - Staff will post the final April 2015 meeting summary to the GLP website.
 - Members provide feedback about the meeting summary format to E. Jensen.
 - Staff will plan the spring GLP meeting and continue to work on meeting format changes based on GLP member input.
 - GLP members will provide input on vacant GLP membership positions to E. Jensen.
 - GLP members will suggest nominations for the GLP elections to the nominating committee.
 - GLP members will participate in the upcoming electronic election (*instructions and ballot to follow in early 2016*).

Recap Discussion from April 2015 Meeting and Review Plans for Work Group Breakout Sessions

- At the April meeting, the GLP discussed adjusting the format to be more responsive to priority issues.
- The GLP can serve as a venue for dealing with current issues rather than developing topic specific workgroups outside of the GLP.
- This method will be trialed at this meeting through three breakout sessions and assessed to consider continuation in the future.

Economic Impacts of AIS

Frank Lupi, Michigan State University

- The Partnership for Ecosystem Research and Management measures and models demand and valuation of ecosystem services (e.g., valuation of beaches, recreational demand for fishing) and develops incentive-based environmental policies.

- To connect invasive species to the economy and consider actions, it is important to see how supply or demand is changing because of aquatic invasive species (AIS).
- Current literature provides useful information, but it is important to conduct studies to learn more and ensure the local accuracy of that information.

Travis Warziniack, U.S. Forest Service (USFS)

Jenny Johnson, Colorado State University

- Economic impacts can be measured in dollar values or changes in activity level (i.e. visitation rate).
- Baseline economic data should be collected over 1.5 years.
- If GLP members are willing to provide data, this group can conduct the analyses to model the regional economic impacts of AIS.

Work Group Breakout Sessions

Address near-term coordination and information needs on three emerging/current AIS priorities for the Great Lakes region. Summaries of breakout sessions are available separately.

- Grass Carp Status
- Starry Stonewort Control
- Economic Impacts of AIS

Tuesday, October 6, 2015

Informational: Jurisdictional Updates

Moderator: John Navarro, Ohio DNR, GLP Chair

ANSTF

Don Maclean, Acting Executive Secretary, ANSTF, U.S. Fish and Wildlife Service (USFWS)

- The Stop Aquatic Hitchhikers campaign is being co-branded with Clean Drain Dry and integrated with other regional initiatives.
- The Habitattitude campaign is being revitalized and a new website is being developed.
- The American Boat and Yacht Council sponsored a summit on boat design [in January 2015](#)
- The ANSTF and USFWS continues to consider funding constraints of the regional panels and state management plans.

Council of Great Lakes Governors (CGLG) AIS Task Force

Kevin Irons, Illinois DNR

Tammy Newcomb, Michigan DNR

Sarah Lesage, Michigan Department of Environmental Quality (DEQ)

- CGLG focuses on economic development and Great Lakes protection.
- They established an AIS Task Force to leverage ongoing work, increase collaboration, and support consistent federal strategies.
- In 2015, the task force agreed on a list of 16 “least wanted” species and established the Mutual Aid Agreement.
- A new work group was established to prevent the introduction and spread of AIS to Michigan, Ohio, and Ontario by pursuing common principles and cooperation, such as collaborating on risk assessments for listing species.

Ontario AIS Regulations

Francine MacDonald, Ontario Ministry of Natural Resources and Forestry

- Ontario Bill 37, the Invasive Species Act, complements the role of the Canadian federal government by identifying a process for listing invasive species and carriers (pathways).
- Under the bill, emergency orders can be created through an immediate temporary designation order rather than going through the process of listing the species.
- The bill also includes early detection and rapid response provisions that will allow inspectors to go to private properties to survey and stop conveyance.

Canada Federal AIS Regulations

Becky Cudmore, Department of Fisheries and Oceans (DFO)

- A federal framework for AIS regulations was established because not all provinces had regulations.
- A suite of regulatory tools to prevent and manage spread was designed.
- The regulations establish a federal list of prohibited species that will be expanded over time using risk assessment tools. Provincial lists of prohibited species were grandfathered in.
- Exemptions to species regulations are possible for certain purposes or situations.

Implementation of Ballast Water Standards

Lorne Thomas, U. S. Coast Guard

- Regulations limiting the concentration of organisms in ship's ballast water discharge when into effect in 2012.
- Independent labs handle the testing for the approval of applications for ballast water treatment systems.
- Compliance is assessed during normal vessel inspections and includes testing machinery and the crew's knowledge of the system.
- Tools are being developed to test the effectiveness of the ballast water treatment systems.

Economics Work Group Report

- Economic information is important to GLP members to justify investment in programs, particularly for state and federal agencies; educate the public to facilitate behavior change; and inform agency decision making and planning.
- The GLP could play a role in setting parameters and guiding economic analyses for AIS impacts.
- GLP members would like more information on a potential economic assessment conducted by Johnson:
 - GLP involvement could help ensure the end product is useful to GLP members.
 - An assessment of invasive plant management in the region is of interest.
 - Assessments should be directly information management decisions.
- ACTION ITEM
 - Solicit an economic analysis proposal from Johnson and hold a follow up webinar to discuss next steps and role of the GLP.

Committee business meetings

Summaries of committee meetings are available separately.

Informational: Species Updates: Grass Carp

Moderator: Lindsay Chadderton, The Nature Conservancy (TNC)

DFO Risk Assessment

Becky Cudmore, DFO

- Both diploid and triploid grass carp have been found in Canadian waters in the past few years.
- These findings provided illustrated significant public interest and provide an opportunity to implement and learn from response processes and protocols.
- Some of the collected carp have been identified as hatchery born, but not all have been identified yet.
- The Grass Carp Risk Assessment is in draft form and being reviewed
- A comprehensive Black Carp risk assessment is also planned once the grass carp assessment is complete.

USGS/Partner Research

Patrick Kocovsky, U.S. Geological Survey (USGS)

- A study effort to assess the presence of grass carp was initiated in the Sandusky River in 2014 and was expanded in 2015.
- River conditions in 2015 were very suitable for grass carp spawning; eight grass carp eggs were found in five different sampling events.
- The University of Toledo student whose masters project focuses on Grass Carp spawning in the Sandusky River is using the USGS-developed FluEgg model to predict spawning and hatching locations

- USGS has proposed continuing research at these sites for the next several years, including assessing macrophyte communities and looking for other invasives in 2016.

Michigan Lake Erie Assessment

Seth Herbst, Michigan DNR

Travis Brenden, Michigan State University

- In 2012, the capture of several grass carp made the threat to western Lake Erie apparent.
- Eradication efforts implemented since 2012 are showing fewer fish over time, and will be continued.
- Ploidy testing of collected fish has shown rates of 76% diploid and 21% triploid.
- Analysis of otolith microchemistry is being used to help identify where the fish came from and infer their movements.
- Some collected fish were tagged and released as part of the Great Lakes Acoustic Telemetry Observation System. This network of receivers throughout the Great Lakes provides insight on how widely the tagged fish are moving, and will help identify spawning tributaries and areas of aggregation.

Grass Carp Work Group Report

John Navarro, Ohio DNR, GLP Chair

- The work group reviewed and provided input on the status of priorities included in the GLP Grass Carp priorities document; the group proposed adding the following items to the document:
 - Develop (a) control plan(s)
 - Engage transporters (non-regulatory)
 - Review other potential pathways (baitfish, food industry, water gardening)
- The work group also made recommendations to reorganize and streamline the priorities.
- The group recommended that the GLP form a sub-committee on grass carp to continue discussions at further meetings through the existing panel ad hoc structure.
 - A vote determined that an ad hoc group will be formed under the existing panel structure.
- GLP members discussed whether to sign on to recommendations on grass carp put forward by the Mississippi River Basin Panel (MRBP).
- ACTION ITEMS
 - Establish a grass carp ad-hoc committee based on panel member feedback and information from the breakout session.
 - Conduct an electronic GLP vote on the MRBP's request to support grass carp recommendations they will be submitting to the ANSTF.

Informational: Species Updates: Aquatic Plants

Moderator: Bob Wakeman, Wisconsin DNR

Hydrilla Infestations in Ohio

John Navarro, Ohio DNR, GLP Chair

- There are currently three infestations of Hydrilla in Ohio and each are being managed differently.
- The Ohio River is a large open system with a significant infestation and no control efforts in place.
- Pymatuning Lake is a large, 16,000 acre, closed system with several infestations, close to the Lake Erie watershed. Management efforts for this infestation include outreach, surveillance and spot treatment, but not eradication.
- Hydrilla has been found in small ponds within the Cleveland metropark system. Here an aggressive approach to management is being implemented including outreach, surveillance and eradication.

Progress on Hydrilla in the Erie Canal

Mike Greer, U.S. Army Corps of Engineers (USACE)

- The Hydrilla infestation in Tonawanda Creek, New York, is made up of large patchy beds along the creek banks, which also provide a source for spread.
- USACE performed a wide-scale herbicide application with spot treatments of Endothall in summer 2015.
- During the first two years of treatment, abundance was reduced from 33 percent to 4 percent and tuber density was reduced by 90 percent.

- Treatments in 2015 reduced Hydrilla fragments, impacted fewer native plants, and was implemented at a service ramp that wasn't controlled in 2014.
- In 2016 there will be more spot treatments and less broad scale use of herbicide.
- USACE is providing technical support for Pymatuning Lake in Ohio and is also continuing a Great lakes specific risk assessment for Hydrilla.

Starry Stonewort in Wisconsin

Bob Wakeman, Wisconsin DNR

- In 2014, starry stonewort was discovered in three of Wisconsin's inland lakes.
- Starry stonewort grows in large meadows that may prevent fish from spawning. The meadows of Starry Stonewort also increase water clarity by reducing sediment, producing allelopathic substances and precipitating calcium carbonate.
- To address starry stonewort, Wisconsin DNR is focusing on the physical spread of Starry Stonewort by searching nearby lakes for new infestations.

Starry Stonewort Work Group Report

Bob Wakeman, Wisconsin DNR

- This session provided an opportunity to update the knowledge base of attendees on Starry Stonewort biology, history, current infestations and control options.
- The group discussed knowledge gaps, research needs and how to continue information sharing into the future.
- The GLP is in a good position to solicit issues that need to be explored further and find mechanisms for discussion.
- ACTION ITEM:
 - Compile recommendations from the breakout session and hold a follow up webinar to discuss next steps and role of the GLP.

Informational: Pathway Updates

Moderator: Sarah LeSage, Michigan DEQ

Update on CAWS Advisory Committee

John Navarro, Ohio DNR and Bob Wakeman, Wisconsin DNR

- The Chicago Area Waterway System (CAWS) advisory committee is working to develop recommendations on preventing two-way transfer of AIS while considering impacts to transportation, flooding, and water quality.
- The group has broad representation with divergent interests and consensus is challenging.
- Consensus has been reached on two letters that have gone out supporting continued work and funding for USACE to develop and study AIS control technologies for the Brandon Road Lock and Dam.
- No final recommendations have been developed yet; the deadline for a final recommendation is December 2015.
- The USACE is conducting a feasibility study on AIS control technologies for the Brandon Road Lock and Dam that is scheduled to be complete by early 2019.

U.S. FWS - Lacey Act and Live Imports

Mike Hoff, U.S. Fish and Wildlife Service (USFWS)

- A bill introduced in the last congressional session would amend the injurious wildlife listing process and give the Secretary of Interior the ability to limit pathogens and parasites.
- 10 fish and one crayfish are part of a proposed multi-species listing under the Lacey Act; of the 11 species only one – the Zander – is currently found in the U.S.
- In 2010, USFWS attempted to list 9 species of large constrictor snakes under the Lacey Act. Four of the nine species were listed in 2012 and there were attempts to list the remaining five.
- A recent court ruling resulting from the constrictor snake listing found that USFWS lacks authority to prevent interstate transport under the Lacey Act; USFWS is currently appealing the ruling.

- Listings under the Lacey Act now receive a categorical exclusion under the National Environmental Policy Act (NEPA) which will allow the USFWS to expedite the federal listing process
- Interior Secretary Salazar convened a TIGER team to look at the bio-security of the U.S. in relation to the Lacey Act to see if there are gaps and recommend opportunities to streamline the process.
- Salamander chytrid fungus is an emerging disease issue potentially impacting U.S. wildlife; the USFWS can't ban the virus but it can prohibit host species and is evaluating which species should be listed to prevent the introduction of the virus.

GLDIATR - Internet Trade Update

Erika Jensen, GLC

- GLC developed the GLDIATR system as a demonstration project to assess the availability of invasive species for sale over the Internet.
- The project has developed over the last three years and GLDIATR has been operational for about a year.
- In July outreach was conducted electronically to over 150 sellers; 11 non-automated responses have been received to date, most of which were requesting additional information.
- Next steps include reviewing seller websites to see if changes have been made as a result of outreach.
- The GLC has applied for additional GLRI funding to continue the project, including software upgrades and convening an advisory board.

Habitattitude® Campaign Update

Marshall Meyers, Meyers & Alterman

- Habitattitude was created in 2004 as a collaboration between the Department of the Interior, the Pet Industry Joint Advisory Council and NOAA Sea Grant to promote responsible pet ownership and environmental stewardship by preventing the release of fish and aquatic plants.
- The website is being updated to be more user friendly and graphically pleasing with simple quick responses to visitor inquiries. The goal is of the new website is for the public to become informed about the effects of invasive species on the environment and choosing compatible pets.
- Information on the website will be expanded to include reptiles and amphibians.
- The website will also provide resources for teachers, students, aquarists, and water gardeners.

Open Discussion

Preliminary reactions to revised meeting format and recommendations for next meeting, including emerging issues.

- GLP members thought that presentations relevant to topic-specific breakouts should happen before break-outs to help inform participants.
- Multiple topics were of interest to GLP members and members would the opportunity to go to more of the sessions, possibly by holding the session back-to-back instead of concurrently.
- GLP members were encouraged to share feedback on meeting format and content with the Executive Committee, including providing ideas about issues to focus on at future meetings and about the possibility of extending meeting length to two full days.
- The next meeting will be in Traverse City, Mich., with the ANSTF.

Other Business

- The floor was opened for public comments; none were received.
- Several general announcements on upcoming events were made:
 - International Conference on Aquatic Invasive Species, Winnipeg, Manitoba, April 10-14, 2016
 - Upper Midwest Invasive Species Conference , LaCrosse, Wisc., October 17-19, 2016
 - Marine and Freshwater Invasive Species Conference, Buenos Aires, May 2-4, 2016

Adjourn