

**Great Lakes Panel on Aquatic Nuisance Species**  
**Organisms in Trade Ad Hoc Committee**  
Summary of industry discussion from June 3 and July 6, 2022

Water gardens/ landscaping

- **What do we want to hear/learn from this OIT industry?**
  - What types of plants are the biggest sellers?
    - What is most popular in numbers? And then that would assist with identifying alternatives?
  - Do the customers "request" or does the industry "recommend"
  - Why do they select the species that they sell, where do they originate?
  - What is the industry's baseline knowledge of invasive species, and of the regulations?
  - How do we communicate the most effectively with industry - how do we reach these groups? E.g., in Michigan had a rule that registration was required to sell certain products, but the industry said that they weren't receiving those communications. How do we ensure that the messages are getting to the right people?
  - Understand the supply chain, and what sells as alternatives. E.g. UMISC - how difficult to create a supply for a native alternative. What would be required to have alternatives available to commercialize. Can we help produce marketing materials?
- **What is the most effective way to engage with this industry?**
  - Good not to assume that we know how to communicate with industry. Understand the ways how they want to be communicated with.
  - Find an influential person within industry to help communicate
  - Use word of mouth to help communicate information
  - Industry champion
  - Indiana gave the example - licensed nurseries brought into the discussion about regulation before it takes effect, reached out to Master Gardeners, CISMAs to help spread word, and Indiana Invasive Plant Council, and did presentations to the industry association to help build ground support for state agencies' rules/outreach. Also used nursery inspectors - but this works better for terrestrial plants, but aquatic plants are much more difficult
- **What do you want the industry to learn/do because of our engagement?**
  - Regulation awareness - industry folks are interested in hearing about some of the problems that result from issues that arise from invasive releases, raise awareness of ecological impacts and costs - this might motivate more care/interest in the issue.
  - Point of contact to reach out to answer questions
  - Awareness of hitchhikers in addition to what they are directly selling
  - E.g. backtracking of aquatic plants has been difficult because of the source of the plants is unknown
  - Maintain positive relationship with the industry
- **Recent or ongoing industry engagement**
  - Minnesota DNR is conducting outreach to OIT related businesses, offering crayfish boils and permitting in MN, and has a certified in HACCP trainer
  - Pennsylvania is pursuing a Choose Native Program (water gardens and landscaping)
  - Illinois-Indiana Sea Grant is supplying IL retailers with What's in your Watergarden? and TakeAIM outreach materials. Promoting Beauty Contained outreach video to retailers. There may be an opportunity for the OIT Committee/ GLP to promote the video and outreach materials

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## Teacher/Classroom

- **What do we want to hear/learn from this OIT industry?**
  - What are they supplying?
  - Who are the suppliers/BSH?
  - Where are they getting their supplies?
  - What does the whole supply chain look like?
  - Are there regional differences?
  - Is demand driven by the teachers versus BSH will supply?
  - Quantity and value would be helpful
  - Best practice guidance given for animal care and disposal.
  - Do they take things back?
  - Any knowledge about AIS and challenges they provide?
  - Do we have readily available information for them?
  - Do they know the regulations for all the spp.?
  - How do regulations play into where they ship their supplies to?
  - I think one thing to hear from Teachers/classrooms is it would be great to learn what they exactly need for the classroom, we could then help figure the correct alternative
  - It was mentioned that teachers have noted that warehouses are often not well labeled (very vague labels without scientific names)
- **What is the most effective way to engage with this industry?**
  - Understand the pathway better
  - Getting a sense of who the players are is the first step
  - For engagement, we need to understand the pathway better and know who the main players are. It would be good to have a whitelist of who the suppliers are and provide them with BMPS
    - Criteria that could line up with whitelist as well – natives, locally sourced spp.
  - Starting from a place for collaboration instead of a punitive approach
  - Encourage industry to provide disposal guidelines
- **What do you want the industry to learn/do because of our engagement?**
  - Swap out potential invasive species with non-invasive or native species
  - Accept returns
  - Have more knowledge of invasive spp. laws
  - Basic understanding of threats from AIS
  - Supply their buyers with BMPs for disposal
  - Any movement or policy actions from industry (i.e. St Louis Accord)
  - Getting industry to move the message
  - Industry participation in prevention
  - What do they need from us as an AIS community?
  - How can we help them be more sustainable?
- **Recent or ongoing industry engagement**
  - Illinois-Indiana Sea Grant's Never Release outreach materials to biological supply houses. There is a potential opportunity for the OIT Committee/GLP to promote and enhance this work

## Aquaculture/ pet industry

- **What do we want to hear/learn from this OIT industry?**
  - MSU Extension recently completed a survey of retailers asking them where they get their information from on how to identify invasive species
  - New York is looking for context within the state to reach out to pet stores
  - What does the industry already know about OIT and their role in preventing spread in OIT? Do they even know that industry contributes to the problem, and do they think it is their responsibility to take action?
  - Learning is a two-way street, and we can learn from the pet industry
  - Aquaculture is highly regulated in Ontario
    - How does contamination impacts industry and their production?
    - There are two types of aquaculture: 1) closed recirculating system and 2) cage culture (in the Great Lakes primarily for rainbow trout) and the two are regulated differently with the latter being less strictly regulated
  - Where, if anywhere, do they go to seek identification information?
    - How do wholesalers go about labeling organisms?
- **What is the most effective way to engage with this industry?**
  - Engaging with industry relies on building a relationship, which can be done through knocking on doors and direct mail (which was the preferred engagement method by pet stores)
  - GLDIATR outreach response was approximately 30% via email. Need to do more investigating to see how we can better reach individual sellers
  - Licenses are required for all of the bait harvesters and dealers in Ontario. Can send materials on AIS when they are applying for their licenses. All harvesters are required to complete a HASP training before they can receive their licenses
  - Would be interesting to develop a Great Lakes wide engagement effort (i.e., could be developing outreach materials: mail, email, social media). Want to hear from industry members first to know how they would like to receive information
  - Ontario has done some communication with the pet industry and may be able to provide some insight
  - Online dealers may often be enthusiastic hobbyists that can be engages through local groups. However, there is not a good sense of the makeup on online sellers
- **What do you want the industry to learn/do because of our engagement?**
  - Reduce Invasive Pet and Plant Escape (RIPPLE) works to ensure hobbyist don't release organisms and is less about regulatory messages. Would like the pet industry to take on the role of working with buyers to push information on what to do with unwanted organisms and want them to be able to identify unwanted organisms
  - Proper labeling and being able to identify organisms they are selling and potential AIS
  - Better identify what it is they are selling
- **Recent or ongoing industry engagement**
  - Pennsylvania hosts Erie Pet Amnesty Days (Aquariums)
  - Illinois-Indiana Sea Grant's Be A Hero Release Zero - outreach materials distribution to retailers. Online training module. What's in your aquarium and TakeAIM outreach material dissemination. There may be an opportunity for the OIT Committee/ GLP to promote What's

in your aquarium/TakeAIM outreach materials and adapt training for other states

## Food/ Live trade

- **What do we want to hear/learn from this OIT industry?**
  - How they get their information regarding regulations (what is prohibited or regulated) in the various jurisdictions. This can help us evaluate to see if their references are outdated
  - Do they look at the regulations for all locations they are shipping live food to?
  - What nonnative species they are selling and why?
    - What motivates sellers to list different species?
  - What capacity/resources do they have to identify nonnative species?
    - What is their current knowledge level or willingness to learn?
    - What resources do they have/need to educate their buyers?
  - Are they aware of various campaigns that educate the public to avoid releases and are they supportive?
  - What is their current level of engagement with AIS prevention?
  - Better understand of how the industry functions at the various levels of distribution?
  - How do new species enter the trade and what is required on the industry level to raise/support/market/transport?
  - How does the industry respond to regulations?
  - Who is regulating this industry and how/by what kind of enforcement?
- **What is the most effective way to engage with this industry?**
  - This is a question that we should work with the food industry to answer
    - What are the preferred approaches by the industry? How do they respond to different methods and from whom is most desirable and at which frequency is useful (considering changing regulations and industry staff)?
  - Would it be possible to invite an industry representative to participate with this group via a meeting/ conference?
    - Need to determine who and what is the ask/ desired outcome
  - Some sellers (more local/ independent) may not have larger representatives that they communicate with or who best represents their needs (e.g., not members of PIJAC)
    - Could talk with local retailers to see who the community leaders are/ better understand their network
    - Local retailers may not have positive associations with PIJAC
  - How do we engage the different levels of the live food industry (suppliers, sellers, and buyers)? Which is more important to reach and how will the messaging differ?
- **What do you want the industry to learn/do because of our engagement?**
  - Not sell or stock regulated or prohibited species
    - Improved knowledge of regulations
    - Better identification of regulated species/ access to resources
    - Improved labeling practices (better accuracy)
  - Have appreciation for/ awareness of the risks of introducing nonnative species more generally and how nonregulated species still have the potential to cause harm if released
  - Provide education and outreach materials to their customers regarding release and invasion
  - Be more comfortable reaching out/ building relationships with regulators so they are willing to reach out with questions/ concerns

- Hold other industry representatives accountable and lead by example
- Engaging with the industry can help us better answer the above questions
- **Recent or ongoing industry engagement**

## Cultural/ Merit release

- **What do we want to hear/learn from this OIT industry?**
  - Is merit release an industry within the Great Lakes or just a pathway?
    - Are there stores that facilitate this pathway? Or are they aware this is even happening?
  - Does the species being released matter to the person doing the release or would they be open to native alternatives? What about aquatic vs terrestrial alternatives?
    - Likely less about the species and more about maximizing lives saved in the most efficient way (lower cost). Worms, crickets, and minnows are popular
    - Working with wild bait harvesters (white suckers collected from the Lake Michigan basin) that pose a lower risk and could be legally released
  - Where are the animals being purchased and are the sellers (live food market, pet store) aware?
  - Which sub-pathway being used the most to facilitate this: live food, pet stores?
  - For OIT group: what is considered cultural/merit release? Animal rights organization releasing organisms included under our definition?
    - What is the prevalence of this within the Great Lakes?
    - Need to identify representatives who we could engage with
- **What is the most effective way to engage with this industry?**
  - Would need to first identify representatives
  - Stores who sell live fish may accommodate people who are planning to do live release
  - How do sellers engage with people outside vs within cultures who are known for merit release?
    - Want to approach this with cultural understanding and sensitivity
  - NY is working on relationship building with live food sellers (local stores) and trying to educate sellers on the consequences and possible alternatives
    - Providing alternatives to generating good karma; protecting native species and their habitats
  - Identify community/ cultural leaders who would be willing to speak with us and help us better understand the practice(s)
    - Darren Yeo
    - Dr. Henry Shiu
- **What do you want the industry to learn/do because of our engagement?**
  - Educate on ways to practice life/ merit release that are both legal and low risk and identify champions to help promote better practices (maybe us!)
  - Want those who participate to be aware of regulatory contacts and be comfortable reaching out and asking for help/ better alternatives
  - Normalize this practice within western culture to raise awareness and increase the number of sellers who can provide them with native/ low risk alternative animals
  - Ensure we are not missing the sellers
- **Recent or ongoing industry engagement**

- Life Release outreach to Buddhist communities in NYC area. The lead for this activity is Melissa Cohen, Region 2 Fisheries, [melissa.cohen@dec.ny.gov](mailto:melissa.cohen@dec.ny.gov). There may be an opportunity for the OIT Committee/GLP to create database of Buddhist communities and provide educational/outreach materials and engage in personal interaction with these communities

## Bait

- **What do we want to hear/learn from this OIT industry?**
  - Who are all of the players in the industry?
    - Suppliers, harvesters, aquaculture, anglers (end users), bait shops, transporters
    - Who do we know the least about/ don't know who they are?
    - What is the awareness of the various players (do transporters know the regulations?)
    - What is their knowledge of AIS and species identification?
  - Are species well regulated within the bait trade across the various taxa? (invertebrates, fish, plants)
  - Do sellers/ buyers know what they are selling and are the labels accurate?
  - How accurate is species identification?
  - How do sellers introduce new bait (based on popularity) into the industry?
    - Ex: carp balls
  - Worms, carp balls, etc. fall outside of state regulatory authority which can make these nontraditional baits difficult to monitor/ control
  - More information on industry economics
    - Highest selling items/ most popular
  - What is the potential for hitchhikers and what is current industry awareness and prevention?
  - Who are the main suppliers and who are they selling to?
- **What is the most effective way to engage with this industry?**
  - Better understanding of industry dynamics to help with the timing of planning engagement
  - Work from both ends of the supply chain. Identify main suppliers and local sellers to engage with
    - A more comprehensive but labor-intensive approach
  - Opportunities for information sharing building off the regulatory framework that is already in place (state and provincial licensing for bait dealers and retailers)
  - Bait produced via aquaculture also provides good opportunities for engagement through existing regulatory framework
  - Utilize existing list of bait dealers and retailers
- **What do you want the industry to learn/do because of our engagement?**
  - Bait industry being comfortable coming to regulators with questions/ concerns and keeping us aware of new bait
  - Support initiatives that are directed towards the end user (anglers) about proper purchasing, use, and disposal of bait
  - Better idea and avoiding cross contamination or removing unknown items from sale (from both dealers and end users)
  - Proper and accurate labeling
- **Recent or ongoing industry engagement**
  - Minnesota DNR is conducting outreach to anglers regarding Bait. Bait release by anglers is a top issue in MN and has been for decades. The GLP should continue to support by providing

- a venue for discussion, lessons learned and improvements to outreach that bring about documented behavior change aimed at bait dumping
- Ohio DNR provides information outreach and there may be an opportunity for the OIT Committee to engage/ support a regional bait outreach effort
  - Illinois-Indiana Sea Grant's Don't Dump Bait to IL retailers. There is not a role for the OIT Committee/GLP to support this work

Contacts and affiliations of industry contacts within Great Lakes jurisdiction that should be engaged by the OIT ad hoc Committee in future meetings or workshops

- Willie Loh, Pres., MN Aquarium Society Board of Directors, [whtloh@yahoo.com](mailto:whtloh@yahoo.com)
- Steve Stoltz, Pres, MN Water Garden Society
- Clarence Bischoff, Pres., Minnesota Aquaculture Association Board of Directors
- Sean Hartzell at the Pennsylvania Fish and Boat Commission who is involved with many of these contacts (not industry but works with industry)
- Melissa Cohen (Region 2 Fisheries, [melissa.cohen@dec.ny.gov](mailto:melissa.cohen@dec.ny.gov)) has a short list of merit release communities