

Meeting of the Pennsylvania Governor's Invasive Species Council
Tuesday, March 8, 2022 | 10:00am
(Held virtually via Microsoft Teams)

** All text in italics indicates additional information included by the minute taker except where scientific names are mentioned.*

Council Members Present: Amy Jewitt, Andrew Ernst, Andrew Rohrbaugh, Bradley Cardinale, Brian Harris, Brian Pilarcik, Cliff Lane, Donald Eggen, Felicia Lamphere, Fred Strathmeyer, Gregg Robertson, James Grazio, Jeffrey Wagner, Jocelyn Behm, Kate Harms, Lisa Murphy, Mary Beth Ruh, Mike Dunn, Piper Sherburne, Russell Redding, Ruth Welliver, Sara Stahlman, Sarah Whitney, Scott Bearer, Sean Hartzell, Sean Mahoney

Other Participants Present: Andrea Hille, Becca Manning, Brenda Shambaugh, Brian Daggs, Brian Ensign, Brian Gallagher, Bryon Ruhl, Darby Byington, Ellyn Campbell, Erik Johnson, Erin Lee Frederick, Eryn Spangler, Eve Adrian, Gregory Podniesinski, Haley England, Heather Smith, Jeniffer Schwartz, Jenny Tompkins, Jill Rose, Jim Suleski, Johnny Zook, Joseph Sieber, Kate (*no last name*), Kaylan Hubbard, Kevin Hess, Kierstin Carlson, Kinga Obartuch, Kris Abell, Kristen Markley, Kyle Schutt, Lisa Candelore, Lydia Martin, Matthew Goldsmith, Max Pohlman, Michael B. Dunn, Michael Hutchinson, Michael Roth, Morgan Sheffield, Nate Lotze, Nick Decker, Norris Muth, Philip Light, Phillip Stober, Ryan Hoeffner, Sandy Thompson, Shea Zwerver, Stephen Rudman, Tara Ramsey, Tim Haydt, Tom Cermak, Trilby Libhart, Victoria Challingsworth, Zachary Newby

Welcome and Introductory Remarks

Fred Strathmeyer (PA Department of Agriculture – PDA) welcomed everyone to the meeting. He then introduced Secretary Russell Redding (PDA) to give opening remarks.

Secretary Redding began by saying that though he has not been able to join PISC meetings in the recent past, he felt it was appropriate to join today, post-budget hearings, to touch base. This year, with the addition of (*proposed*) funding for PRISM (Partnerships for Regional Invasive Species Management), he wished to thank members of the Council for their work, advocacy, and strategic thinking on behalf of PRISM, an important initiative for the Commonwealth.

An infrastructure is being built for PRISM, both in terms of governance and across the state for managing invasive species long-term (i.e., for species that are already here and those that will come). There is a lot of comfort knowing we finally have a plan, a structure, PRISM regions, and

\$3.5 million in funding supported by the Governor's proposal. With that funding will also come critical staffing capacity.

Secretary Redding asked Council members and stakeholders to continue advocating for and supporting the Governor's proposed budget for PRISM over the next several months (through this budget season). Though the PRISM concept did seem to gain traction in the House, the Secretary advised us not to make any assumptions, as he and others were left with the question of support (*i.e., will the House support this funding ask for PRISM?*).

Advocacy for PRISM could be done by reaching out to House and Senate members and speaking to the benefits individuals and organizations see in establishing PRISM as a model/structure for the state. Additionally, advocacy is needed to support funding for PRISM in the Governor's proposed budget and the importance of keeping this funding. Secretary Redding sees this funding as being the "first installment" and mentioning that there is a longer-term strategy to build out PRISM over time. At present, we're starting at \$3.5M, getting our framework, and then in years to come, we'll continue building on that framework.

Even though funding for PRISM is in the Governor's budget and we are post-budget hearings, Secretary Redding urged Council members and stakeholders to take full advantage of this time to talk about the importance of the funding and particularly where we see the opportunities in our regional structure. And to be so bold, to talk about within the regions, the types of organizations and issues that we see PRISM funding addressing.

In the Senate, there was not the same type of active exchange as in the House. PRISM was noted and acknowledged, but more in the context of the funding being proposed by the Governor and coming up in the discussion around spotted lanternfly. Again, no assumptions should be made at this time (*regarding support for PRISM by the House/Senate*).

One of the most important pieces of information we have is what the [Center for Rural Pennsylvania](#) did; their [fact sheet](#) and [webinar](#) held on August 24, 2021 on the topic of economic impacts of invasive species. The Center for Rural Pennsylvania has a very good reputation and is comprised of some House and Senate members. Using these resources as a platform to talk about the importance of PRISM will be key.

Secretary Redding thanked Fred Strathmeyer (PDA) and Kris Abell (PDA); it's been a long journey as far as the discussions around how to address invasive species in Pennsylvania. We're at the point now with the Council functioning well, having a very talented leader in Kris, and the Council being built on the framework of a partnership across multiple agencies. Our Council is also engaged in thinking and putting forth good ideas of how we manage and structure our planning and response to invasive species. We're in a good place! Of course, funding is critical, but also the voices of Council members and stakeholders will be needed now and over the next couple of months to advocate for PRISM.

Fred Strathmeyer (PDA) thanked Secretary Redding for joining the meeting this morning and providing his comments. He also thanked Council members for getting us to this position (*of having potential funding for PRISM in Pennsylvania*). As the Secretary said, this just begins the work. We need to continue talking about PRISM, the goals, potential successes, and the areas that become more personalized and localized; those are the things that will resonate with legislators.

We are now at a place where we need to take this momentum, go way beyond, and look at what the future holds for invasive species, the Council, how we address our approach to invasive species, how we become proactive and integrated across the state when it comes to this type of situation with PRISM and invasives. As the Secretary noted, we're just waiting for the next invasive species to show up, so better to be prepared.

Announcements, Roll Call, and Approval of Minutes

Fred Strathmeyer (PDA) conducted the roll call. A quorum is present.

MOTION: Gregg Robertson (PA Landscape & Nursery Association – PLNA) moved to approve the December 7, 2021 meeting minutes. Jeffrey Wagner (Western PA Conservancy – WPC) seconded the motion. **Motion approved.**

Kris Abell (PDA) announced that Gary Walters (DEP), a long-time Council member, has retired. James (Jim) Grazio will take his place as the primary designee representing DEP on the Council. We wish Gary well in his retirement.

Mike Dunn (PLNA) will be replacing Gloria Day as the primary designee representing PLNA on the Council. Gregg Robertson (PLNA) will remain the alternate.

Every year, primary Council members (*not alternates*) must submit a statement of financial interest form to the ethics department by May 1, 2022. Information about this was included in the meeting packet (*which was sent to all Council members via email prior to today's meeting*). This form can be submitted online.

ACTION: Felicia Lamphere (DEP) mentioned that in her new position with the agency, she may not be able to attend PISC meetings every quarter, but she will attend when she can. With this in mind, she feels another alternate should be selected for DEP to fill in when needed.

Invasive Species Listing Committee

Spokesperson: Andrew Rohrbaugh, Botanist, PA Department of Conservation and Natural Resources (DCNR), Bureau of Forestry, Ecological Services Section

We have 149 plant species that have been proposed for inclusion on the PISC website. Those were the plant species that were initially ranked by the survey taken by Council members. Of those, 36 species still need full assessments completed. It used to be 45 species (*that needed assessments completed*), but New York (NY), the Western PA Conservancy (WPC), and DCNR have run nine assessments, which brought the number down to 36.

Having an assessment completed is critical for listing these species on the PISC website. Having species listed is good and educational. We can argue over how large the list should be, but if we have those assessments completed, we can have a species on the list, even if it scored low.

For some of the more serious plants or early detection rapid response (EDRR) species that we might consider adding to the list quickly, we need to discuss if that would be okay to do prior to completing an assessment for a particular species (so long as an assessment is prioritized or is currently being assessed). This is the case for some of the 36 species (especially for public education purposes), though Andrew is not recommending that all 36 species be listed prior to having an assessment completed.

Noting the importance of the assessments in terms of how we add things to a list for the PISC website, Kris Abell (PDA) has worked to have the full list and all our information pulled together. The following screen shot is an example of something the public could see on the PISC website. ([View live link here.](#)) The list is sortable, so it can be searched by species name (scientific or common), priority score, PLNA Economic Importance Score, etc. The assessment process is based off of the Invasive Impact Score; for example, a species like [Mimosa](#) (*Albizia julibrissin*) that may not score high currently in Pennsylvania, but is still important to keep educating people about, is on the list, but not as a top priority.

Scientific Name	Common Name	Aquatic or Terrestrial	EDRR	Weed Rank	DCNR Rank	Priority Score
Acer ginnala	Amur Maple					
Acer palmatum	Japanese Maple					
Acer platanoides	Norway Maple					
Aegopodium podagraria	Goutweed					
Allanthus altissima	Tree-of-Heaven					
Akebia quinata	Chocolate Vine					
Albizia julibrissin	Mimosa					
Alliaria petiolata	Garlic Mustard					
Alnus glutinosa	European Black Alder					
Ampelopsis glandulosa	Porcelain Berry					
Anthriscus sylvestris	Wild Chervil					
Aralia elata	Japanese Angelica Tree					
Artemisia vulgaris	Mugwort					
Arthraxon hispidus	Small carpetgrass					
Arundo donax	Giant Reed					
Berberis thunbergii (seeded varieties)	Japanese Barberry					
Berberis thunbergii (Seedless Varieties)	Japanese Barberry					
Berberis vulgaris	European Barberry					
Bromus japonicus	Japanese brome					
Bromus sterilis	Poverty Brome					

We're also looking at the EDRR category and hoping to change it to have categories such as "Potential" (species not yet in PA), "Emerging" (species just starting to get into PA), and "Established" (something like multiflora rose that is everywhere).

Currently Andrew is working on completing an assessment for [poison-hemlock](#) (*Conium maculatum*). Amy Jewitt (WPC) has been doing a great job trying to recruit volunteers to help complete species assessments; thanks to her and to anyone on this call who's volunteered to help with those!

For prioritizing which species we're going to assess first, we're looking at ones that are potentially considered for listing by the Noxious Weed Committee. This includes agricultural species, EDRR species, worst of the worst ([top '25' PISC recommended species](#)), and also landscaping plants.

Another stage of assessments is the economic assessment which entails running part of the Generic Impact Scoring System ([GISS](#)) process. The GISS is needed since the WPC and NY assessments do not deal with economic impacts. So far, we do not have many economic impact assessments completed and is lower on the committee's prioritization scale; however, Andrew is trying to complete these for any species that are used in landscaping so this information is available prior to considering for listing on the [PA Noxious Weed List](#).

Right now, a lot of these assessments are being completed by one person (i.e., Andrew R.). The committee needs to come up with a better process for review of completed assessments, whether that's multiple people conducting the same assessment and averaging out the score, or having peer-review of the initial assessment. If others on the Council have thoughts on this, please contact Andrew (anrohrbaug@pa.gov).

Gregg Robertson (PLNA) asked for information about the economic assessment and some of the things that go into it. Andrew replied that it's part of the GISS process we've adopted for use with other taxa, and so we're only running section 2 which has to do with a species' economic impacts (i.e., issues with agriculture, infrastructure, etc.). Gregg asked if the economic assessment considers if a species is economically important species to the industry? Andrew replied, saying the assessment has more to do with economic impacts, such as the costs associated with controlling a species. If we are proposing a species that might have economic impacts to the industry, it behooves us to do our due diligence and also come up with the economic cost to infrastructure, agriculture, removal efforts, etc.

Other taxa are also being worked on by committee members. Sean Hartzell (PFBC) is working on aquatics, Houping Liu (DCNR) and Lawrence Barringer (PDA) are working on insects, and Jill Rose (DCNR) is working on pathogens.

Houping and Lawrence came up with lists of species to consider adding to the PISC website. They break down into three categories:

- Potential menaces (species not yet in PA, but have the potential to cause serious damage upon arrival)
 - [Asian longhorned beetle](#)
 - [Asian giant hornet](#)
 - [Red imported fire ant](#)
 - [European fire ant](#)
 - [Kudzu bug](#)
 - [Winter moth](#)
 - [Crapemyrtle bark scale](#)
 - [Box tree moth](#)
 - [Asian garden beetle](#)
 - [Spruce longhorned beetle](#)

- Emerging threats (species introduced to PA with increasing damage coincided with expanding distribution)
 - [Spotted lanternfly](#)
 - [Hemlock woolly adelgid](#)
 - [Walnut twig beetle](#)
 - [Sirex woodwasp](#)
 - [Elm zigzag sawfly](#)
 - [Viburnum leaf beetle](#)
 - [Lily leaf beetle](#)
 - [Allium leaf miner](#)
 - [Fall armyworm](#)
 - [Cherry curculio](#)

- Established pests (well-established species with significant damage incurred in the past and continued currently)
 - [Spongy moth](#)
 - [Emerald ash borer](#)
 - [Elongated hemlock scale](#)
 - [Balsam woolly adelgid](#)
 - [Spotted-wing drosophila](#)
 - [Japanese beetle](#)
 - [Asian ladybeetle](#)
 - [Introduced pine sawfly](#)

Andrew asked if Council members were okay with putting these species on the PISC website prior to assessments being conducted (and having those assessments being worked on in tandem)?

Jill came up with a list of invasive pathogens. They are as follows:

(Note: EDRR = *Early Detection, Rapid Response species*)

- [Sudden oak death](#) (EDRR)
- [Beech leaf disease](#)
- [Beech bark disease](#) (EDRR)
- [Oak wilt](#) (EDRR)
- [Laurel wilt](#) (EDRR)

Andrew noted that when he was going over the invasive plant assessment process, there was a separate assessment done by both NY and WPC for a particular species (*he doesn't remember which one*). Interestingly enough, the resulting scores were 79 and 75 respectively (*out of 100*), which didn't show much discrepancy between the two groups running the assessment and resulted in the same category of invasiveness. So far, not many PA species have more than one assessment run, so it was good to see this result.

Gregg Robertson (PLNA) asked if [Highly Pathogenic Avian Influenza](#) (HPAI) is considered an invasive pathogen (*and wondered if it should be included on the pathogen list*). He mentioned this virus is "raising its head" again in some areas. Andrew responded, saying the pathogen list compiled by Jill Rose (DCNR) was made with a forest health perspective. However, Andrew felt that if folks from PA Department of Agriculture or PA Department of Health were included in the conversation about pathogens, HPAI and other pathogens would likely be added to the list.

ACTION: Gregg asked if this pathogen list should remain just with forest pest pathogens, or if it should be expanded? Andrew deferred to Kris Abell (PDA) and asked that he follow-up on Gregg's question of whether or not we should include human and animal pathogens for purposes of education and outreach. Kris responded, saying there would be benefits and detriments to doing so. Fred Strathmeyer (PDA) commented that a small work committee could be assembled to have this conversation.

Andrew Ernst (PA Farm Bureau) commented that some of the money for PRISM would be available because of a reduction in animal health issues. He felt it would be good to add some of these additional human/animal pathogens to the list (*being referred to above*).

Piper Sherburne (PA Association of Conservation Districts – PACD) wondered if the Council should vote today on whether or not certain species should be added to these lists to ensure risk and economic impact assessments are completed. Kris Abell (PDA) felt the whole Council should have additional time to review the full list at a future meeting and consider whether or not this information should be posted on the PISC website. Discussion and a vote could happen at the next PISC meeting (*in June*).

ACTION: Piper felt it was a good idea to distribute these lists to the full Council prior to the next PISC meeting for consideration and voting on by members.

Don Eggen (DCNR) commented in the meeting's Chat Box that the committee may want to coordinate with the [One Health](#) task force for purposes of reviewing animal and human pathogens.

Ruth Welliver (PDA) commented in the meeting's Chat Box that additional species groups are still to be considered for developing related lists. They include snails, other mollusks, worms, and mammals.

Sean Hartzell (PFBC) has completed 18 GISS assessments for invasive fish and invasive aquatic invertebrates. He can likely give an update on this at the next PISC meeting.

PRISM Program Committee

Spokesperson: Kris Abell, Governor's Invasive Species Council Coordinator, Bureau of Plant Industry, PA Department of Agriculture (PDA)

Partnerships for Regional Invasive Species Management (PRISM) is the Council's plan for a statewide invasive species management program. It would develop public-private partnerships, be regionally based as well as locally and community focused (led by a local organization) and state funded which would provide monies for coordinators, staff, contracts, supplies, and materials.

There is currently a line item in the Governor's proposed budget that would fund PRISM for the coming year; however, that funding is not guaranteed at this point.

In preparation for when a PRISM program is funded at the statewide level, this committee has been working on and recently completed a PRISM Implementation Plan (which includes 18 steps). This Plan was included in the Council meeting packet (*which was sent out via email prior to today's meeting*). If there are any questions, concerns, or edits that Council members wish to make to this Plan, contact Kris Abell (krabell@pa.gov).

Kris, Shea Zwerver (DCNR), and Deb Klenotic (DEP) have been working on compiling a PRISM Talking Points document for use by stakeholders and others who wish to communicate about the proposed PRISM program (i.e., what it is, what it's about, how it will work, what it will and won't do). This document was also included in the Council meeting packet. If there are recommendations to improve this document, contact Kris Abell.

The Governor's proposed budget includes \$3.5 million for PRISM meaning there's potential this program could roll out next year.

One key component listed in the PRISM Implementation Plan is establishing a Review Committee. When an RFP is released for local host organizations to lead their regional PRISM, those applications need to be reviewed by a group of people. The PRISM committee has recommended that a Review Committee of three PISC members and two PA Department of Agriculture (PDA) staff would comprise this Review Committee. They would review applications and provide a recommendation to PDA for host organization selection (*for each of the six PRISM regions*).

If any Council member is interested in serving on this Review Committee (which would be a fair amount of work, though very important and valuable), please consider your involvement and contact Kris Abell if interested.

At the last PRISM committee meeting, a question was brought up of whether we should consider rolling all PRISM regions out at once (which would be a heavy lift), or do a more gradual approach. This is something more to discuss by the committee.

Lastly, continued promotion and advocacy for PRISM is needed as funding for PRISM is not guaranteed now or in years to come. With this in mind, are there other documents/resources that the PRISM committee or others could develop that would be useful to Council members and stakeholders? Current resources available include the PRISM Talking Points document and the Center for Rural Pennsylvania economic impacts of invasive species [fact sheet](#). If additional resources are needed, let Kris Abell or other members of the PRISM committee know.

Fred Strathmeyer (PDA) commented that additional resources to advocate for PRISM should be identified and created now. The timeframe to lobby for PRISM is late May and early June (i.e., to inform/educate legislators on the need for PRISM). Think about involvement from different segments of the Council and its stakeholders; this is encouraged! Input from people around the state would be greatly appreciated. This needs to be made personal for those working in the regions as well as the regions' affiliated legislators.

Sandy Thompson (McKean County Conservation District) asked in the meeting's Chat Box if it would be possible to send the Talking Points document to non-Council members also? This way, others can promote PRISMs to our legislators. Kris Abell (PDA) responded in the Chat, saying yes, anyone who would like the PRISM program Talking Points document, please email him a request (krabell@pa.gov).

Don Eggen (DCNR) commented in the meeting's Chat Box that we need to let legislators know that \$3.5 million will not fully implement the PRISM program. So, we need a plan on what to implement with the proposed funds minus the funding that goes to PDA for staff/resources for

PISC. The full proposed PRISM budget was \$7.8 million for six PRISM regions, and another \$625,000 for PDA/PISC staff/resources.

Controlled Plant and Noxious Weed Committee Meeting Update

Spokesperson: Trilby Libhart, Botanist, Bureau of Plant Industry, PA Department of Agriculture (PDA)

There was a [Controlled Plant and Noxious Weed Committee](#) (CP&NWC) meeting on January 20, 2022. Three plants were added to the [noxious weed list](#) at that meeting. They included:

- [Ravenna grass](#) (*Tripidium ravennae*) – this is an ornamental grass, commercially available; listed as Class A noxious weed
- [Glossy buckthorn](#) (*Frangula alnus*) – listed as Class B noxious weed
- [Common buckthorn](#) (*Rhamnus cathartica*) – listed as Class B noxious weed

All three species will become official Pennsylvania noxious weeds on April 5, 2022.

Species up for consideration (*for listing as noxious weeds*) at the April 21, 2022 CP&NWC meeting will include:

- [Chocolate vine](#) (*Akebia quinata*)
- [Wild chervil](#) (*Anthriscus sylvestris*)
- [Lesser celandine](#) (*Ficaria verna*)

The rest of the year, the committee will also consider:

- [Bush honeysuckles](#) (*Lonicera* spp.)
- [Burning bush](#) (*Euonymus alatus*)
- [Starry stonewort](#) (*Nitellopsis obtusa*)

The committee continues to work on [phragmites](#) (*Phragmites australis* ssp. *australis*) as a controlled plant. Hopefully that will come up for consideration by the end of 2022.

CP&NWC meetings are open to the public. More information about the committee is available on the [CP&NWC website](#). Questions can also be sent to Trilby at tlibhart@pa.gov.

Legislative Committee

Spokesperson: Shea Zwerver, Executive Policy Specialist, PA Department of Conservation and Natural Resources (DCNR)

This committee drafted legislation that would amend Title III by adding a chapter to codify PISC (which is now just an executive order). Feedback was received from the legislative committee, the legislation was edited, and it was sent out to the larger group. One key discussion led to reformatting this proposed legislation and the removal on a section dealing with the rules and responsibilities of PRISM. That authority related to PRISM will be delegated to PISC according to how the current language is written.

The latest draft of the legislation includes creation of an invasive species fund that would provide monies for PRISM and PISC. This would hopefully be more stable than having funding tied to rapid response line items in PDA's budget.

Currently the legislation gives PISC and PDA authority to utilize the invasive species fund to support invasive species programs including but not limited to PRISM. The draft legislation has been sent to PDA's policy and legislative offices in mid-February; they'll take the lead from here.

Our original goal was to introduce this legislation in the March session, but it's looking like the timeframe will now be in June or sometime next year. The legislative committee has been concurrently working with the communications committee to align our efforts between the committees and continue to build awareness and momentum, post [National Invasive Species Awareness Week](#) and also the budget hearings. We'll want to maintain that momentum to drum up support.

As Kris Abell (PDA) mentioned, we collaborated with the Center for Rural Pennsylvania to produce an economic impacts of invasive species fact sheet that can be used.

We also started brainstorming key legislative districts for legislators who could possibly be sponsors or co-sponsors of the legislation and thinking about invasive species that are really prevalent in those districts. The committee may want to coordinate field visits for legislators to visit areas where invasive species impacts can be noticed easily (e.g., orchards where spotted lanternflies are swarming, or wading through Japanese knotweed to gain access to a waterway).

If there are other resources this committee can provide that would be helpful to an organization that wishes to advocate for PRISM, let Kris Abell (krabell@pa.gov) or Shea Zwerver know.

Communications Committee

Spokesperson: Kris Abell, Governor’s Invasive Species Council Coordinator, Bureau of Plant Industry, PA Department of Agriculture (PDA)

The committee has been working to improve the [PISC website](#) and doing so in conjunction with the PDA digital team. This has involved reorganizing the navigation into a structure that’s more user-friendly and easier for us to develop content in.

We created friendly URLs (which are currently active) for the:

- PISC homepage: www.agriculture.pa.gov/InvasiveSpeciesCouncil
- PRISM page: www.agriculture.pa.gov/InvasiveSpeciesCouncil/PRISM

Our committee hopes to continue improving the site with new content.

Most of our recent efforts have been centered around National Invasive Species Awareness Week (which was last week). We sent out a [special issue of the PISC e-newsletter](#) with links to various learning resources including webinars, videos, and fact sheets. The e-newsletter was opened by 369 recipients, and there was good distribution of clicks on the links, nothing getting a ton of clicks, but a number of links getting good engagement.

The committee developed an op-ed campaign for Pennsylvania’s major mainstream media outlets. A big thank you to many individuals for their great participation in authoring these op-eds. Jim Grazio’s (DEP) op-ed was placed in the [Erie Times](#), and a few smaller outlets picked up Brenda Shambaugh’s (PACD) piece after the PA Association of Conservation Districts (PACD) sent it through their distribution network. Overall, we didn’t get the response from the media outlets we wanted. (It’s possible that the international events dominating the news factored in.) We’ll try sending them again in coming weeks/months.

We used the Center for Rural Pennsylvania’s economic impacts of invasive species [fact sheet](#) to develop a [video](#) that was shared across Facebook, Twitter, and LinkedIn. The DCNR’s posts of the video led engagement by far – over 70 people shared DCNR’s post of the video on Facebook and Twitter, and the video was viewed over 2,500 times. This is really great traction!



Video: “Economic Impacts of Invasive Species in Pennsylvania” ([watch on YouTube](#))

On March 2, Fred Strathemeyer (PDA) and Jim Grazio (DEP) were featured on 89.5 WITF's "SmartTalk" program for a [live interview](#) on invasive species and their impacts as well as the PRISM program. They did a great job talking about this and the need for regional collaboration, all in just 15 minutes. We've pitched this to 90.5 WESA FM's "The Confluence" program as well; waiting to hear back.



Audio Interview: "Controlling Invasive Species in Pennsylvania" ([listen to on SmartTalk](#))

Aquatic Invasive Species Rapid Response Workgroup Update and Best Management Practices Proposal

Spokesperson: Sara Stahlman, Extension Leader, PA Sea Grant

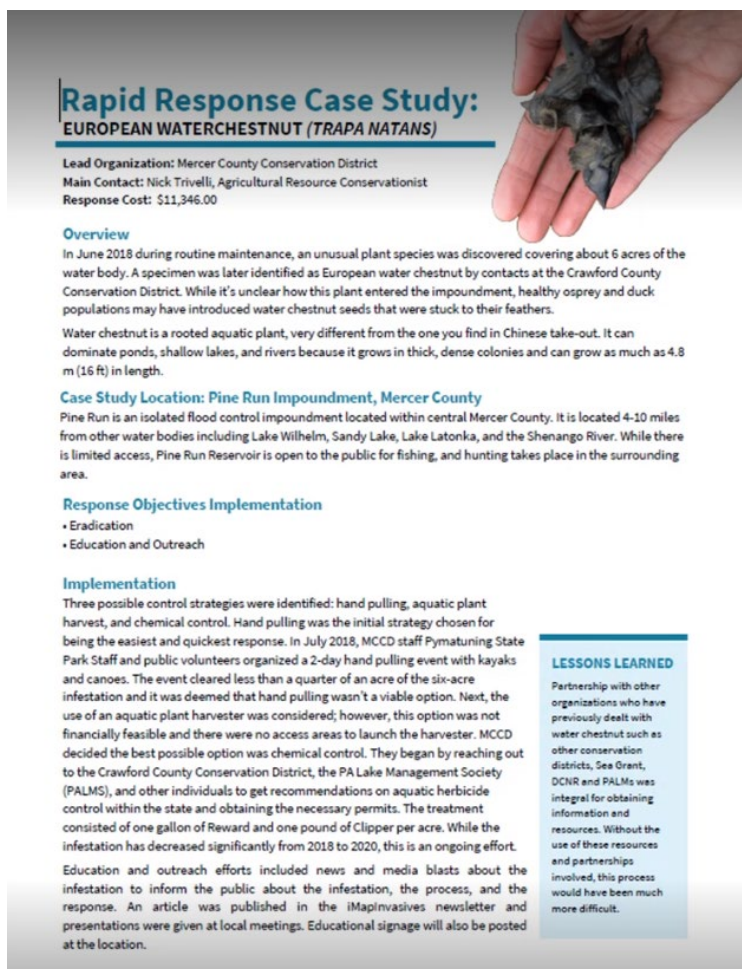
At the last Council meeting, this committee pitched a proposal and formal request for PISC to be the entity to house an aquatic invasive species (AIS) best management practices (BMPs) database/library. This would provide formal guidance approved by PISC on BMPs for management and control of AIS.

Sara clarified this database would not be a link farm, but rather guidance that the Council and this committee agree upon to be used as recommendations and would be housed on the PISC website. An opportunity for comment was provided during today's meeting; however, no comments were received. If folks would like to contact Sara at another time with comment(s), they may do so by emailing her (sng121@psu.edu).

At the next PISC meeting, Sara will have an outline ready for review of what the database will look like and ask for additional comments at that time.

This committee has also been pulling together case study documents for rapid response actions that have been completed in Pennsylvania. For example, Sara showed a water chestnut (*Trapa natans*) case study (see image below) that outlines the Mercer County Conservation District's response to water chestnut in the Pine Run impoundment. Another case study is currently being worked on for invasive carp in the 84 Pay Lakes.

The purpose of these documents is to share information about the different response actions, various control strategies that were used, lessons learned, and other helpful information for someone who may be responding to the same species elsewhere and they want a contact of someone to reference before implementing a rapid response.

The image shows the cover of a case study document. At the top right, there is a photograph of a hand holding several dark, pointed water chestnut seeds. The title 'Rapid Response Case Study: EUROPEAN WATERCHESTNUT (TRAPA NATANS)' is written in blue and black text. Below the title, it lists the lead organization as Mercer County Conservation District, the main contact as Nick Trivelli, and the response cost as \$11,346.00. The document is divided into sections: Overview, Case Study Location, Response Objectives Implementation, Implementation, and Lessons Learned. The 'Lessons Learned' section is highlighted in a light blue box.

Rapid Response Case Study:
EUROPEAN WATERCHESTNUT (TRAPA NATANS)

Lead Organization: Mercer County Conservation District
Main Contact: Nick Trivelli, Agricultural Resource Conservationist
Response Cost: \$11,346.00

Overview
In June 2018 during routine maintenance, an unusual plant species was discovered covering about 6 acres of the water body. A specimen was later identified as European water chestnut by contacts at the Crawford County Conservation District. While it's unclear how this plant entered the impoundment, healthy osprey and duck populations may have introduced water chestnut seeds that were stuck to their feathers.

Water chestnut is a rooted aquatic plant, very different from the one you find in Chinese take-out. It can dominate ponds, shallow lakes, and rivers because it grows in thick, dense colonies and can grow as much as 4.8 m (16 ft) in length.

Case Study Location: Pine Run Impoundment, Mercer County
Pine Run is an isolated flood control impoundment located within central Mercer County. It is located 4-10 miles from other water bodies including Lake Wilhelm, Sandy Lake, Lake Latonka, and the Shenango River. While there is limited access, Pine Run Reservoir is open to the public for fishing, and hunting takes place in the surrounding area.

Response Objectives Implementation

- Eradication
- Education and Outreach

Implementation
Three possible control strategies were identified: hand pulling, aquatic plant harvest, and chemical control. Hand pulling was the initial strategy chosen for being the easiest and quickest response. In July 2018, MCCD staff Pymatuning State Park Staff and public volunteers organized a 2-day hand pulling event with kayaks and canoes. The event cleared less than a quarter of an acre of the six-acre infestation and it was deemed that hand pulling wasn't a viable option. Next, the use of an aquatic plant harvester was considered; however, this option was not financially feasible and there were no access areas to launch the harvester. MCCD decided the best possible option was chemical control. They began by reaching out to the Crawford County Conservation District, the PA Lake Management Society (PALMS), and other individuals to get recommendations on aquatic herbicide control within the state and obtaining the necessary permits. The treatment consisted of one gallon of Reward and one pound of Clipper per acre. While the infestation has decreased significantly from 2018 to 2020, this is an ongoing effort.

Education and outreach efforts included news and media blasts about the infestation to inform the public about the infestation, the process, and the response. An article was published in the iMapInvasives newsletter and presentations were given at local meetings. Educational signage will also be posted at the location.

LESSONS LEARNED
Partnership with other organizations who have previously dealt with water chestnut such as other conservation districts, Sea Grant, DCHR and PALMS was integral for obtaining information and resources. Without the use of these resources and partnerships involved, this process would have been much more difficult.

There is continued discussion around making this project something that extends beyond the Aquatic Invasive Species Rapid Response Plan and housing these documents for online accessibility.

This group is also working on updating our collection and reporting protocols. Ultimately, we want to make sure that the information we have in the Aquatic Invasive Species field guides is

consistent with the protocols that state agencies are using. Input on this topic has been provided by agencies serving on this committee including DEP, PFBC, and PDA. If others would like to review AIS collection and reporting protocols, let Sara Stahlman know.

Ruth Welliver (PDA) commented in the meeting's Chat Box that she feels the AIS best management practices library is a fantastic resource and will be great to have on the PISC website.

Unrelated to the Rapid Response committee, Sara gave a brief update about the 4th annual [Great Lakes Aquatic Invasive Species Landing Blitz](#). The event is slated for July 1-10, 2022. It's regional, but event leaders are looking to expand beyond just the Great Lakes. The purpose of the event is to raise awareness of aquatic invasive species (AIS) prevention. In past years, this awareness has been achieved by hosting in-person events at boat launches and with boat steward programs. Because of COVID, however, more focus was put on virtual events such as social media campaigns and digital media including [geofencing](#). New partners are being sought to help participate this year, either in-person or virtually.

This year the [Great Lakes Commission](#) is offering an RFP to support in-person events to expand the program and get new partners. Events do not have to occur in the Great Lakes Basin. Submission deadline is April 15, 2022. Awards will range from \$4,000 to \$10,000. Events should center around outreach on AIS prevention and boat inspections.

PA Sea Grant does have funding to support AIS prevention initiatives, so if you are interested in hosting any type of in-person engagement event, PA Sea Grant can help (e.g., to purchase tents, chairs, banners, and outreach materials).

Fred Strathmeyer (PDA) asked if there are plans to advertise the Great Lakes Landing Blitz via a press release? Sara responded that in the past, the PA Sea Grant communications director compiles a press release template that can be used by partners of the project. This is part of a larger media packet used for this bi-national event.

Fred mentioned that DCNR has been spending money to do the same type of event at different boating locations around the state. They had expanded that program, so Fred is curious if the Great Lakes Landing Blitz is being done in conjunction with the activity of DCNR as well. Sara responded that DCNR is a partner of this event; the locations provided by DCNR supply the greatest number of events we have through the DCNR boat stewards program. Many times, these are activities that are happening already, so we can count them as part of the Landing Blitz because they are happening between the July 1-10, 2022 time period.

Sean Hartzell (PFBC) voiced his support for the Great Lakes Landing Blitz, mentioning that PFBC has participated virtually in 2021. Because the social media packet provides ready-made social media posts, it's really easy to be involved virtually.

Sara mentioned she has reporting forms that go along with the event (for in-person or virtual participation). Data is then collated at the end of the Landing Blitz time frame to see what impact and reach the event had.

Pennsylvania Invasive Species Management Plan Update

Spokesperson: Jocelyn Behm, Assistant Professor, Center for Biodiversity, Department of Biology, Temple University

The committee reviewed the previous [PA Invasive Species Management Plan](#) (PISMP) and some other states' plans to get some inspiration. We then drafted a “meaty” outline for the new Plan; new sections are starting to be written. This work is ongoing.

The group realized content is needed for other sections in the Plan. Input is needed from the Council to provide this content. The committee developed a survey that will be sent out shortly by Kris Abell (PDA) to ask Council member agencies and organizations to provide information on the current status of invasive species management in the state as well as hopes/dreams for where we want to go (i.e., big picture context, not just suggestions for more funding and people capacity).

Andrew Rohrbaugh (DCNR) and Don Eggen (DCNR) filled out the survey from their perspective representing DCNR to use as an example for others who fill out the survey (indicating the depth/breadth needed for each response). These responses will be sent out with the survey link.

Amy Jewitt (WPC) asked if the survey would go out only to PISC members and alternates, or also PISC stakeholders? Jocelyn deferred this question to Andrew Rohrbaugh (DCNR), who said he didn't see a reason not to expand the list of people who receive the survey. Don Eggen (DCNR) felt it would be best to first get input from PISC members, and then at a later time, expand out to gathering input from interested stakeholders (e.g., a 2-step approach). Amy commented that at some point, she felt it would be good to let stakeholders provide their feedback on the Plan. Kris Abell (PDA) mentioned the committee will discuss this suggestion at their next meeting.

Brenda Shambaugh (PACD) mentioned there are some people who are part of this committee, but not part of PISC. It would likely be good to share the survey with all PISMP committee members, regardless if they are part of the Council. Kris felt this was a great point and didn't see any issues in doing so.

Kris Abell (PDA) felt any and all feedback received from the survey would be useful as it will help inform a future PRISM program as well as the Council’s objectives and initiatives for the state.

Farm Show 2022 Report

Spokesperson: Kris Abell, Governor’s Invasive Species Council Coordinator, Bureau of Plant Industry, PA Department of Agriculture (PDA)

PISC had a booth at the 2022 Farm Show. This year, the booth focused on noxious and invasive weeds as well as the promotion of native plants. Visitors to the booth were asked to vote in a poll “Which Weed is Worst?” in Pennsylvania. The poll was successful, averaging 3.3 votes per hour. A digital television display was also present, providing information on “Plant This – Not That” (i.e., avoid these invasive plants, encourage native alternatives for landscaping and gardening).

Thanks to many individuals for your time and work on this display!

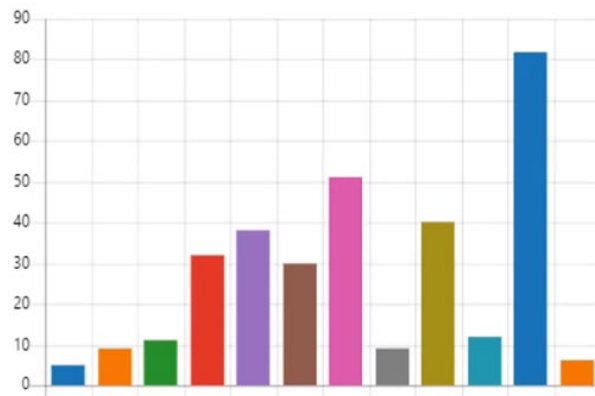




1. Which Noxious Weed is Worst for Pennsylvania?

[More Details](#)

- European water chestnut – *Tra...* 5
- Garlic mustard - *Alliaria petiol...* 9
- Hydrilla - *Hydrilla verticillata* 11
- Japanese barberry - *Berberis t...* 32
- Knotweed – Three *Reynoutria ...* 38
- Kudzu - *Pueraria lobata* 30
- #2** ● Mile-a-Minute – *Persicaria per...* 51
- Palmer amaranth – *Amaranth...* 9
- #3** ● Poison hemlock – *Conium ma...* 40
- Purple loosestrife - *Lythrum sa...* 12
- #1** ● Tree-of-heaven - *Ailanthus alti...* 82
- Wild parsnip – *Pastinaca sativa...* 6



Results from the “Which Weed is Worst?” survey are provided above. The species that received the most votes (i.e., the species voters felt was the worst noxious weed for Pennsylvania) was [tree-of-heaven](#) (*Ailanthus altissima*), followed by [mile-a-minute](#) (*Persicaria perfoliata*), and then [poison hemlock](#) (*Conium maculatum*).

Kris mentioned that preparation for Farm Show 2023 should start now and asked for input from the Council on how to more effectively use the PISC booth. Should this be a general Council effort, or maybe a Council member (agency/org) uses the booth to do targeted outreach on a specific issue? This year, PDA led the charge for the booth in conjunction with DCNR and others. Looking ahead, Kris feels one or more Council members working as a team to do targeted outreach on a specific topic and/or having a theme is the best way the PISC booth can be used in the future.

Don Eggen (DCNR) mentioned that perhaps a display on the PRISM concept and proposed activities would be good for future targeted outreach by PISC at the Farm Show. Kris agreed, saying it would be a great way to promote the program and get the word out to partners and potential host organizations.

Brenda Shambaugh (PACD) mentioned that PACD distributes lots of literature to the public at their Farm Show booth and would be happy to distribute materials about PRISM at the 2023 Farm Show.

Phillip Stober (PDA) is the Division Chief for Economic Development and his team manages the “So You Want to Be a Farmer” exhibit at Farm Show. Phillip felt increased collaboration should occur within PDA since the “So You Want to Be a Farmer” booth this year engaged not only commercial farmers but also the general citizenry. Lots of questions were asked on what to plant and what not to plant. He would like to talk with Kris Abell (PDA) and Ruth Welliver (PDA) more about this, including what messaging they put out for next year and perhaps a shared theme in conjunction with PISC.

Shea Zwerver (DCNR) commented in the meeting’s Chat Box that for Farm Show 2023, maybe an activity almost like a treasure hunt could be done to encourage visitors to go to the different PISC partner or agency booths to find out information.

Pennsylvania Invasive Species Central Database Updates

Spokesperson: Kris Abell, Governor’s Invasive Species Council Coordinator, Bureau of Plant Industry, PA Department of Agriculture (PDA)

As a reminder to Council members, the following motions were passed by PISC in relation to the PA Invasive Species Central Database.

1. The Council recommends that [iMapInvasives](#) be designated as the central clearinghouse for invasive species data in Pennsylvania pending identification of a sustainable funding and administrative mechanism to support database maintenance and development.

2. The Council recommends that agencies and organizations begin working to incorporate steps in their existing data collection/management procedures to include regular submission of invasive species data (presence, absence, location, treatment and control efforts) to iMapInvasives, and provide updates on progress towards this goal at PISC meetings.

These decisions have become important in light of potential PRISM program funding as iMapInvasives provides a way to store, sort, and manage data that will be produced from the PRISM program. Participation by PISC agencies and organizations with iMapInvasives will be key to advancing the database itself as well as the PRISM program.

Kris asked the Council today for an update on progress they've made or hope to make in the near future related to their contributions to iMapInvasives.

Don Eggen (DCNR) noted that Forest Insect and Disease data was recently shared with iMapInvasives for inclusion in the database. However, he has not heard back from his staff on whether or not this effort was successful. Amy Jewitt (WPC) replied, saying this data was received by the iMapInvasives program and she is currently working at incorporating it into the database; all is going well. Don was glad for this update and mentioned that additional data from DCNR could be shared with iMapInvasives. Amy/others should let him know when the full "data dump" should be sent.

Amy Jewitt (WPC) mentioned that conversations have been occurring between staff with iMapInvasives and the PA Game Commission (PGC) over the last several months. The purpose of the meetings are to encourage PGC's collection of invasive species data and use of iMapInvasives. In conjunction with these talks, coming up next week on March 17, Amy will be attending the PGC's Land Management conference (in-person) in Franklin, PA and will be giving a talk about iMapInvasives. Additionally, a virtual webinar is planned for the end of May to train PGC staff on the use of iMapInvasives.

Kris encouraged all PISC members to keep in mind their use of iMapInvasives as their involvement in this program will be very important to the Council. Questions or comments regarding iMapInvasives can be directed to Kris Abell (PDA) (krabell@pa.gov) or Amy Jewitt (WPC) (ajewitt@paconserve.org). Kris looks forward to developing this Council initiative more in the coming months and years.

Updates, Activities, and Events

Spokesperson(s): Various

Kris Abell (PDA) reminded Council members that a few meetings ago, it was approved to form a new PA Invasive Species Management Plan workgroup that would be led by a Council member and comprised of non-Council members. This workgroup would increase the capacity of the Council and bring in new voices and expertise. Jeff Wagner (WPC) will be leading this group.

Jeff Wagner said that a list of people was assembled (who could be potential members of this group) and were asked if they would like to participate. An organizing meeting will occur on March 10. Those that wish to participate can make a decision afterwards regarding their involvement.

The purpose of the workgroup is to add capacity for the Council to conduct various projects and initiatives. Jeff mentioned connecting with Jocelyn Behm (Temple University) at some point. He'd like this workgroup to review the goals listed in the PA Invasive Species Management Plan and figure out a way to provide a tracking mechanism for the Council's progress on these goals. He felt this was critical to do.

Jeff hopes that for this workgroup, there may be other things that come up that we need some thought and time put into to make progress. This group could have various assignments to research over time. Jeff received a really good response from folks who are interested in taking part. Over 12 people plan to attend the organizing meeting. (Jeff was initially hoping to get 8-10 people to participate, so this number exceeded his expectations.) Logistics to be discussed will include meeting frequency, how to divide up work, etc.

Piper Sherburne (PACD) mentioned her organization is having their regional meetings right now. If there are any PRISM talking points Kris wants to share or take part in their upcoming conference in July, let Piper know. Brenda Shambaugh (PACD) clarified that PRISM talking points from Kris are already taken care of for their regional meetings. More internal discussions will be needed regarding the PACD summer meeting and Kris' involvement in it.

Don Eggen (DCNR) commented that the Division of Forest Health has an annual update that is done in conjunction with Penn State Extension (happening next week). There's an in-person option on March 15 at the Penn Stater in State College and two virtual options on March 17 (one in the morning, one in the evening). Pesticide core credits and continuing education credits will be offered.

Don also provided information on the [*Lymantria dispar*](#) aerial spray program for this year. The DCNR will spray an estimated 209,000 acres and the PGC will spray an estimated 62,000 acres. This will be happening in the month of May.

Don also mentioned that the Bureau of Forestry has resurrected its research committee. Using timber revenue, the Bureau can fund research projects, though no decisions have been made yet by the state forester on what research projects will be funded. Potential research topics to receive funding include:

- Hemlock and hemlock woolly adelgid
- Tree breeding improvement and host resistance in eastern hemlock
- Tools and methods for control and management, silviculture, tree release, biocontrol, and insecticide control

Don also mentioned in the meeting's Chat Box that in the Governor's proposed budget, the Forest Pest Management line item has been re-established with \$5 million for conducting *Lymantria dispar* spraying and other forest pest management activities.

Amy Jewitt (WPC) recently received an email from a co-worker who was in touch with someone who works at Home Depot. Her coworker was wondering what kind of outreach is occurring in regards to [Japanese barberry](#) (*Berberis thunbergii*) and [Callery pear](#) (*Pyrus calleryana*), which were both recently added as noxious weeds and are both popular ornamental species for sale by various retailers. Are efforts being made by PISC to communicate with retail giants (like Home Depot) in relation to these two species not being allowed to be sold anymore (once the assigned grace periods have elapsed)? And is information being provided on native plants that can be used as alternatives? So instead of retailers saying "Here's what I can't do", instead they can say, "Here's what I can do instead." If these outreach efforts are not underway, could PISC and perhaps its Communications team work at getting this type of messaging out in regards to native plant alternatives?

Ruth Welliver (PDA) replied to Amy's question, saying she has seen messaging following the PDA release that these two species can no longer be sold. Penn State Extension put out messaging offering suggestions for alternatives, and DCNR already has some of this information as well. PDA has received some comments from the nursery industry; Ruth feels this is an opportunity for this industry to promote their own products that they feel are good substitutes, and she thinks some of that is happening already.

Amy thanked Ruth for her response. Amy also mentioned that likely in the future, other ornamental species will be listed as PA noxious weeds. This will again present a need to communicate to the public information about these species no longer being sold and encouragement to plant native alternatives instead. (And likely, the public will not be asking for this information, so the industry and others will need to be ready to provide it.) Perhaps PISC, PDA and other entities should be more strategic on this front, now and moving forward, if this work is within our capacity.

Fred Strathmeyer (PDA) appreciated and agreed with Amy's comments, but expressed concern regarding the expectation of who should do this work. The PDA is essentially responsible for getting the message out of what cannot be done (*by the industry*), though certainly within that messaging format, what the industry can do. Ultimately, this task becomes the responsibility of the stakeholders and nursery industry to inform the people that are buying their products of native alternatives to purchase instead of Japanese barberry and Callery pear. If the feeling is that PDA isn't doing something you think they should be, maybe it's because that's not where their responsibility lies. Fred encouraged this information (*on native plant alternatives*) to be placed on websites, in brochures, etc. to help get the message out to the public. However, the expectation should not be that PDA is responsible for leading the charge on sending this message.

Lydia Martin (Alliance for the Chesapeake Bay) mentioned in the meeting's Chat Box that perhaps PISC/PDA could use the "Plant this, not that" message. A brochure on native plant alternatives might be helpful for local nurseries so when the general public asks for information, they can give out as a handout or perhaps a poster design.

Don Eggen (DCNR) commented in the meeting's Chat Box that DCNR has a brochure "[Landscaping with Native Plants](#)" and some other literature regarding native plants that could also be used.

Lydia Martin asked where these and other resources on landscaping with native plants can be ordered for purposes of handing out at events or to landowners/farmers she works with? Don Eggen said to contact Andrew Rohrbaugh (DCNR) (anrohrbaugh@pa.gov).

Sara Stahlman (PA Sea Grant) announced that PA Sea Grant will be hosting a pet amnesty event on May 21, 2022. This is an opportunity for pet owners to return species of turtles, fish, or other aquarium pets that they no longer want. This event is being held in conjunction with the Erie Humane Society and Herps Alive Program and allows pets to be re-homed in a safe and responsible way. If pets cannot be rehomed, they will go to the shelter at Herps Alive in Cleveland, Ohio (where they will not be killed). A similar event will also be held in the fall on October 1, 2022.

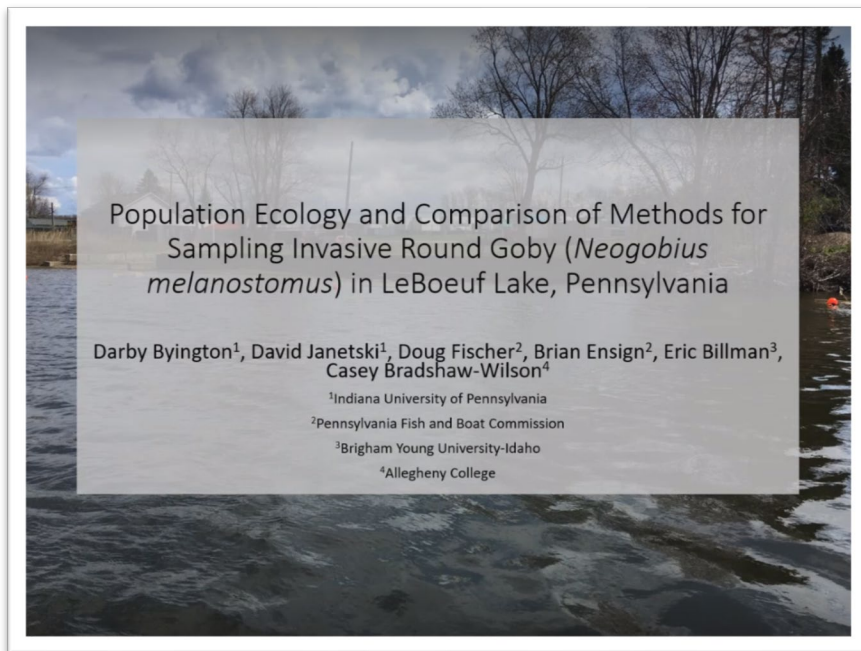
Sara mentioned that PA Sea Grant is partnering with Erie Brewing Company and the Erie Ale Trail to create invasive species-themed beers. They'll be releasing their next invasive species beer, "Hazy Hydrilla", for St. Patrick's Day on March 17 (it's a green beer). There will also be an invasive species beer festival called the "Wanted Dead or Alive" fest on May 7. At that event, three new invasive species beers will be released.

Kris Abell mentioned that if any Council members have content they wish to contribute to the next PISC e-newsletter, please get in touch with him (krabell@pa.gov).

Round Goby in PA Research Update

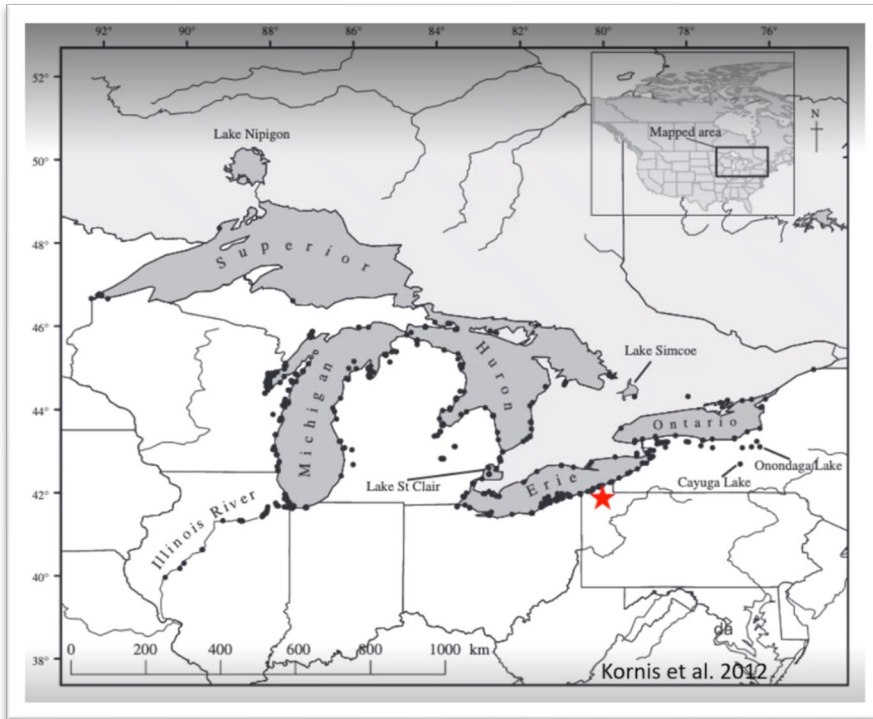
Spokesperson: [Darby Byington](#), Master's Student, Indiana University of Pennsylvania

Darby provided a guest presentation on her research dealing with population ecology and comparison of methods for sampling invasive [round goby](#) (*Neogobius melanostomus*) in LeBoeuf Lake, PA.



Round gobies are native to the Black and Caspian Seas and were introduced to the Great Lakes via ballast water in the 1990s. They are great invaders; they are short-lived (1-5 years) and spawn April-September. They can lay 5-6 clutches and can spawn every 16-20 days. By 2002, a total of 9.9 billion round gobies were present in western Lake Erie.

The following map shows the round goby's distribution throughout the Great Lakes Basin. The red star represents the location of LeBoeuf Lake in Waterford, PA.



Negative impacts from round goby include their competition with native benthic fish species (darters, sculpins) and preying on native mussels and the eggs of game fish.

Because LeBoeuf Lake is not connected to the Great Lakes Basin, the concern is that round goby could spread beyond this area and have negative impacts on native species. LeBoeuf Lake is part of the French Creek watershed, an area that has very high biodiversity. At present, we don't know what a population of round goby could do if they spread throughout this watershed.

LeBoeuf Lake is a glacial lake, 28 hectares in size, and is a popular area for recreational fishing. Round gobies were discovered here in 2014 (by accident). The most likely introduction was through bait bucket transfer.

For monitoring round goby populations, gear types vary in effectiveness depending on locations and many other factors. Testing the effectiveness of gear types will help in future management actions. One gear type suggested to Darby was an electrified benthic trawl which has been used in some studies, but not to sample for round goby in LeBoeuf Lake.

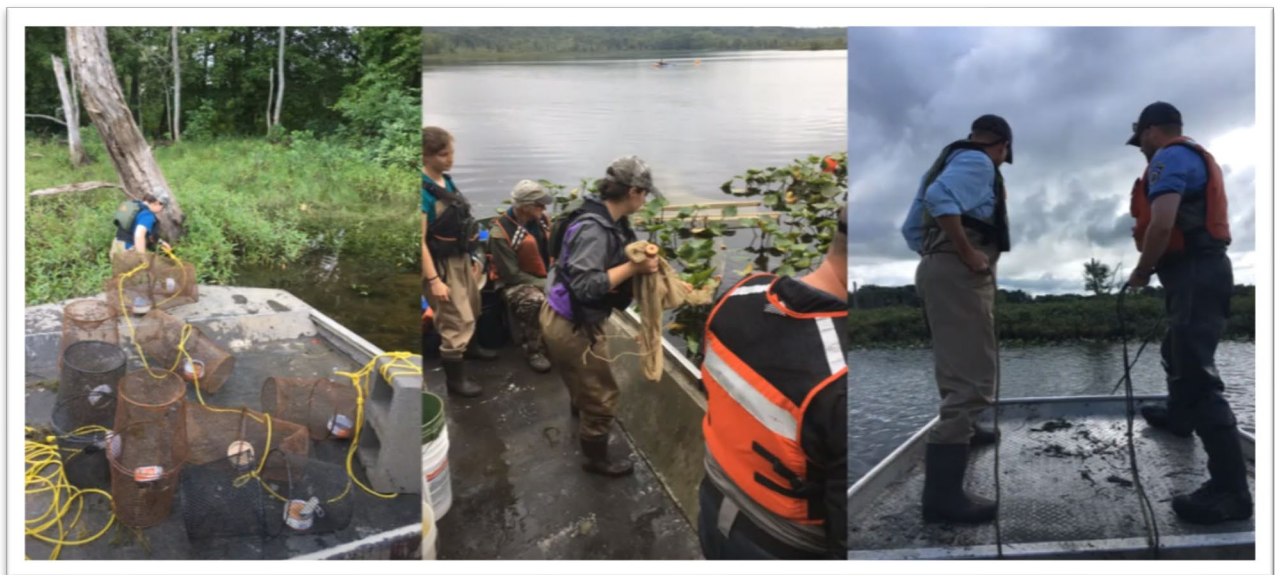
We needed to know information about the round goby population within the lake because though gobies were found there in 2014, managers hadn't had an opportunity to sample for them and understand what was going on since that time. The complex vegetation on the shoreline of LeBoeuf Lake made for difficult sampling. For example, when using seine nets or a backpack electro fisher where you're in the water, you basically sink into the ground.

Darby had two objectives for her study:

- Identify the most effective method for collecting round goby in LeBoeuf Lake
- Assess population characteristics of round goby in LeBoeuf Lake (i.e., are they reproducing in the lake?)



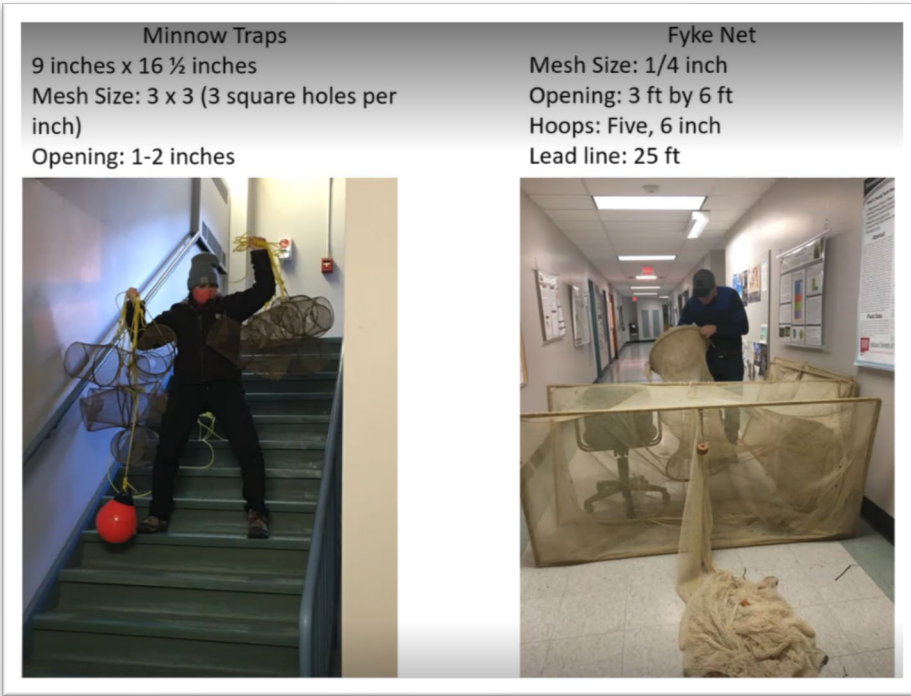
Left to right: Team members conducting round goby sampling; round goby collected from LeBoeuf Lake



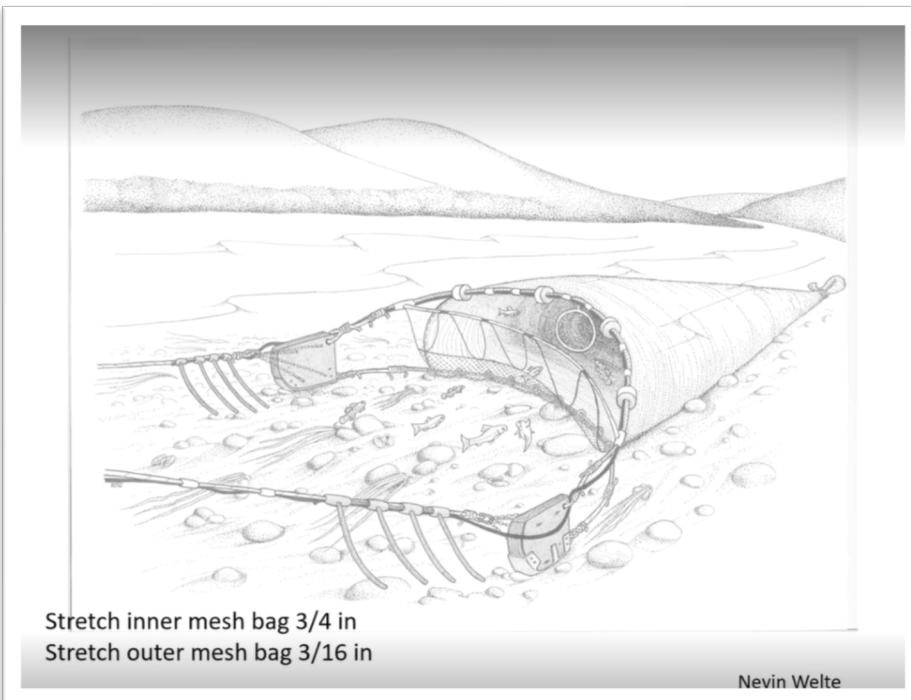
Left to right: Minnow traps, fyke nets, and electrified benthic trawl

Three different gear types were tested as part of Darby's study. They included minnow traps (baited with cat food), fyke nets, and electrified benthic trawl. They sampled in April and August

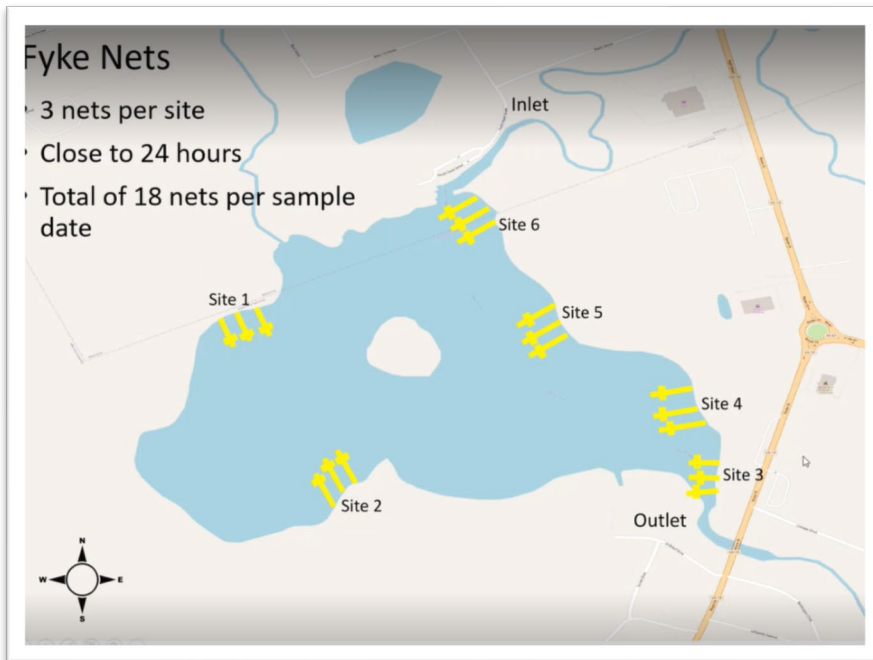
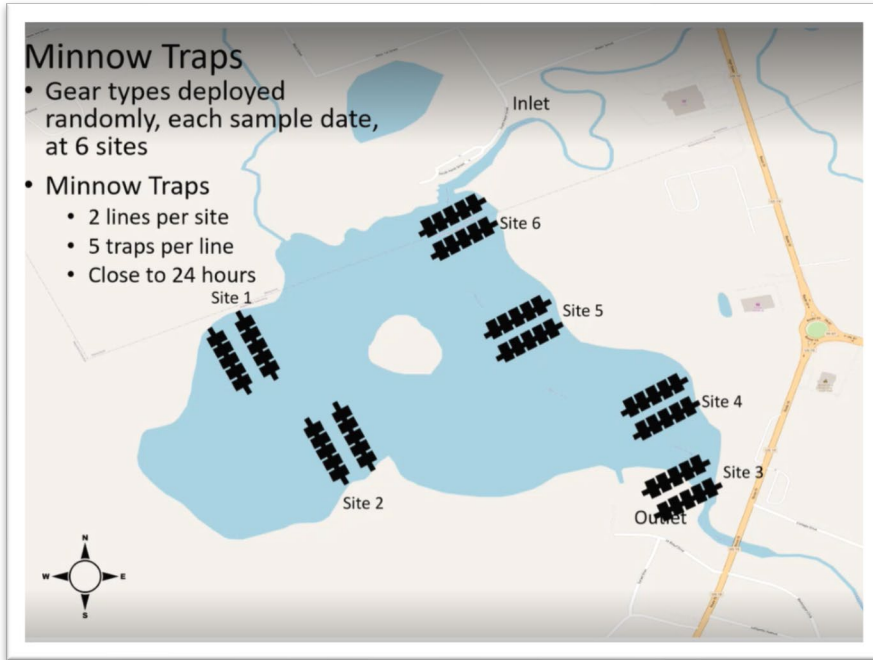
of 2021 to get the gobies at the beginning and end of their spawning period for comparison purposes.

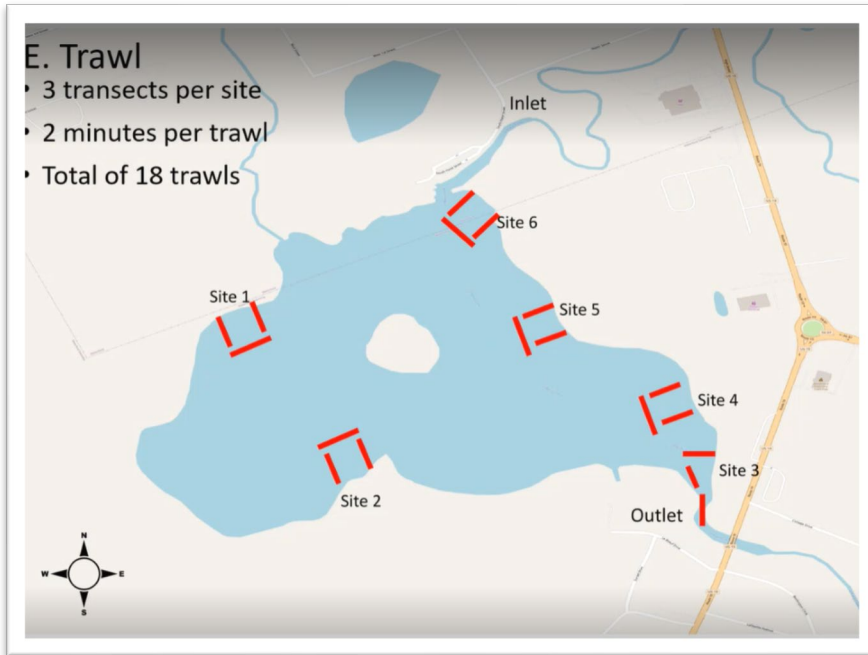


The following drawing shows what the electrified benthic trawl looks like underwater.



Darby explained how their team set up gear types in the lake for sampling purposes of round goby. The following three slides capture this information visually.





The following image shows what a fyke net looks like set up in the water. Minnow traps were set up similarly.



The electrified benthic trawl functioned with two people standing at the front of a boat holding a net in the water. The boat is placed in reverse for two minutes. Once the two minutes are up, the people at the front of the boat pull up the net and collect the fish from the sample.



Lab methods for fish dissections included measurements for total length (mm), weight (g), sex, gonad mass (g), and eviscerated mass (g). Sagittal otoliths (ear bones) were removed from each round goby. Ages were estimated with whole otoliths.

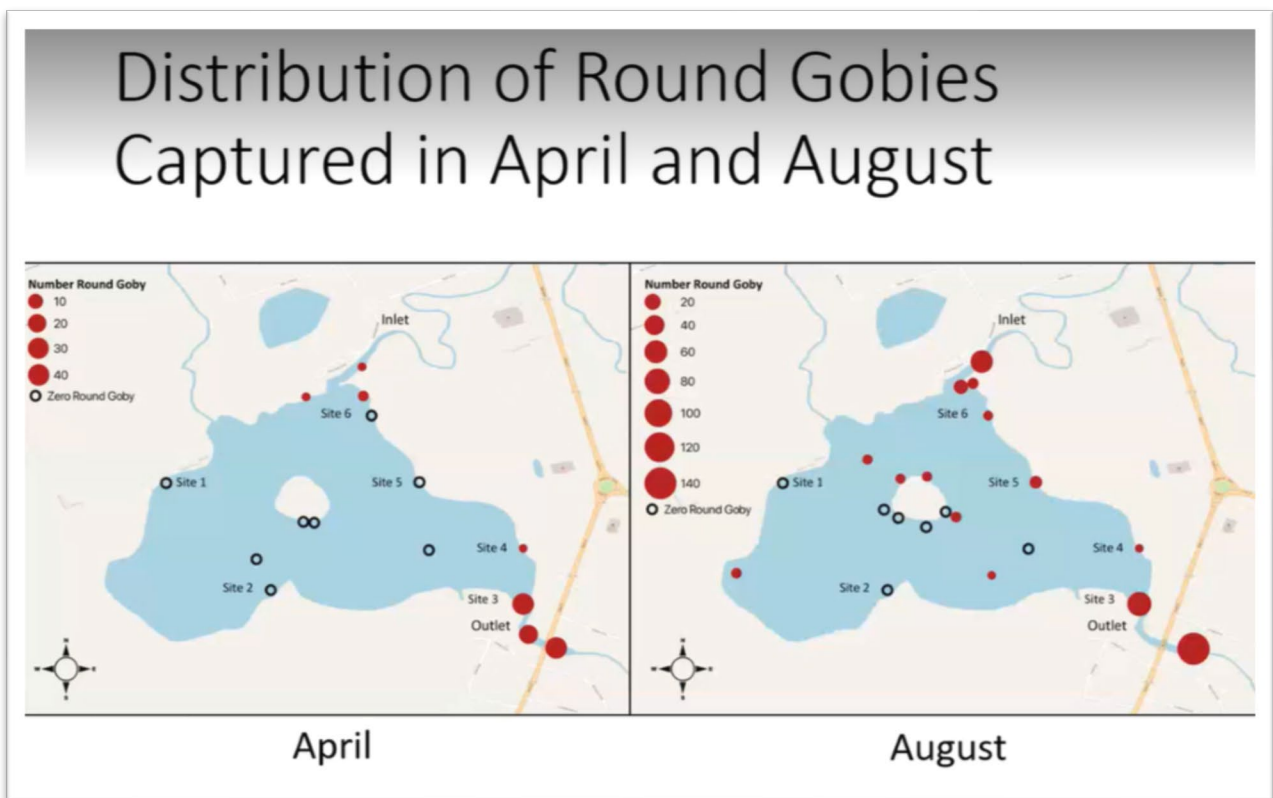
Results:
 Electrified benthic trawl captured highest number of gobies

Gear Type	Sample Month	Average Time (hrs)	Total Number of Fish	Total Number of Species*	Total Number of Round Goby
Minnow Trap	April	22:31	2	2	1
	August	23:19	19	3	0
Fyke Net	April	22:08	521	21	2
	August	22:59	824	18	1
E. Trawl	April	00:02.3	336	15	88
	August	00:02.3	1104	21	312

*Kaleb Keech's Poster

Of the three gear types tested, results in the table above show that the electrified benthic trawl captured the largest number of round gobies.

The maps below show the distribution of round gobies captured during sampling. Black hollow circles show areas that were sampled and zero round gobies were collected. Red circles indicate where round gobies were collected and the circles' relative sizes show the number of gobies caught. The inlets and outlets sampled during both months were the main areas where round goby captures were made. This is where LeBeouf Creek flows through the lake. In August, gobies were determined to also be spreading further into the lake as compared to data from April.



Data were captured regarding round goby [fecundity](#) in the month of April. (See first slide below.) However, these data were not able to be compared with samples collected in August as gobies were finished spawning by that time.

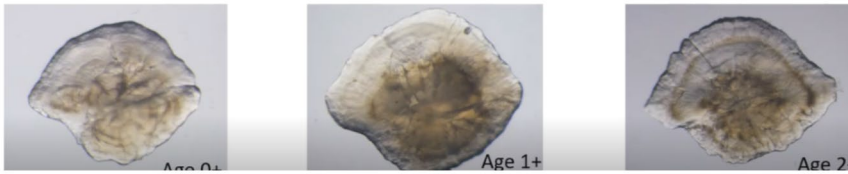
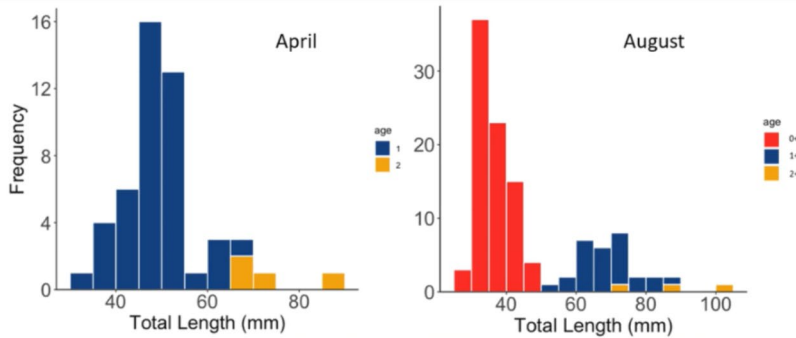
Age distributions were compared according to samples collected in both April and August. (See second slide below.) Pictures shown on the bottom of the “Comparison of Age Distributions” slide shows images taken under a microscope of round goby otoliths which are used to determine fish age.

April Fecundity



- Mature gobies
 - Males: 9
 - Females: 23
- Sizes range 46 - 90 mm
- Ova ranged from 63 - 282
- Mean Ova: 100
 - SD: 71.2
- Finished spawning in August

Comparison of Age Distributions



The gear method determined to be the best for sampling round goby was by far the electrified benthic trawl. Having a better understanding of the distribution of round goby in LeBoeuf Lake was also very useful. Their high numbers in the inlet and outlet were most likely related to warmer temperatures at these locations. Additionally, rockier substrate found at these locations provided more habitat for the gobies to hide and spawn.

Samples collected show round gobies have a high rate of fecundity and are reproducing by age 1 (this is not unusual). There was high recruitment in August. No gobies collected were found to be age 3 or greater; this indicates high mortality which correlates with their high recruitment.

Next steps include continued monitoring using the electrified benthic trawl throughout the French Creek watershed. We also suggest incorporating standardized sampling throughout the watershed (lakes, streams, rivers). Sampling later in the year is another action step; this appears to be when gobies are moving more. Standardized sampling would allow for observation of impacts by round goby on native game species such as the Iowa Darter. It would also help in knowing when gobies are introduced into new areas. Because round goby's introduction is still new within the French Creek watershed, it's unknown what effects might occur from its presence there.



Ruth Welliver (PDA) commented that it seemed a similar number of fish species were captured with the fyke net and minnow traps, but greater numbers when using the electrified benthic trawl. Was this the same for all fish species captured, or unique to round goby? Darby said this was unique to round goby; however, bycatch data from this project is still being analyzed.

Public Comment Period

No comments from the public were received.

Concluding Remarks

Fred Strathmeyer (PDA) thanked Darby for her presentation.

Regarding public comments as part of Council meetings, members of the public can choose to comment during a meeting or reach out to Kris Abell (PDA) (krabell@pa.gov) or Fred Strathmeyer (PDA) (fstrathmey@pa.gov) prior to a PISC meeting and share their thoughts that way. Public comment has been and continues to be very important to this Council and the conversation surrounding invasive species.

At the peak of today's meeting attendance, 71 people were present. This seems to be a trend (*comparing to past PISC meetings which were also well attended*), and indicates there is substantial interest in invasive species from people across Pennsylvania.

It will be very important to gain the support of both PISC agencies and organizations as well as stakeholders to ensure a PRISM program is successful in the Commonwealth. Given the high amount of money being spent on invasive species management and eradication programs, a PRISM program will help be proactive regarding future costs to the state moving forward.

MOTION: Fred Strathmeyer (PDA) moved to adjourn the meeting. James (Jim) Grazio (DEP) seconded the motion. **Meeting adjourned.**

Next PISC Meeting

Tuesday, June 7, 2022 at 10:00am on Microsoft Teams

Meeting minutes respectfully submitted by Amy Jewitt, Invasive Species Coordinator with the Western Pennsylvania Conservancy and the Pennsylvania Natural Heritage Program.

Questions concerning these minutes should be submitted to Kris Abell (krabell@pa.gov), Council Coordinator. If you are a member of the public and wish to attend the next PISC meeting, please contact Kris for more information on the date, time, and location.
