Virtual Meeting of the Pennsylvania Governor's Invasive Species Council
Thursday, December 12, 2024 | 10:00am

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

Agenda Item	**Speaker**
Welcome & Introductory Remarks	Fred Strathmeyer PA Department of Agriculture
Announcements, Roll Call, and Approval of June & September 2024 Meeting Minutes	Fred Strathmeyer PA Department of Agriculture
Guest Speaker Presentation: Building Public Awareness of the Invasive Species Problem & Community-Level Solutions	Rachel Reed Carnegie Museum of Natural History
Controlled Plant and Noxious Weed Update	Trilby Libhart PA Department of Agriculture
PA Invasive Species Management Plan Update & Discussion	Andrew Rohrbaugh PA Department of Conservation & Natural Resources
Invasive Species Listing Committee Report	Andrew Rohrbaugh PA Department of Conservation & Natural Resources
Legislative Committee Report	Kris Abell PA Department of Agriculture
Communications Committee Report	Patricia Prade Penn State Extension
Aquatic Invasive Species Rapid Response Committee Report	Sara Stahlman PA Sea Grant
Aquatic Invasive Species Education & Outreach Committee Report	Sara Stahlman PA Sea Grant
Northwest PA Stakeholder Survey	Brian Daggs Western PA Conservancy
Updates, Activities, and Events	Council Members

Public Comment Period	Members of the Public
Concluding Remarks & Adjourn	Fred Strathmeyer PA Department of Agriculture

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Council Members Present (19): Andrew Ernst, Andrew Rohrbaugh, Brenda Shambaugh, Brian Harris, Deah Lieurance, Fred Strathmeyer, Grant Gulibon, Gregg Robertson, Harold Brecht, James Grazio, Jeffrey Wagner, Jocelyn Behm, Kate Harms, Lisa Murphy, Matthew Helmus, Rosa Yoo, Sara Stahlman, Sean Hartzell, Sean Mahoney

Other Participants Present (51): Alan Deppen, Alexis Balog, Ali Bowling, April Moore, Bill Brock, Brant Portner, Brian Daggs, Bryon Ruhl, Catherine Zeigler, Dani Jurina, David Scamardella, Douglas Wolfgang, Ekaterina Nikolaeva, Emilee Boyer Euker, Erin Lee Frederick, Frank Schneider, Grace Wildermuth, Gregory Podniesinski, Heather Fowler, Heather Smith, Holly Best, Jacob Misal, Jennifer Senchak, Jill Rose, Jill Zdunczyk, Joe Debes, John Schwartzer, Johnny Zook, Kierstin Carlson, Kris Abell, Kristen Markley, Maggie Wallner, Mason Keyser-Trout, Michael Hutchinson, Michael (Josh) Lookenbill, Michael Parker, Nick Decker, Nick Trivelli, Norris Muth, Owen Schneider, Patricia Prade, Rachael Marques, Rachel Reeb, Rachel Reese, Roy Gothie, Ryan Reed, Shishir Paudel, Susan Marie Boser, Tim Byan, Timothy Haydt, Trilby Libhart

In total, 70 individuals are present for today's meeting.

Welcome and Introductory Remarks

Fred Strathmeyer (Deputy Secretary for Plant Industry and Consumer Protection, Pennsylvania Department of Agriculture – PDA) welcomed everyone to today's meeting.

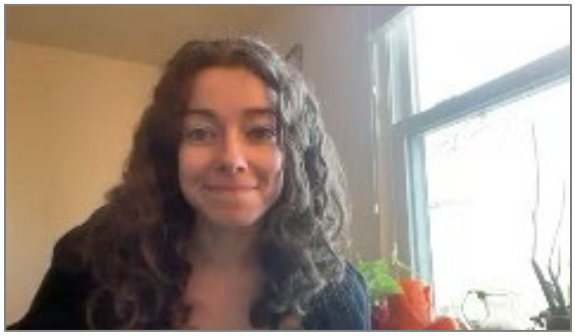
Announcements, Roll Call, Approval of June and September 2024 Meeting Minutes

Fred Strathmeyer (PDA) conducted the roll call and introduced two new members of the Council; Harold Brecht representing Penn Ag Industries, and Arden Pontasch representing the Pennsylvania Landscape and Nursery Association. (Arden is from North Creek Nurseries.)

MOTION: Gregg Robertson (Government Relations Consultant, Pennsylvania Landscape & Nursery Association - PLNA) moved to approve the June 6, 2024 and September 19, 2024 PGISC meeting minutes. Harold Brecht (member, Penn Ag Industries) seconded the motion. **Motion approved.**

Building Public Awareness of the Invasive Species Problem and Community-Level Solutions

Speaker: **Rachel Reeb**, Ph.D., Postdoctoral Fellow, Department of Botany, Carnegie Museum of Natural History (CMNH) (reebr@carnegiemnh.org) *(current email address: rreeb@iup.edu)*



Rachel specializes in invasive plant ecology. In her current role at CMNH, she has a dual position as both a scientist and a science communicator. Rachel's presentation today will focus on efforts happening at the museum to build public awareness of the invasive species problem and inspire community-level solutions among the public.

Rachel gave a special thank-you to Jennifer Senchak (jennifersenchak@gmail.com), a landscape designer, conservationist, and science communicator based in northwestern Pennsylvania. She and Rachel had several conversations in the last few weeks that helped inspire the thematic elements of this presentation and she has been a great community partner to work with.

As many of us know, invasive species have a large and concerning impact on the health of our environment, the economy, and society in Pennsylvania. There's more than 150 invasive species in the state, with many more projected to become established over time through the continuation of global trade and movement, as well as climate change.

All people in our society, whether they realize it or not, are directly or indirectly affected by the invasive species problem. Not only are invasive species classified as one of the leading causes of biodiversity loss worldwide, but they also have huge economic costs within

natural resource industries. They impose many infrastructural costs on our society and have a huge (but hard to quantify) impact on societal and cultural well-being.

We are losing native flora and fauna at rapid rates due to invasive species. And we know that these species make up a huge part of our cultural identity in Pennsylvania. Native species influence local food customs and recreational activities with many aspects of humans' quality of life being impacted because of them.

One critical role that scientists, educators, and land practitioners can play in addressing the invasive species problem is by engaging in public communication. And why is this necessary? Public outreach about the invasive species problem can help build collective understanding of basic facts, baseline information, and solutions. It can help connect community members to high quality information and resources to engage in the most effective solutions possible. And perhaps most importantly, public communication is critical because it helps foster sustained participation in invasive species solutions.

Like the climate change issue, invasive species solutions are complex, nuanced, and slow-moving. It can sometimes be years or decades before we see tangible improvements and outcomes to solutions. Public communication is an important bridge that helps keep individuals continuously engaged while building towards long-term solutions.

The importance of science communication has been recognized by the PA Governor's Invasive Species Council (PGISC), specifically in the Council's 2016 management plan where education and outreach is listed as an urgent recommendation:

> "The Commonwealth should create unified messages for use by all state agencies and member organizations of the Council regarding the prevention and control of invasive species. Additionally, there needs to be a proactive approach to educate the public and people involved in business, trade, research, and government so these groups do not accidentally facilitate the introduction or spread of invasive species."

That's what we're trying to accomplish here at the Carnegie Museum of Natural History (CMNH). In 2023, the CMNH was awarded a grant by the Richard King Mellon Foundation that enabled us to begin an invasive species awareness campaign. This is a collaborative effort between the museum's botany exhibitions and education departments. I'd like to give a shout out to Mason Heberling, Sarah Crawford, and Laurie Giarratani who are the department heads and have collaborated on this project.

The goal of the CMNH's campaign is to integrate new communication material about invasive plant species into the museum's exhibits and programming (here in Pittsburgh).

Our goal is to raise awareness with the public about the invasive species problem and inspire our audiences to engage in more effective solutions.

For this presentation, I am going to highlight some of the top communication priorities we have identified for the awareness campaign and describe projects from the campaign that aim to fill some of these communication priorities. The campaign had three major communication goals.

Goal #1: Provide an improved understanding of critical concepts in invasion biology.

These are messaging points that are based on experiences with our own audiences as well as with colleagues and people who have shared information. These messaging points are not yet common knowledge within the public, but are key to addressing the invasive species problem.

Messaging Point #1: Humans are the root cause of the invasive species problem.

The public tends to maintain a poor understanding of the introduction histories of invasive species and understanding intrinsically how invasive species came to be here. As we know, invasive species were introduced because of global trade and global movement over the last couple of centuries.

It has been estimated that about 4% of the world's vascular flora, or about 13,000 plant species, have become naturalized somewhere else around the globe because of human activities. (This is a figure that Rachel likes to highlight in her presentations.) It was published in "Nature" a few years ago, but it is essentially showing the scale of global plant species movements over the last few centuries. Not only have many introduced invasive species from other continents been introduced to North America, but North America has also donated a huge number of species to other parts of the globe.

Modern patterns of trade and global movement have only accelerated this rate of species introductions over time. It has been estimated that 61% of invasive plant species in the U.S. remain available in the plant trade.

We also want to communicate to the public that humans are driving the invasive species problem by causing other forms of anthropogenic disturbance by participating in things like habitat degradation, forest clearing, contributing to deer overpopulation, and causing climate change. Any sort of anthropogenic disturbance that removes existing native flora and fauna and destabilizes existing food webs can facilitate invasive species by freeing up resources in spaces for them to establish.

This is all to say that even if our audiences are not directly introducing new species themselves, there is a good chance they are indirectly affecting the problem by contributing to these other forms of disturbance.

Messaging Point #2: An ounce of prevention is worth a pound of cure.

This is a phrase that we say a lot in the invasion biology community. It is based on the famous invasion curve that many of us are familiar with. The invasion curve encompasses the basic idea that it takes infinitely fewer resources for us to prevent something new from establishing at the very beginning of its introduction phase than it is to eradicate the species after it has become established and spread across its introduced range.

As invasion biologists, we know that first and foremost, preventative strategies are always going to be the most efficient solution to the invasive species problem. Removal, management, and reactive management strategies are, of course, very important parts of the invasive species management process. But we want to make sure that we are communicating to the public that prevention is the best way to maximize our impact. There is no point in promoting to people the importance of managing invasive weeds in their garden if they are going to replant with a burning bush or something similar just a few weeks later.

Another point to highlight is that everyone in our audiences can participate in preventative solutions. This is especially important in an urban area like Pittsburgh where many of our audience members at the museum do not own huge swaths of private natural land where they can engage in traditional land practitioner work. We want to communicate that everyone has something to contribute, whether it is influencing consumers at a garden center, cleaning your watercraft and hiking shoes to prevent transmission of invasive species, engaging with local policy makers, or having conversations about invasive species within their communities and spreading that awareness.

Messaging Point #3: Invasive species solutions must be nuanced and balanced.

A lot of us know that the goal of invasive species management is not just to remove invasive species. It is to preserve indigenous biodiversity, protect ecological health, and ensure and protect human well-being. Oftentimes the public does not have a great understanding of this nuance. They hear messages about invasive species management and removal alone, and it can accidentally engage in a lot of management decisions that end up causing more harm than good.

As an example, not too long ago, a land practitioner in Pittsburgh shared a story about an individual who was in one of the parks they help to manage. This individual intended to contribute by helping to manage invasive tree-of-heaven by girdling trees in the park. But

what that person did not realize is that not only were they misidentifying some of the trees and accidentally killing many native trees, but were also imposing a safety risk for the public. Killing standing trees becomes a management issue that the land practitioner must deal with to ensure park visitors are not being impacted.

Another example is when people brush hog invasive shrubs. We have heard stories (from my work at the museum) about folks not having sufficient education about the importance of timing invasive shrub removal at the right time of year. This oversight can lead to having non-target impacts on breeding bird nests. This leads to people accidentally hurting birds and disrupting nests due to a lack of education. Therefore, providing education about the risk of non-target impacts and conveying the importance of how to minimize this biodiversity loss is paramount.

By building up these three foundational core concepts (*see bulleted list below*), our community members in Pittsburgh will be better prepared to mobilize and participate in solutions that are recommended by the state of Pennsylvania, especially as they pertain to preventative solutions as well as early detection and rapid response around emergent invasive species.

- Humans are the root cause of the invasive species problem.
- An ounce of prevention is worth a pound of cure.
- Invasive species solutions must be nuanced and balanced.

Goal #2: Provide consistent and coordinated messaging across stakeholder groups.

Very early on, we wanted to ensure we were providing consistent and high-quality information not only to our audiences, but to as large of an audience that we could reach in Pittsburgh as possible. Here at the museum, we reach a lot of visitors; however, we do not reach everyone in Pittsburgh. Therefore, we have an incentive to reach out to other stakeholder groups to try and expand our messaging.

Museum staff are not active land practitioners themselves (though we do own a nature center off property), but ultimately are not the local experts in Pittsburgh for on-the-ground land management. We want to be able to connect our audience members to the services and practical hands-on resources that are offered in Pennsylvania by other organizations.

We recognized early on that there would be a huge benefit from working with a network of organizational partners in dividing and conquering this work - by delivering consistent messaging that can activate a much larger audience that we can accomplish independently and do work to connect our resources to others.

A major campaign goal has been to reach out to other organizations in the city, engage in discussions about their communication work and their messaging goals, and make sure that we are coordinating with them as much as possible so that it is streamlined, and we know that this process can be effective.

A good example is from 2023 when the Allegheny County Conservation District recognized the need for coordinated messaging for the public to respond rapidly to the spotted lanternfly issue. They convened a spotted lanternfly roundtable for about a year, and it was attended by many organizations in the city. They spent a lot of time having discussions about core messaging and created a shared document that conveyed that information. It was a very useful and productive meeting series that allowed many organizations to coordinate and streamline their messaging.

Goal #3: The need for ethical message frames.

Over the last decade or so, it has become increasingly apparent to many practitioners, scientists, and communicators that certain communication strategies that are commonly used to talk about invasive species with the public aren't connecting with our audiences as well as they used to. In particular, the use of militaristic framing and militaristic rhetoric.

Militaristic message framing relates to invasive species management to the defense of territory, stopping the invasion, population control, or protecting native residents. It is also language that anthropomorphizes invasive species and compares them to bad actors like enemies, criminals, villains, or aliens.

This message framing has good intentions. It is meant to motivate the public by inspiring a sense of fear and urgency around this issue. However, several science communication strategies are demonstrating that this type of messaging is not as effective at capturing the long-term engagement of the public. People can only be afraid of something for so long. At some point, that intense emotion fades out and turns into apathy. Sometimes you can be left with the risk of having an immobilized or non-active public due to this message framing.

Additionally, academics and land practitioners are recognizing that there are some social harms caused by this framing because it reinforces the distrust of outsiders, which can have uncomfortable parallels with some of the politicized rhetoric surrounding human immigration that happens in society. This kind of framing can make many of our audience members feel uncomfortable; people have vocalized that fact to us. It can cause certain people to become distrustful of the basic science of invasion biology altogether.

This is a big issue that we are concerned about. We do not want to alienate audience members that we are trying to attract and bring into the discussion, especially those from

historically marginalized communities and people who are impacted by anti-immigrant rhetoric.

The good news is there is an increasing number of available resources produced by science communicators and professionals who are exploring more effective ways of framing the invasive species problem that allows us to get away from this more problematic form of framing. People are exploring ways of talking about this issue that are ethical and politically neutral while still being equally effective at inspiring and motivating the public. The more we as communicators can adopt these new strategies, the better we will be at activating our audiences.

Those are our big communication goals; now I am going to walk through some of the major campaign outcomes that, over this last year, we have been using to try and implement these goals.

One of the first initiatives CMNH had when starting this campaign was to begin hosting a round table series for environmental educators and land practitioners in the city of Pittsburgh. We invited folks to the museum to come together and share their work in invasive species communication and outreach. We have had participants from over 20 organizations in the city. This has served as a regular discussion space for our colleagues to talk about their respective communication efforts from their own organizations. It has been a very informative learning experience for all of us and has helped narrow down what is critical information that we wanted to be in the public and what are some of the best strategies for communicating that information.

We have been able to bring in some guest speakers, including Kris Abell from the PA Governor's Invasive Species Council, to share information with round table members and host discussions with them. It has also been a great space to learn about each other's programming work as well as outreach and educational opportunities they provide to connect our audiences and promote each other's work.

We at the museum have greatly benefitted from this meeting series; it has hugely impacted the other communication projects I will talk about shortly. It has allowed us to align our messaging in the exhibit and our programming with the messaging goals of our community partners.

The round table meetings have also been a fantastic space for research and resource creation. We are currently working on compiling an inventory of invasive species outreach and education projects from the greater Pittsburgh region. The goal of this inventory is to create a compiled list of things that people are working on, not only so we can better connect our audiences to those programs, but also that we can learn about opportunity gaps in programming as well. Essentially, understanding what audiences are not yet being

reached by existing organizations in city; what are areas of Pittsburgh that we could be reaching out to, etc.

There is also a working group within the round table who are developing an invasive species conversation starter guide. This is meant to be a digital training resource for people to engage in more productive dialogue about invasive species with their own community members. This project is being led by Alexis Thorbecke (CMNH staff member).

The next big capstone project for the campaign that we are in the final stages for is working on a new museum exhibit which is going to be opening on March 22, 2025 – please come visit! The name of the exhibit is "Uprooted: Plants Out of Place." The big idea/theme for this exhibit is that the past, present and future of invasive plants and our ecosystems are defined by human actions and notions of stewardship. The goal of this exhibition is to draw on the strength of the museum's historical collections, especially the herbarium plant collections, to tell the introduction stories of invasive plants.

We are taking a humanistic approach to invasive species communication by emphasizing that invasive plants are intertwined with human stories of colonialism, culture, and globalization. We are also working to provide a magnified view within our display cases that show the interactions that invasive plants have with their neighboring plant and animal communities to highlight the enormous ecological impact of invasive species and try to translate to people why this is such a large environmental problem.

One example of a species that we are highlighting in the exhibit is multiflora rose, which is a pervasive invasive species across all of the eastern United States. Multiflora rose was once a common species in the horticultural trade. It was widely used, especially in the ornamental rose industry. It was also promoted by conservation services as a form of erosion control and as a hillside stabilizer. People used multiflora rose as a living fence to help contain livestock as it is a dense, thorny bush.

Today, multiflora rose is considered an enormous nuisance species that's very hard to manage. Any land practitioner who has dealt with multiflora rose on their property knows what a pain it is to deal with. It also has large, tangible impacts on biodiversity and forest health.

The goal of this material is to highlight not only the pathways of introduction for multiflora rose, but also help our audiences consider their own contributions to the spread of invasive species. We are hoping to open a deeper conversation about how this problem could have been prevented through responsible land stewardship.

We are also excited to feature a photographer in our exhibit – Koichi Watanabe. He is a Japanese photographer who has provided us with custom photography of knotweed, an invasive plant in Pittsburgh, juxtaposed by photos of knotweed in its home range of Japan.

Koichi has been documenting images of knotweed for the last decade or so and has taken photos of this plant across all different parts of its range. His work is critical by exploring the migration, movement, and introduction history of knotweed and trying to explore both the different cultural and economic uses of knotweed across history.

Knotweed is a highly valued medicinal food plant in its home range. If you juxtapose that against its invasive range in Pittsburgh where it has these enormous negative environmental impacts, it is really interesting to see that comparison.

Also, as part of the exhibit, we are sharing stories of holistic invasive species management from community organizations around Pittsburgh. In particular, we're highlighting Garfield Urban Farms, Allegheny GoatScape, and the Pittsburgh Parks Conservancy and featuring a short video highlighting some of the stewardship work and invasive species management they do. Our goal is to capture a breadth of holistic land management that is happening in the city and connect our audiences to the great work these organizations are doing.

In tandem with the exhibit, we are also hosting a large program on the opening weekend of the exhibit that we are calling Naturefest (Saturday, March 22, 2025). It is going to be free to the public with a ticket purchase. Naturefest will be themed around building awareness of local invasive species solutions in western Pennsylvania and promoting the immense amount of land stewardship work that is happening in our city.

The Naturefest event will include science tabling and interactive activities from CMNH scientists and organizational partners. It will be a great opportunity to bring these partners into the museum space and provide them with an opportunity to give our audiences the chance to speak directly with them.

We are also hosting a speaker symposium where stories will be shared about land stewardship in Pittsburgh, and a film screening of the "Seeing The Unseen: Aquatic Invaders & What's at Stake" documentary, produced by the Western Pennsylvania Conservancy (WPC). The WPC kindly agreed to let us screen the film at this event to connect people and showcase invasive species work that is happening in our region of the state.

Many of the lessons learned and best practices that we've been implementing for this campaign are summarized in a peer reviewed publication that is open access (i.e., available to anyone). It specifically emphasizes best practices for ethical language and effective framing around the invasive species problem. It was recently published in "Plants, People, Planet" *(and is titled "Lost in translation: The need for updated messaging strategies in invasion biology communication")*.

Please reach out to Rachel if you would like to have any more conversations on this topic. She enjoys talking about this issue and connecting with folks who want to learn more.

End of guest speaker presentation.

Fred Strathmeyer (PDA) thanked Rachel for her excellent presentation and commented that she is another resource in this conversation and on the western part of the state (a couple of bonuses). Fred asked if Rachel's presentation could be shared with the group? Rachel said yes; she will turn it into a PDF and send to Kris.

Fred also asked if Rachel/CMNH will be offering any other events beyond Spring 2025? Rachel commented that Naturefest is the big event they are working on now. Past March, the education staff are planning on formalizing some guided tours through the exhibit that will provide extra context; folks are welcome to sign up for that. Other than that, CMNH hasn't finalized their programming schedule past the spring.

Fred remarked that he sees a lot of benefit that the museum is bringing to this subject matter. There has been conversation around legislation in this realm of invasive species. We look to CMNH as another partner, and if you need anything, make sure to reach out to Kris or any of the other partners in today's meeting.

Jocelyn Behm (Assistant Professor – Integrative Ecology Lab, Temple University) asked if Rachel and others at CMNH have thought about making their recent work (with invasive species) scalable for other organizations that don't have the same capacity level as the museum. Perhaps for use by municipalities that have a community room, a public library, or another similar venue. Jocelyn feels this could be valuable and would be great if this could be packaged for different types of spaces where you could reach the public in various ways.

Rachel responded, saying this is one of the big goals of the conversation starter guide that some of her colleagues through the invasive species roundtable are working on – to be a digital learning resource for people to learn about an overview of the invasive species problem. The guide also provides talking points on how to engage with people in their local community, whether that is a group or family member. There is also the published paper which is more focused on science communication methods. Finally, when the exhibit opens, the CMNH website will have digital learning resources that will link to other organization's online resources (providing an extended learning space).

Fred Strathmeyer (PDA) remarked that there are additional resources through some of the other agencies and non-governmental organizations that Rachel may want to reach out to for purposes of adding to CMNH's library of information. For example, the PFBC, PGC and others are doing work in this area. It would probably be a good segue into the partnerships that can be created moving forward.

Rachel agreed with Fred, adding that Amber Stilwell with PA Sea Grant has also been doing fantastic work (e.g., the new native plant guide- *"Pennsylvania's Guide to Using Native Species in Landscaping and Water Gardening"*). One of the goals for the CMNH resources is to have several digital links that connect people to resources that other organizations have produced. It is the goal of CMNH to be a hub to connect their audience members with as many resources as possible, especially since there are so many great resources already created.

Fred remarked that he liked Rachel's reference to the Pittsburgh area and that many people do noy have much surface area, but can still be influenced by invasive species in their neighborhood. He appreciated her recognizing this important fact.

Controlled Plant and Noxious Weed Update

Speaker: **Trilby Libhart**, Botany & Weed Specialist, Pennsylvania Department of Agriculture, Bureau of Plant Industry (tlibhart@pa.gov)

The Controlled Plant and Noxious Weed Committee met twice this year; once in April and once in October.

The Committee listed Cogon grass (*Imperata cylindrica*) (cultivar Red Baron) as a Class A noxious weed. This species is already considered to be on the Pennsylvania noxious weed list (as a Class C weed) since it is already a federal noxious weed. However, Trilby wanted

to make the species more visible (*on the list*) since it is available in the horticultural trade. Trilby sees Cogon grass out and about and has enforced it three times.

The problem with Cogon grass (Red Baron), which is supposed to be sterile, is that it is not a stable cultivar and reverts to its original form. It then starts to flower and produce seeds. That is the form of the plant Trilby is enforcing.

At the end of January 2025, the grace period will end for several plants previously added to the PA Noxious Weed List, including burning bush, Japanese privet, Chinese privet, European privet, and Border privet. Once the grace period is over, these plants will no longer be able to be sold, planted, propagated, or transported within the state of Pennsylvania. Trilby is certain there will be people who are unhappy about this, but it will be dealt with that as it comes. Trilby felt it was an important step by the Committee to get these plants on the PA Noxious Weed List.

Pennsylvania Invasive Species Management Plan Update and Discussion

Speaker: **Andrew Rohrbaugh**, Section Chief, Program Services and Support Section, Division of Forest Health, Bureau of Forestry, Pennsylvania Department of Conservation & Natural Resources (anrohrbaug@pa.gov)

Andrew mentioned an update for the PA Invasive Species Management Plan has been a long process and a long time coming. Unfortunately, we were interrupted by COVID. However, this committee has been reviewing how we can improve the plan to make a difference in the Council's operations moving forward.

Several comments were received regarding the draft plan and all were appreciated. Many were minor issues, all of which are being addressed. The committee is going to keep the basic format of the plan as-is. There were some proposals/comments that were ambitious in terms of trying to convert the plan into something like what other states have; however, the committee is not going to do that with this 5-year plan. But that is not to say they cannot go back and make a different document that addresses some of those needs.

A few of the things that will be addressed include adding more information on PRISMs (i.e., background information, recommendations, and goals); removing novel ecosystems due to a concern that this would lead to some complacency; and beefing up the long-term management sections that discuss addressing invasive species that are already common/widespread in order to protect specific resources in a local area.

Jocelyn Behm from Temple University volunteered to pull together all the comments and make necessary changes. The committee hopes to have a final draft of the plan completed by the next Council meeting in March 2025.

Kris Abell (Coordinator, PA Governor's Invasive Species Council & PA Department of Agriculture) mentioned that comments are still being accepted on the current draft of the plan. And even when the next draft is created (by March), it may not yet be the final draft. Instead, Council members could still be allowed to comment on it. However, it should be nearly complete at that point.

Deah Lieurance (Assistant Professor of Invasive Species Biology and Management, Penn State University) remarked that she was the one who had concerns about novel ecosystems. From her experience in Florida, putting anything out there would give an "opt out" in terms of management. The other thing she felt strongly about was in the introduction about the positive benefits of non-native species. There is a line that says something like, "Unless sufficient positive benefits are overwhelmingly obvious." Deah thinks that's dangerous language. Not to say there are not positive benefits to non-native or invasive non-native species, but wanted to make sure that concern was heard.

Shishir Paudel (Plant Ecologist, Phipps Conservatory and Botanical Gardens) remarked that he commented on similar things as Deah did in the draft plan. Particularly, we are not seeing immediate social or economic impacts, but likely they will be intensified later down the road. Changing the language in a few places would help improve the message.

Jocelyn Behm said folks can send her specific edits to language or broader comments via email (jocelyn.behm@temple.edu). All suggestions are welcome.

Jim Grazio (Great Lakes Biologist, PA Department of Environmental Protection) asked if the 5-year update requirement is a component of the original executive order that established the Council? Andrew said yes. Jim also wanted to know how the writing team was assembled. Andrew remarked that a rough draft of the (*existing*) plan was completed 1.5-2 years ago. Unfortunately, the project was sidelined due to busy schedules and other priorities. Kris Abell (PGISC-PDA) mentioned that at the time, he had sent out an email asking for volunteers to be part of the writing workgroup.

Fred Strathmeyer (PDA) remarked that when the plan is complete, it will be in printed form. Do we have an idea of how many copies are going to be made? Or, knowing that it can be posted on the PGISC website, are we ensuring all the hyperlinks are readily available? Andrew said that all links will be functional. Regarding the number of printed copies, this has not yet been discussed.

Andrew remarked that one particular comment asked about the plan's intended audience. As a group, the committee felt the two main audiences for the plan are the public as well as governmental leadership. The purpose of the plan is to show what the Council is trying to do, what we are currently accomplishing, and what we aim to accomplish and how. Internally within the Council, the plan can be used as a guideline for the next five years to provide the goals, direction, and needed steps to accomplish our goals. So, regarding printed copies, we would like enough to provide to those audiences.

Fred (PDA) commented on the need to find common ground regarding public places (libraries, township offices, CMNH, etc.). There may be a broader audience that are not actually aware they are the audience. There has been more public outreach by the public itself to understand and gain more knowledge about invasive species. If there is going to be a push to create regional support (*i.e., PRISMs*), Fred feels the 5-year management plan is a good tool to use going forward.

Invasive Species Listing Committee Report

Speaker: **Andrew Rohrbaugh**, Section Chief, Program Services and Support Section, Division of Forest Health, Bureau of Forestry, Pennsylvania Department of Conservation & Natural Resources (anrohrbaug@pa.gov)

The PGISC has a list of invasive species currently on its website. This committee is working to place those species into various tiers, as described below.

Tier 1: Early detection/prevention priority
- No records in PA, but the species is found within 100 miles around PA
- 30 species (e.g., giant salvinia, Japanese chaff-flower, Asian longhorned beetle)

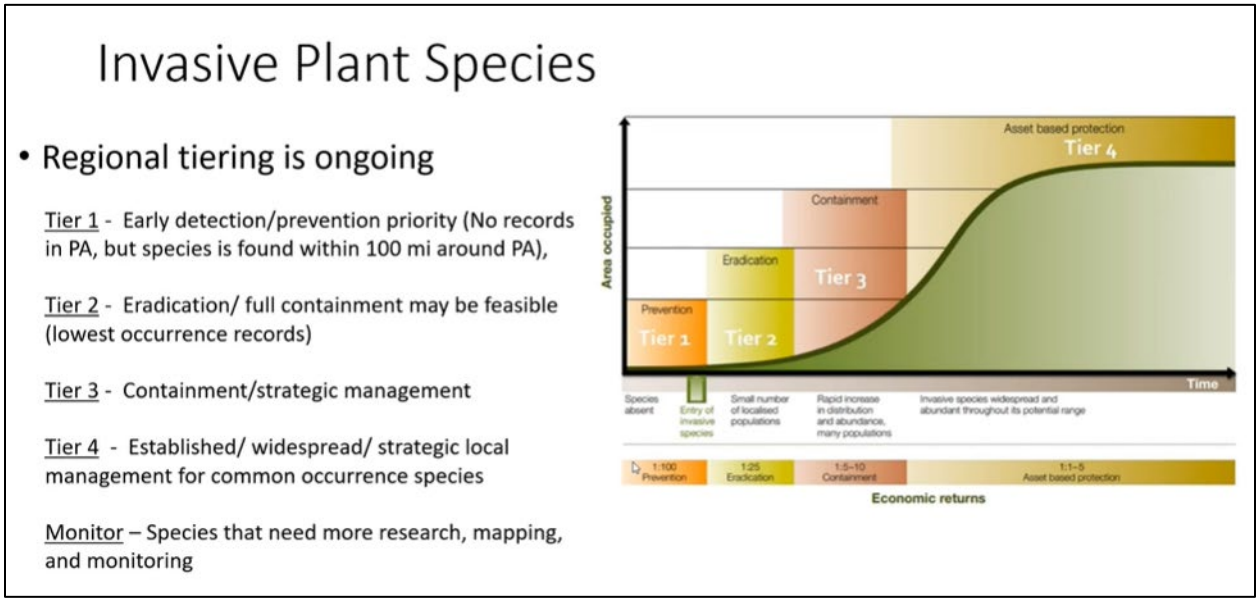
Tier 2: Eradication/full containment may be feasible
- Describes lowest occurrence records (*species not yet widespread*)
- 66 species (e.g., round goby, black swallow-wort, goatsrue, giant hogweed)

Tier 3: Containment/strategic management
- 56 species (e.g., porcelain-berry, hydrilla, European privet, zebra mussels)

Tier 4: Established/widespread, strategic local management for common occurrence species
- 49 species (e.g., tree-of-heaven, phragmites, spongy moth, Japanese barberry)

Monitor: Species that need more research, mapping, and monitoring

- 14 species



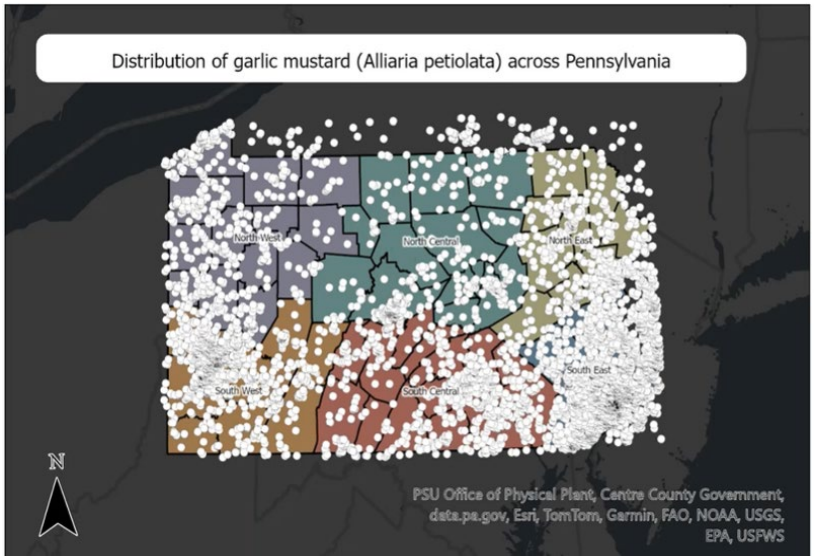
Specifically for invasive plants, not only is the committee tiering them for the entire state, but also for the various proposed PRISM regions in PA. For example, garlic mustard (*Alliaria petiolata*) ranks as a Tier 4 species across the whole state.

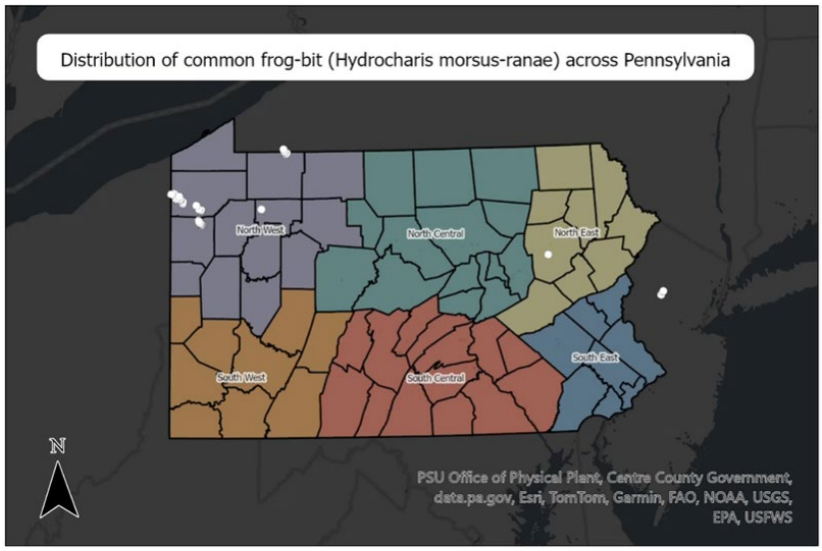
However, something like common frogbit (*Hydrocharis morsus-ranae*) ranks as a Tier 1 species across many of the PRISM regions because it is not found in most of the regions. The only documented occurrences of common frogbit are found in the NE and NW regions.

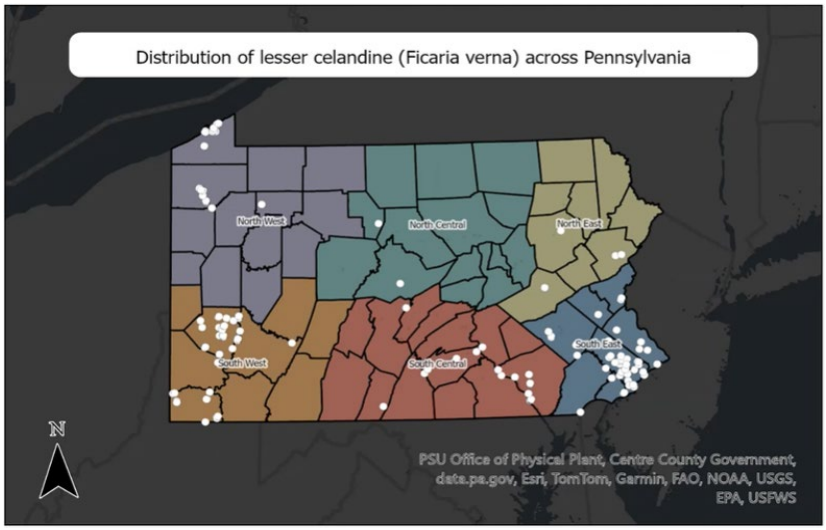
We can start breaking these species down into a prioritization that eventually can help different regions figure out what they should be keeping an eye out for that is not present, as opposed to what is present and should be a higher priority for action.

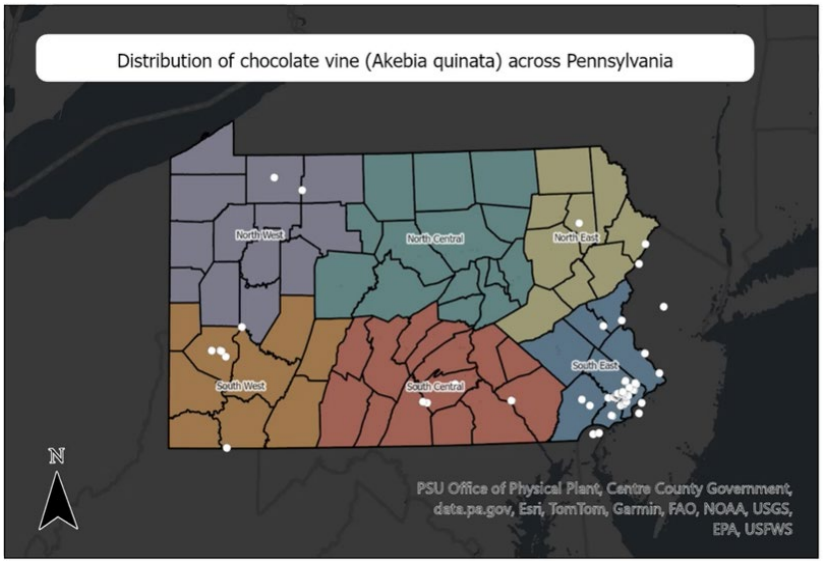
The map of Lesser celandine (*Ficaria verna*) shows a few occurrences in the NC and NE regions, whereas in the SE region it is very prevalent. The distribution information would account for this species being ranked as a higher tier, similar also to the occurrence map for chocolate vine (*Akebia quinata*).

These tiers will help the PRISM regions eventually figure out what their prioritization should be for treatment of these species, in addition to plans for early detection and rapid response. Andrew thanked Brian Daggs (Invasive Plant Ecologist, Western PA Conservancy) for providing the following map images. *The data they show comes from information compiled in iMapInvasives*.


Distribution of garlic mustard (Alliaria petiolata) across Pennsylvania
North West
North Central
North East
South West
South Central
South East
N
PSU Office of Physical Plant, Centre County Government, data.pa.gov, Esri, TomTom, Garmin, FAO, NOAA, USGS, EPA, USFWS


Distribution of common frog-bit (Hydrocharis morsus-ranae) across Pennsylvania
North West
North Central
North East
South West
South Central
South East
N
PSU Office of Physical Plant, Centre County Government, data.pa.gov, Esri, TomTom, Garmin, FAO, NOAA, USGS, EPA, USFWS


Distribution of lesser celandine (Ficaria verna) across Pennsylvania
North West
North Central
North East
South West
South Central
South East
N
PSU Office of Physical Plant, Centre County Government, data.pa.gov, Esri, TomTom, Garmin, FAO, NOAA, USGS, EPA, USFWS



Regarding aquatic invasive species (AIS) (Sean Hartzell, AIS Coordinator, PA Fish and Boat Commission – PFBC) completed four new AIS assessments for the following species:

- Fishhook waterflea (*Cercopagis pengoi*) (score = 26)
- Scud (*Apocorophium lacustre*) (score = 17)
- Amphipod (*Echinogammarus ischnus*) (score = 21)
- Spiny waterflea (*Bythotrephes longimanus*) (score = 25)

Sean used the modified GISS system to rank these species. That system has a maximum score of 70. Each of these species ranked at the lower end of the impact score.

Our group is also recommending that common carp (*Cyprinus carpio*) be removed from the "aquatic animals of greatest concern" list. While this is a non-native and somewhat ecologically impactful species, it is well established and found in almost every suitable habitat for carp in Pennsylvania. It is also probably the "lowest of the low" in terms of any management priority for non-native fish in the state.

Sean and others are working to rank/tier the aquatic animals of greatest concern, like what has been done for invasive plants. However, the regional approach did not make the most sense for AIS because it is not important whether a species is present in a region if the drainage basin of a river or other waterbody covers multiple areas (*i.e., the species can easily spread via water flow*). Therefore, the tiering for AIS was done using the major watersheds and drainage systems in Pennsylvania.

Tiering was also done for invasive insects. The committee changed hemlock woolly adelgid to "established" since it is now (unfortunately) found in all 67 counties in Pennsylvania.

The committee also added box tree moth as an emerging pest in Pennsylvania as it was recently found in Erie County. The tiered list is now available on the PGISC website.

The group discussed the fact that they do not have many non-native arachnids and other insects in the current species list (i.e., brown widow spider, Joro spider, lone star tick, and tiger mosquito). The group will start talking with DEP's vector management about some of these species, include them on the PGISC's Invasive Species list, and rank/tier them.

Mike Hutchinson (Entomology Program Manager – PA Department of Agriculture – PDA) found it interesting that the committee waited till hemlock woolly adelgid was found in all 67 counties to rank it as established. Is that a recommendation the committee would have for other species when determining them as established, or would it be some lower threshold? Mike felt a lower threshold would be more appropriate. Andrew agreed with Mike that a lower threshold would make sense; the committee just missed this in some of their earlier efforts.

John Schwartzer (Woodland Stewardship Practices Specialist, PA Department of Conservation and Natural Resources, Bureau of Forestry) asked (*in the meeting chat*) if box tree moth affects native species? Andrew said he does not believe it affects native species; however, box tree moth is under the PA Department of Agriculture's jurisdiction. Michael Hutchinson (PDA) also remarked that box tree moth feeds specifically on boxwood plants. However, if boxwood plants were totally devastated in an area, the moths might move onto other things, but they won't enjoy it, won't thrive, and won't last long.

Legislative Committee Report

Speaker: **Kris Abell**, Governor's Invasive Species Council Coordinator, Pennsylvania Department of Agriculture, Bureau of Plant Industry (krabell@pa.gov)

The Council recently held a field tour in September 2024 with a primary purpose of promoting legislative outreach. The tour was held at Octoraro Native Plant Nursery and Stroud Water Research Center. A total of 40-50 people attended in-person and 15 virtual attendees were present for the presentations given at Stroud. Kris thanked the folks at Octoraro, Stroud, and all the presenters for helping make this event possible.

In photo above, Jim McKenzie (*right*), owner of Octoraro Native Plant Nursery, demonstrates to Council members some of the nursery's planting techniques.

Kevin Zuidervliet (*wearing light blue t-shirt and green shorts*), grower at Octoraro Native Plant Nursery, leads Council members on a tour through one of the nursery's greenhouses.

The field tour event wrapped up at Stroud Water Research Center where a series of presentations on invasive species topics were given by various presenters.

All the slides from the presentations (given at Stroud) are in the meeting minutes from the September 2024 PGISC meeting. A recording is also available by request to see/hear those presentations.

Kris felt the field tour was successful, but would like to see increased legislative attendance at future events. This will be something to keep in mind when planning the 2025 field tour (*i.e., strategies to increase legislative interest/presence*). Note: The 2025 field tour has not been substantially discussed and is open for comment and suggestions from Council members and the public (i.e., venue, theme, etc.).

The Legislative Committee also welcomes input on 2025 Pennsylvania Native Species Day. We feel this event is a great opportunity to invite legislators to and have an impact there.

This committee is also pursuing our Invasive Species Act and is hopeful this piece of legislation can be introduced. However, there are no major updates to report currently regarding the Act.

The committee brainstormed ideas of what we can do regarding legislative outreach:

- Have the field meeting closer to Harrisburg next year to make it easier for legislators to attend.
- Hold a separate event near Harrisburg specifically for legislative outreach.

- Plan a legislative tour that makes several stops in a region to see different invasive species-related sites of interest.
- Hold another invasive species legislative hearing next year.
- Collect examples of successful outcomes from invasive species management to show that funding has positive impacts and results.
- Get more participation from townships and counties for legislative outreach.
- Have agencies draft a series of memos targeted at policy makers to relate the unique challenges that invasive species pose for them, and how PRISM would help address those challenges. Generally, have greater agency advocacy.
- Recruit more non-government groups and organizations to advocate and support new invasive species funding and/or PRISM.
- PA Native Species Day is our next event to plan. Make plans to attract legislative and media interest for PA Native Species Day 2025. We need to get quotes from agency secretaries for a press release.
- Hold a 'Lunch and Learn' session after council meetings where we invite legislators, provide lunch, discuss invasive species and PRISM, etc. Target doing this at March 2025 PGISC meeting.
- Collect information on specific issues relevant for legislative districts we want to focus on and hold an event in those districts to highlight select issues.
- Find larger events or projects that we can plug into that legislators are interested in and likely to attend or pay attention to (e.g., NW PA survey, PA Outdoor Corps, etc.)
- Schedule meetings with legislative committees, chairs, and individual legislators to discuss invasive species and PRISM.

It remains to be seen which of these ideas we will choose to act on, but all are great suggestions. However, one of the ideas seems to be rising to the surface. Kris asked Jeff Wagner (PA Natural Heritage Director, Western PA Conservancy) to explain the idea further.

Jeff Wagner (WPC): The idea is simple but would require some coordination. Events like the September 2024 field tour are great, but unpredictable regarding attendance from legislators and/or their staff. They receive an invitation to attend, but the event is not necessarily focused on a particular legislator, except if the event happens to be in their district.

An alternative idea would be to invite specific legislators and their staff to our quarterly PGISC meetings. Their attendance could be timed so as not to be during the business portion of the meeting, but instead for an hour (at most) after the conclusion of the meeting. We could invite 6-10 legislators (not too many) with the intention of discussing specific work occurring in their districts. Follow-up would occur to ensure attendance.

In between PGISC meetings, a group of us, including the Legislative Committee, could comb through districts involved and decide on projects to highlight. (There are activities going on, some of which we know about, some of which we do not.) To make things relevant to the invited legislators, there could be a short presentation that highlights the specific projects going on (*or recently completed*). We would want to choose legislators that we think are going to be interested, friendly, and pivotal.

Folks involved in legislative affairs with the various state agencies and NGOs could direct that selection process, determining a list of around a dozen legislators that we could reach out to over the next year and extend invitations to upcoming PGISC meetings.

If we reached out to legislators over the course of a year and were successful with several of them, those will be great connections to make. It would be a very directed and targeted outreach effort. The goal would not necessarily be to highlight invasive species being a problem, but rather that invasive species are a problem and here is what is happening (at least in part) in your district to do something about the issue (i.e., highlight existing efforts, where funding is coming from, groups involved, and constituents being affected).

To reiterate, this idea would be affiliated with the quarterly meetings of the Council. It would be great to invite legislators to each upcoming meeting. If we implement this idea, the first go-around will likely teach us some things about the best way to about this. From there on, things would hopefully go smoothly.

Jeff commented that this idea would indeed require more work to implement, but it seems like such an important function of what this Council needs to do to advance the PRISM concept in Pennsylvania and invasive species work in general.

Fred Strathmeyer (PDA) commented that he felt the idea is good and it would need to be sorted out in between PGISC meetings to become specific to what Jeff envisions. However, some of Fred's hesitation was in relation to virtual PGISC meetings (i.e., how would this work, who on the Council takes the lead, and where would you have this meeting with the legislators)? Some additional tweaking of the idea is warranted and providing the right tools to help attract legislators to attending future PGISC meetings will be good to consider (i.e., creating and setting "tools' in motion such as disbursement of the PA Invasive Species Management Plan, communication about planned presentations, coordination and communication with one or more Council members, interaction with legislative offices, etc.)

Jeff clarified that the group did not want to overburden legislators or their staff to travel far, so the idea would be to have these meetings in Harrisburg, such as at the PA Department of Agriculture, where PGISC meetings are typically held in-person. Additionally, the Legislative Committee would be the "muscle" behind the logistical work and assembling

information regarding projects occurring in various legislative districts. We would also inquire with the full Council to get their thoughts and suggestions on projects to highlight as well as reach out to specific agencies, organizations, etc.

Gregg Robertson (PLNA) remarked that he also liked the idea of inviting legislators and their staff to future PGISC meetings and has been advocating for something like this. However, it will be difficult to get legislators out of the Capitol when they are in session. Therefore, these meetings would have to be somewhere in the Capitol and would also have to be on a session day (which typically occur Mondays through Wednesdays). Legislators usually come in on Monday morning and the session usually starts around noon or thereafter (on a Monday). By late afternoon on Wednesday, they are returning to their districts. To make this idea work, you will have to find some time during that timeframe to host this type of meeting.

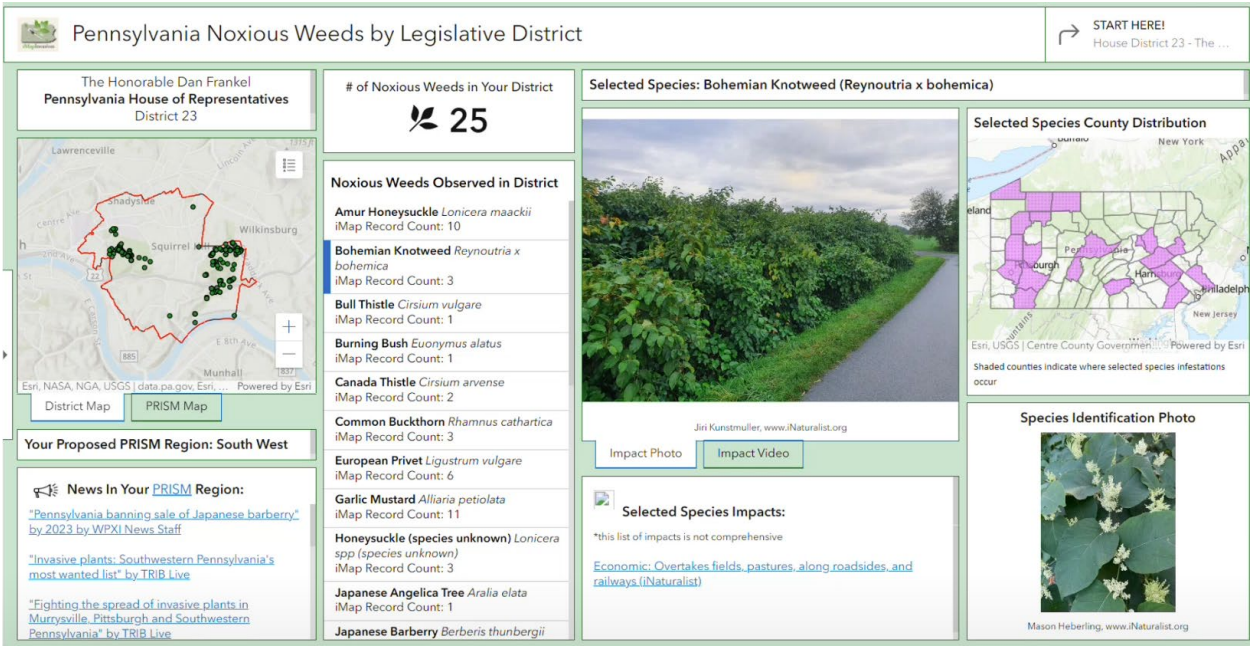
With the Council of State Farm Organizations, we have been successful in having meetings with legislators and/or their staff on a Monday (late afternoon or evening) or a Tuesday (late afternoon) because by Wednesday they're gone. Meetings such as this also must take place in the Capitol because they are not going to travel outside. You might get 1-2 staff to come to the PA Department of Agriculture, but for the most part, particularly during a session day, you are not going to get staff out of the Capitol.

Meetings with legislators tend to be most successful if they are held in a legislator's district. If possible, it would be ideal to involve a couple of constituents who are from that district. When you involve constituents, you get the attention of the legislator. If you can show a legislator something that is going on with their constituents in their district, that is your best chance of getting them out.

Altogether, that is the problem and the parameters we're facing to get legislators out and interested in the issue of invasive species.

Jeff thanked Gregg for his input. This is the kind of information the Legislative Committee needs from the legislative liaisons, organizations, and agencies involved. (Jeff said he personally could not have described what Gregg just did as far as the ability to get people together in terms of legislative outreach.) As far as going district by district, that will be very labor intensive, but we could discuss that idea further. The original thought was to have 4-5 legislators at a time in a central location in Harrisburg where we could then make headway.

Gregg said he is happy to help facilitate this idea as he is a current member of the Legislative Committee, but the work will be tough. However, the payoff that you can get from having a meeting in a legislator's district is going to be there.

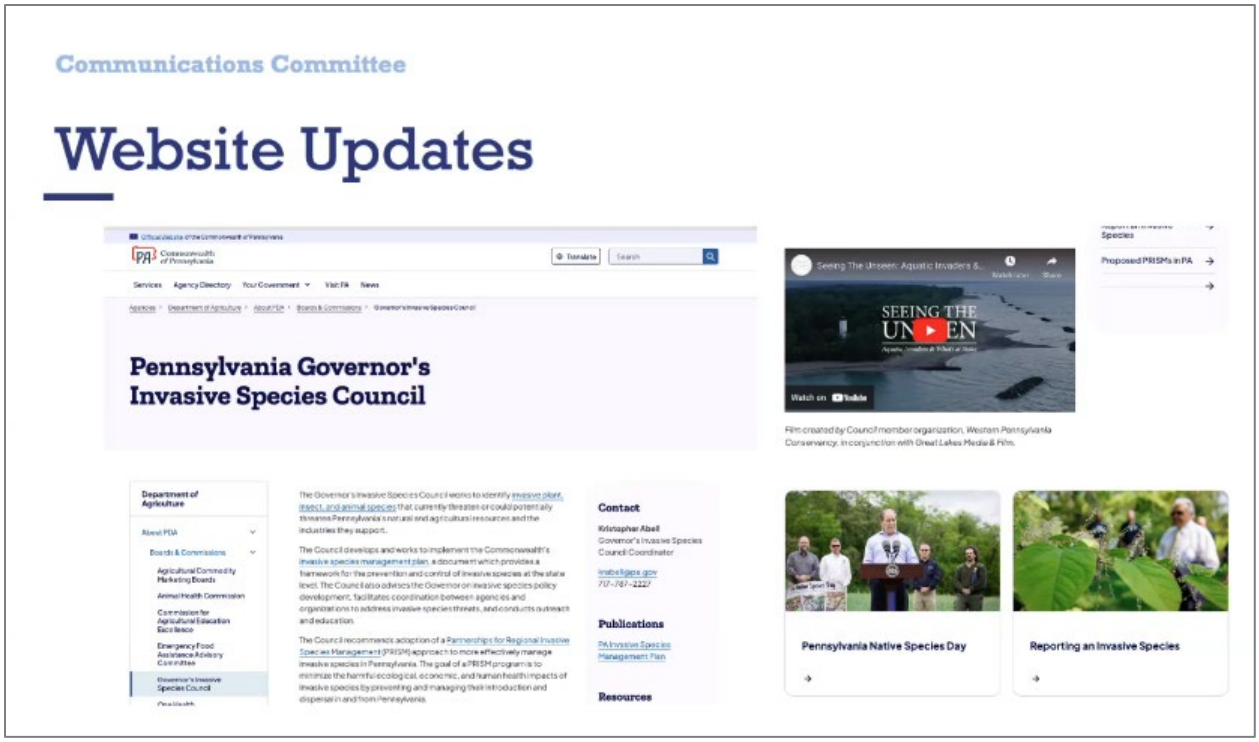


Kris also briefly highlighted the "Pennsylvania Noxious Weeds by Legislative District" dashboard (*see photo above*) which shows noxious weeds that are present in individual legislative districts. This is a great tool to use for anyone speaking with legislators.

Communications Committee Report

Speaker: **Patricia Prade**, Extension Entomologist, Horticulture, Penn State Extension, Lehigh/Northampton counties (prade@psu.edu)

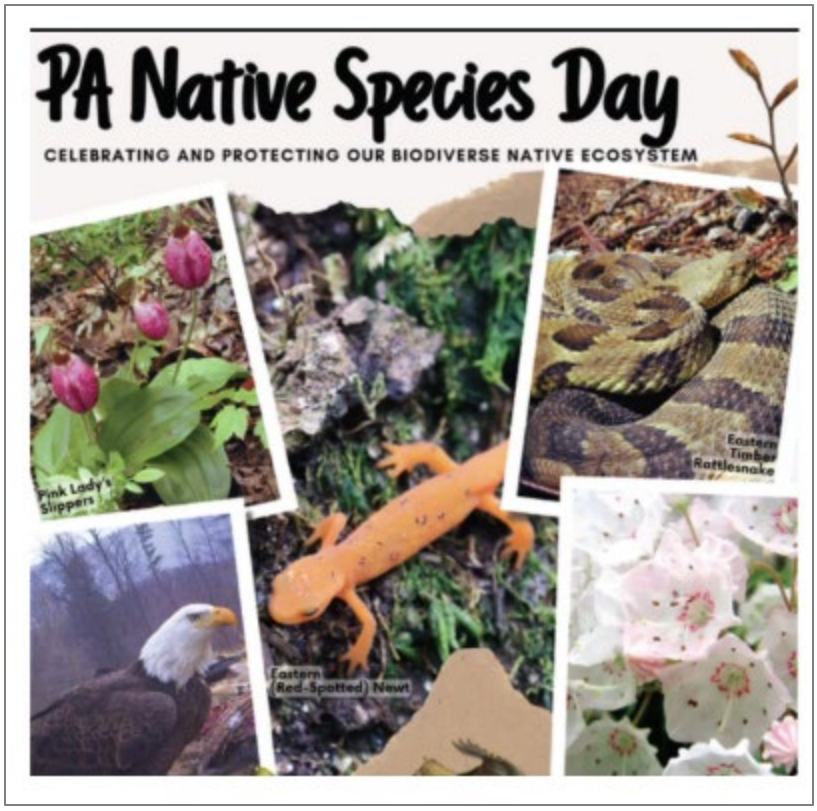
The Communications Committee has been updating the Council's website due to the recent change in layout for all state agency websites, including the PA Department of Agriculture's website. Unfortunately, the new layout did not look good and needed significant edits. Additionally, several links were not working, and photos were not showing up. Thanks to efforts by committee members, the website now looks much better and more changes are currently in the works.



We started sending out the Council's e-newsletter again in September 2024. The latest version of our e-newsletter was sent in an e-mail format, which was not the same as the previous format we were used to. For the time being, this is how the Communications committee will share updates with a larger audience.

If anyone has suggestions for articles and events that you would like to see in future editions of the PGISC e-newsletter, please send them to either Patricia Prade (Penn State Extension) or Kris Abell (PDA). We want to have a very robust newsletter with everything that is pertinent to invasive species in Pennsylvania. To do that, we need everyone's help. (Patricia asked Rachel Reeb to send along information regarding the topics she presented on at the beginning of today's meeting so they can be included in a future edition of the PGISC e-newsletter.)

We are also exploring how to make the PA Invasive Species Management Plan more appealing and accessible to the public.



Our committee is currently in the planning stages for the 2025 PA Native Species Day event. One of our goals is to establish a fixed date for the event, which we plan to keep for upcoming years. All Council members will receive an email from Kris Abell (PDA) with a selection of dates in May to choose from. There was also a suggestion of having the date be June 17 because that was the date listed in the original PA Native Species Day proclamation. If you have not voted yet, please do so soon. Our committee will be meeting next week and will finalize the date then.

We would like to make the PA Native Species Day event a statewide initiative. Essentially, host events in multiple locations across the state; make it a big event in a lot of different places. We will need help promoting PA Native Species Day on social media, newsletters, and in emails. Please help with this if you can.

In 2025, the PA Native Species Day event will be partnering with the Pennsylvania Invasive Replace-ive Program. Patricia asked John Schwartzer (DCNR) to provide more information about that program.

John prefaced by saying that he is just the spokesperson for a larger partnership of multiple conservation organizations and state agencies that have been working on the Pennsylvania Invasive Replace-ive initiative.

The program will allow Pennsylvania residents and communities to receive replacement native trees or shrubs in exchange for proof of removing invasive trees or shrubs. We are working out the details right now, but starting in Spring 2025, in conjunction with PA Native Species Day, there will be multiple events across the Commonwealth in locations to be determined. Registration will be required for the events so we can scale the inventory on hand for each event's expected volume of participation. Because we are working in conjunction with PA Native Species Day, the press releases for the events should be coming out soon. We will also give participants time to get their invasive species removed before the event. Participation requires that individuals show a before-and-after picture of their invasive removal to receive the replacement plants.

Funding for the replacement plant purchases is coming from U.S. Forest Service grants held by the Bureau of Forestry's Urban and Community Forestry Section and the Chesapeake Bay Watershed Forestry Program. The planting stock will most likely be purchased from Pennsylvania nurseries depending on inventory availability. We are just now starting to reach out to nurseries to begin the procurement process.

Because there are multiple funding streams for this initiative, it will be a dual focus program. When an invasive species is removed, participants will be provided with a replacement native shade tree, or they can choose to select an agroforestry or production type tree or shrub species that provides a usable product such as edible fruits, nuts, floral cuttings, or fiber.

The expected outcomes of the PA Invasive Replace-ive Program are:

- Fewer invasive species on the landscape
- More native trees and shrubs where they are needed most
- Increased public awareness of the benefits of native species and the downsides of invasive species in landscaping and beyond
- Promotion of productive and edible products from trees and shrubs for enjoyment by participants and the public

Fred Strathmeyer (PDA) asked that information be shared with Council members highlighting the PA Invasive Replace-ive Program (i.e., details John just shared). Fred also asked that details about the event be posted on the PDA website. Kris Abell (PDA) remarked that much of what John highlighted today is a sneak peek into the program; however, much of the information is not yet solidified, but is being worked on. Hopefully in January 2025, we will have information posted on the PDA website as well as other relevant places. In follow-up, Fred asked that a general outline of the proposed PA Invasive Replace-ive Program be sent to Council members. Folks can then review and provide suggestions prior to the initiative's details being finalized. Kris and John both agreed to Fred's suggestion.

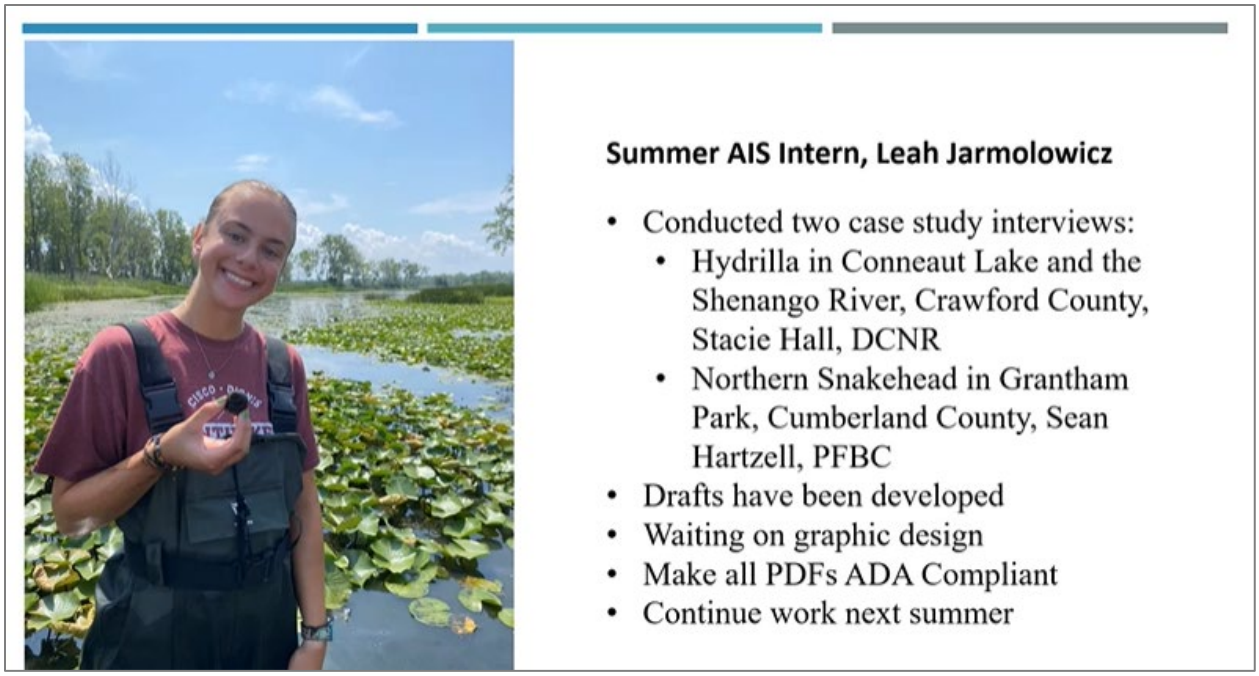
Aquatic Invasive Species (AIS) Rapid Response Committee & AIS Education and Outreach Committee Reports

Speaker: **Sara Stahlman**, Extension Leader (sng121@psu.edu)

The AIS Rapid Response (RR) subcommittee completed an update of the AIS RR plan and has since been focusing on updating pieces of the plan, such as the case studies.

As mentioned during the last update, the group applied for Great Lakes Restoration Initiative (GLRI) funding for fiscal year '24 to continue to develop and enhance the case study section of the AIS RR plan. Good news; funding was received from the U.S. Fish and Wildlife Service (for that GLRI funding) to do this work. We are currently in the process of setting up the budget internally through Penn State, but have started work on this project, which is the update Sara is giving today. Our group has until November 30, 2026 to complete this work. The deliverable for this project is to develop 4-6 new case study PDFs.

Sara recognized summer intern Leah Jarmolowicz who has done a lot of work moving this project forward. So far, the group has identified two additional case studies to create and Leah conducted the interviews for both. The first case study focuses on hydrilla in Conneaut Lake and the Shenango River in Crawford County. Stacie Hall (Assistant Manager at Pymatuning State Park) was interviewed for this case study. The second case study focuses on northern snakehead in Cumberland County at Grantham Park. Sean Hartzell (AIS Coordinator with PA Fish and Boat Commission) was interviewed for that case study.



Transcripts for both case studies have been written and drafts have been developed for the affiliated interviews. The group is currently waiting for the funding to come in so they can move this work to their graphic designer to develop the case study documents. Another component to this effort is ensuring all existing case studies as well as any new case studies to be developed are ADA compliment PDFs.

The group is planning to continue this work; likely in spring/summer 2025 they'll have another intern that can help conduct additional case study interviews. As the project continues to move forward, they'll be sure to share our progress.

Switching gears to the AIS Education and Outreach Committee…

The focus of this committee is to share AIS education and outreach activities to help promote collaboration and partnership, identify any crossover in the type of work that the group is doing, and avoid duplication of efforts. The committee also provides an opportunity to leverage resources and opportunities to promote and share events and activities going on related to AIS in Pennsylvania. Sara invited anyone interested in this type of work to join the committee. The group chats quarterly to share news of various current activities.

During their most recent meeting, the group discussed the development of state and regional bait identification resources. This is an effort that Sara is working on (with PA Sea Grant) along with Sarah Whitney and Amber Stilwell. The goal is focusing on the vector of spread – the bait trade. This effort will provide resources for bait shop owners, dealers, and

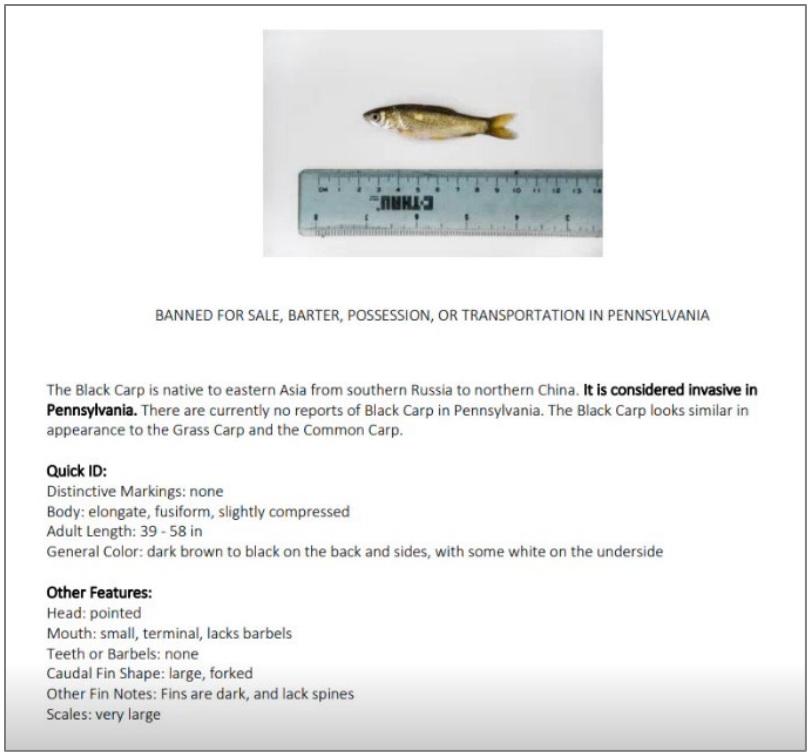
growers as well as anybody working within that space of live bait to help these individuals identify AIS that might be mixed in with bait shipments.

For example, in the photo below, these are young-of-year (YOY) species of silver carp which can closely resemble bait fish. To somebody who is not trained to identify them, these silver carp can easily get mixed in with the bait shipments, not be noticed, and continue to be released when people use bait. This effort will provide resources to help inform this audience and put in place a control point for spreading AIS.

Juvenile Silver Carp (University of Illinois)

As part of this project, the group is creating two different resources. The first one is a Pennsylvania-specific bait guide. Funding for the guide is from the GLRI program in fiscal year '21. Content for the guide has been developed and reviewed. (*Below is a sample page of content describing the black carp.)* The bait guide is currently with a graphic designer and the group is hoping to see completion of the project at the beginning of 2025.

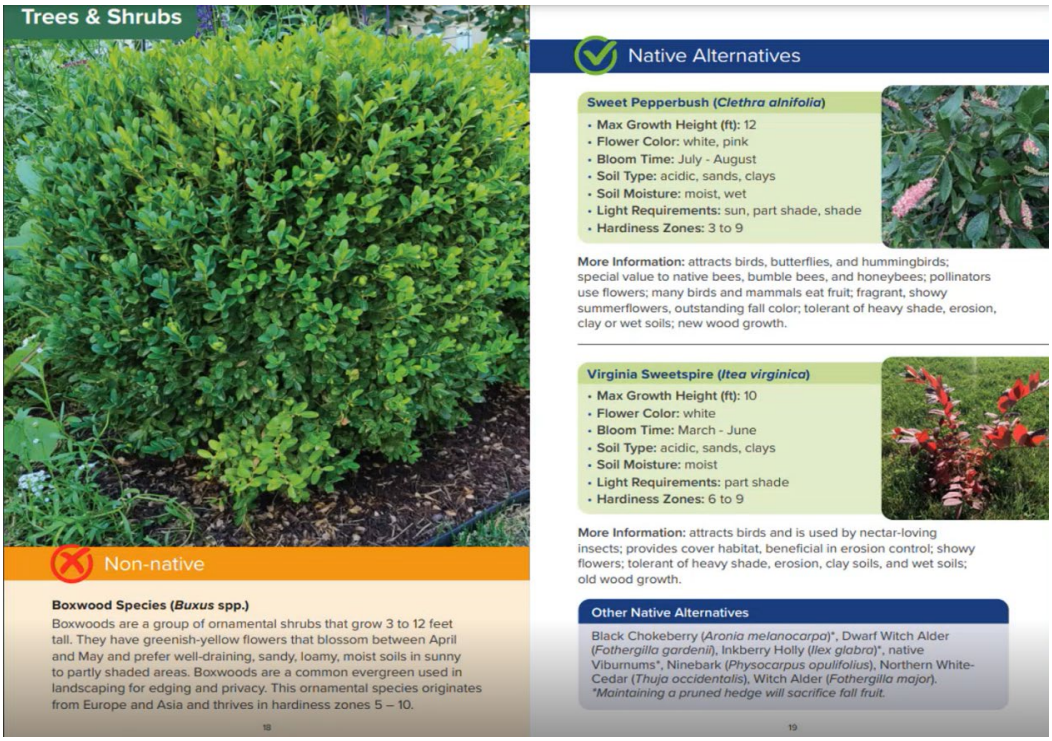
The second project is more of a regional project and is also funded through GLRI. It is their inner jurisdictional funding opportunity and partnership with the Great Lakes Commission (GLC). The GLC funneled money to Sea Grant to work on this project, which entailed looking at all the existing bait guides in the region and working with a PhD candidate at Penn State to conduct a content analysis. This included reviewing all the bait guides and identifying common themes and content throughout the guides, looking at different ways that bait fish and invasive species are featured, various format options, and unique aspects from the regional guides that the group might want to consider for their resource.



The actual content analysis was completed in October, but the group is working right now with the PhD candidate to develop a synthesis document. This document will help the group connect directly to get feedback from law enforcement and industry folks and help frame the development of the Great Lakes resource. For this effort, the committee is still in the beginning stages and are looking for input from the user group so they can let the committee know what info they want to see and what would be most helpful to them. Having this feedback will increase the chances of the resource being used.

Sara also mentioned the Choose Native initiative. This is a project that Amber Stilwell (PA Sea Grant/Penn State Extension) took the lead on in working with the landscaping and water gardening industry. Amber did a lot of work with Penn State Extension to connect directly with landscapers and water garden suppliers to find out what is being sold the most. She then used that information to identify native alternatives that would help build a market for native plants and provide the public with the tools needed to prevent the spread of invasive species.

One of those tools is the Choose Native books. These books provide a “choose this, not that” option for several terrestrial and aquatic plants that are frequently used in water gardening and landscaping. Several community workshops were hosted around the Choose Native initiative. A total of 150 landscapers, water gardeners, and community members attended three in-person regional workshops that took place in March 2024. A virtual webinar was also hosted that had over 500 people in attendance.



The photo above provides a look at some of the information in the Choose Native guidebook. For example, boxwood is a non-native species and its native alternatives are shown along with information about each.

Finally, there are some upcoming events in 2025 that this committee is interested in being involved with to build connections and perhaps also host a booth at. They include:

- Joint PA Association of Conservation Districts (PACD) and State Conservation Commission (SCC)
- PA State Association of Township Supervisors (PSATS) (May 4-7 in Hershey, PA)

Rachel Reeb (CMNH) asked (*in the meeting chat*) about print versions of the Choose Native booklet. Sara remarked that she is not sure when print versions will be available, but that is something that is being worked on.

Northwest Pennsylvania Stakeholder Survey

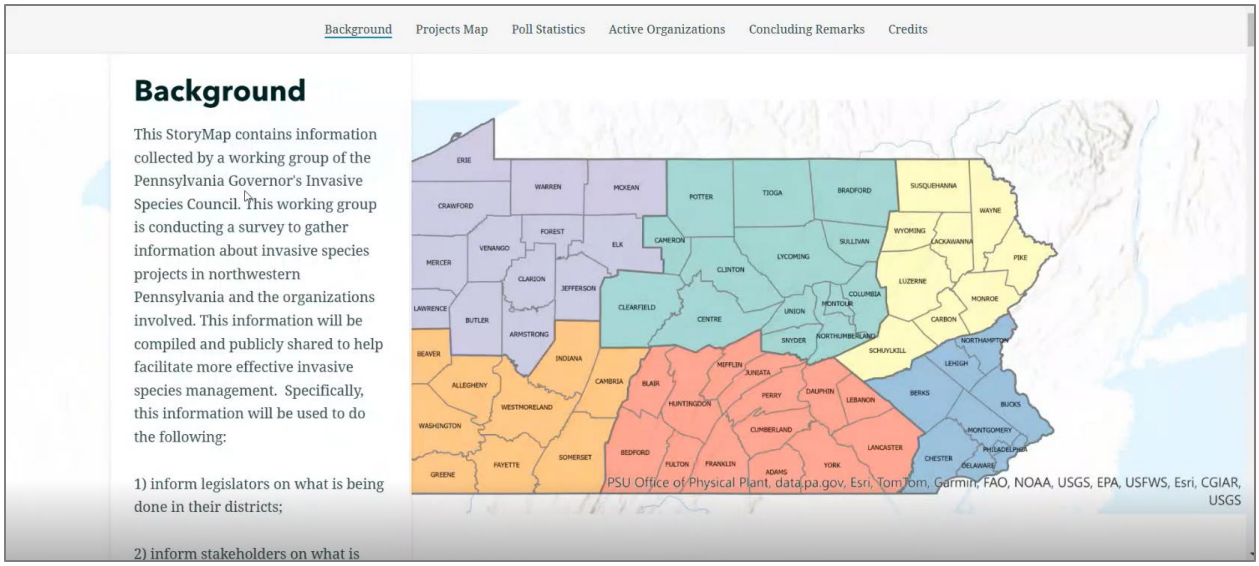
Speaker: **Brian Daggs**, Invasive Plant Ecologist, Pennsylvania Natural Heritage Program, Western Pennsylvania Conservancy (bdaggs@paconserve.org)

Kris Abell (PDA) provided some background on the information Brian will further highlight.

Kris: About a year ago, PGISC held an invasive species stakeholder meeting at Moshannon State Forest. After that meeting concluded, PGISC wanted to ensure that appropriate follow-up occurred. Therefore, a committee has been gathering information and putting together a StoryMap to share news about work being done in northwest Pennsylvania by various organizations.

Brian remarked that the committee settled on presenting their compiled information in the form of a StoryMap as this is a publicly available and user-friendly tool that accommodates a presentation format. By compiling and presenting this information, the committee hopes to achieve several outcomes including informing legislators of invasive species projects occurring in their districts. The group also wants to keep all relevant stakeholders, the public, educators, researchers, and community scientists informed of work being done within their region.

The goal of this resource is to help bolster applications for various projects, help identify gaps/needs for management and expertise, and coordinate information sharing and volunteer opportunities. It will also be helpful to have a database showing a network of people, projects, and organizations collaborating together within a region.



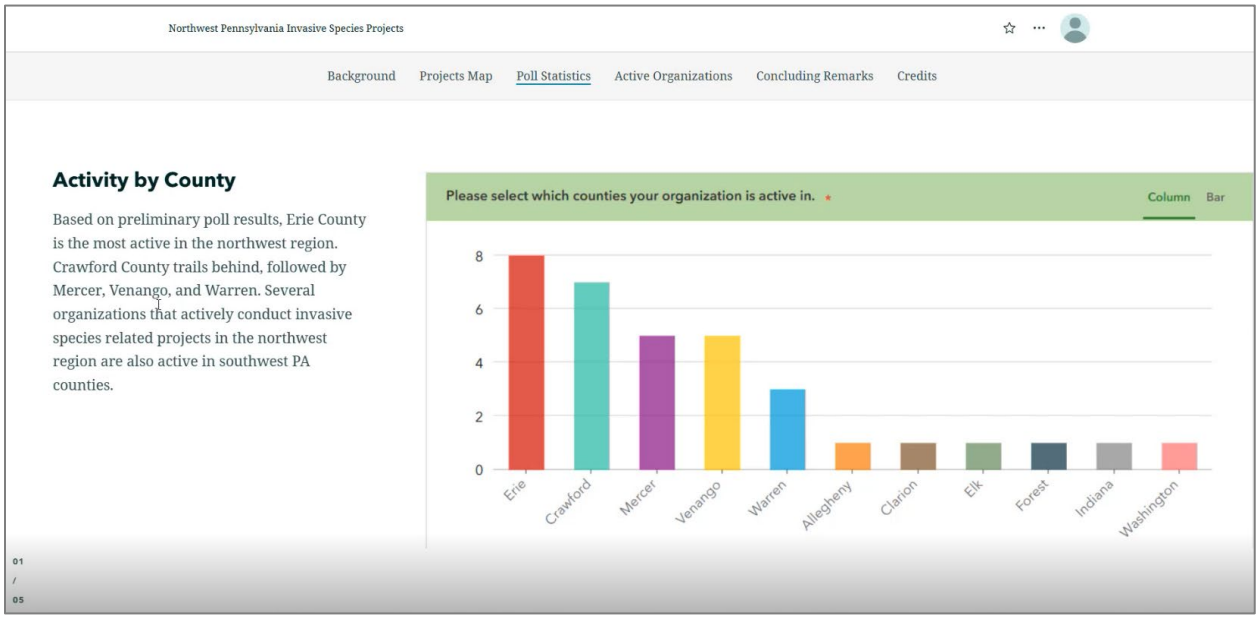
Following the stakeholder meeting in NW PA, the group begin compiling information from that region that highlighted collaborative invasive species efforts like the Lake Erie Watershed Cooperative Weed Management Area (LEW CWMA) and the Allegheny Plateau Invasive Plant Management Area (APIPMA). The NW region made for an ideal starting point for this project since there's already a lot of activity, organizations, and networks in place to build from. Once compiled, this information could be made into a map (within the StoryMap) and shown to legislators regarding what projects are happening in their districts.

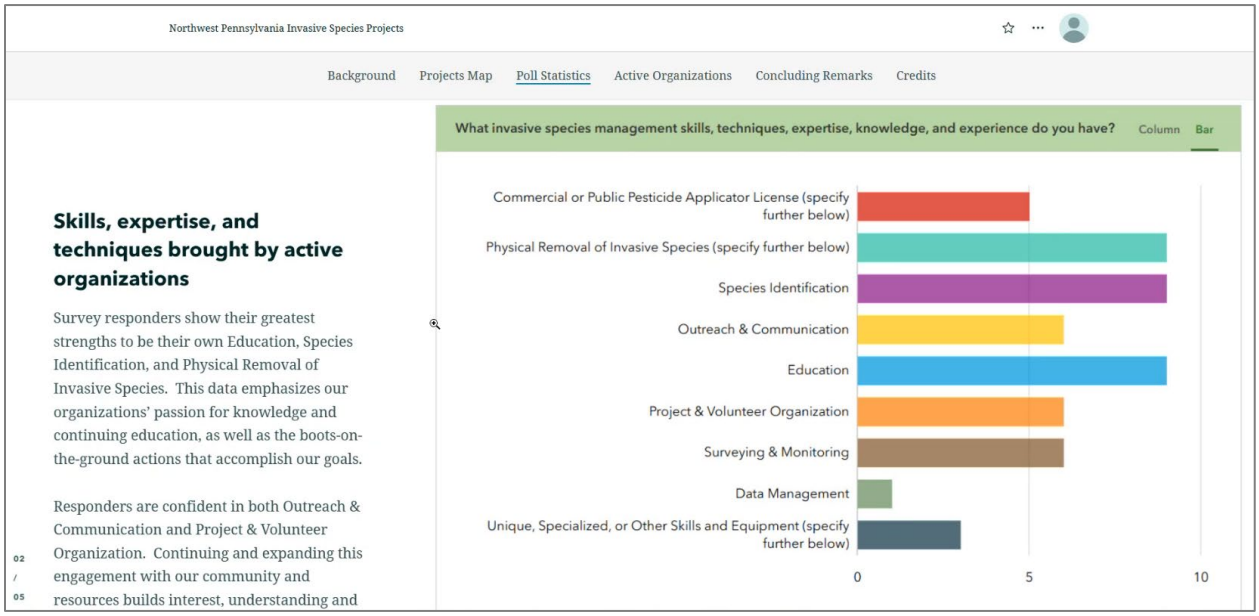
A survey was sent out earlier this year (via Survey123) to obtain geospatial data on projects happening in NW PA. This first round of data gathering was a preliminary effort. Unfortunately, the timing of sending out the survey was not ideal since it was at the beginning of the field season when many people were outdoors managing and monitoring invasive species (*and not indoors checking their email*). We did receive several responses; however, the plan moving forward is to recirculate the survey and continue to fill in the map with relevant projects.

The StoryMap provides an interactive map showing points that reference different projects happening in NW PA. Viewers of the StoryMap can click on a point and see information describing a project, who is involved, project goals, the funding source (if provided), and photographs. Ultimately, the StoryMap is meant to be a visual way of disseminating this information.

The committee also included several polls within the survey to get information on the capacity and expertise the various active organizations are working with as well as what areas they are lacking in (limitations). These polls showed which counties are most active, with Erie County being one of the most active. This is because work happening in Erie

County is often being funded by GLRI, and an active CWMA (Lake Erie Watershed) is in place.





Polls also gathered information on the types of skills and expertise various organizations have as well as where there may be a need for additional skills. For example, most people can do physical invasive plant removal; however, not many organizations have data management expertise.

Information gathered also showed what kind of physical control methods people are most often using in their projects, and what kind of pesticide applicator licenses are being held and maintained by active organizations.

Data on organizations' limitations was insightful as it showed what is most hindering their ability to achieve their goals in invasive species management. Most people have a need for more staff, which stems from a need for more funding to achieve the goals and aspirations that organizations are working toward regarding invasive species.

If you are part of an active organization in NW PA and would like your work included in this project, please fill out the survey and contact either Brian (WPC) or Kris (PDA) if you have questions. Once this committee finishes gathering data, a tabulated database will be made available that will facilitate searching and filtering for this information (i.e., find organizations and individuals you might know, discover new project partners with different kinds of expertise, or assistance with a task).

Kris Abell (PDA) remarked that the effectiveness and utility of this project's StoryMap will depend on participation in the survey. He encouraged Council members to share this opportunity to participate in the survey through everyone's various networks.

Updates, Activities, and Events

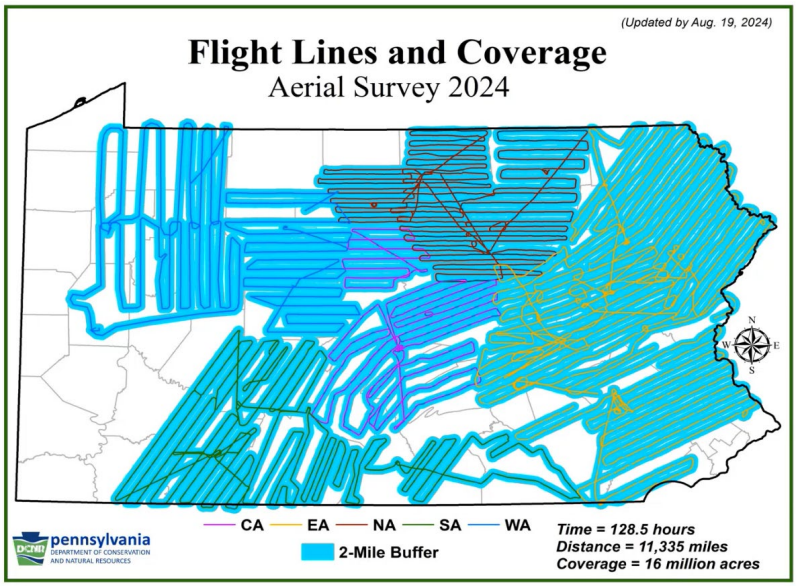
Kate Harms (Executive Director, PA Lake Management Society - PALMS) said the Council will have a booth at the 2025 Farm Show (January 4-11). The booth's theme will be aquatic invasive species (AIS) prevention. Folks involved include Kris Abell (PDA), Kate Harms (PALMS), Sean Hartzell (PFBC), and Amber Stilwell (PA Sea Grant).

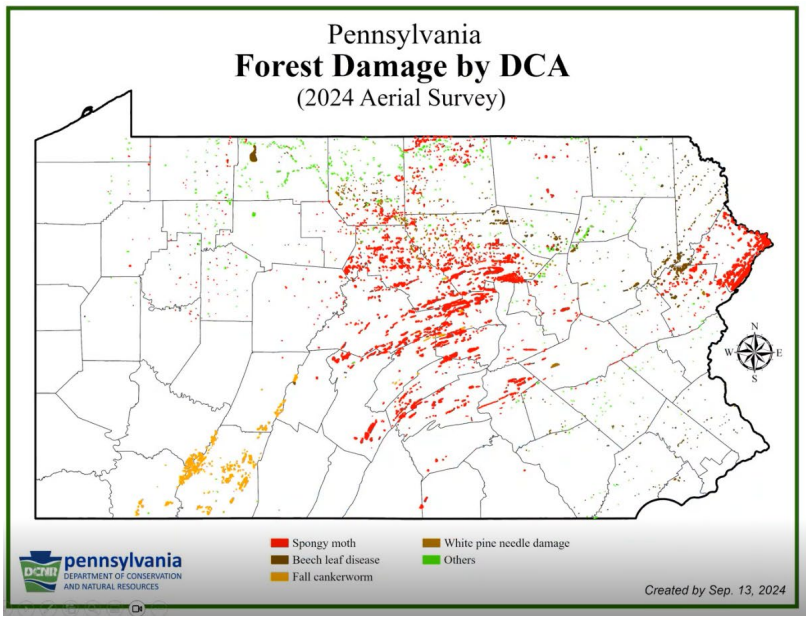
The booth will feature a mock clean-drain-dry activity that includes a small kayak, paddle, and fishing rod. Participants can inspect and remove aquatic hitchhikers from each of the objects as there will be fake plants hidden on each. This is a similar activity that PALMS does with larger boats, but in this case is sized down to fit on a tabletop. Some of the plants used in the activity are fake aquarium plants and others are ones the group created. The goal of the activity is to make people think about cleaning, draining, and drying their boats, equipment, etc.

As an aside, the Council's booth will be part of the Ag Explorer Program, so we will have an activity stop for kids. Kids can visit our booth to participate in this activity and then get their passbook stamped. (They will be encouraged to come to our booth and do the activity by looking at their passbook and all the different stops they can make.) There is also a possibility of having some online resources available too.

A volunteer sign-up was circulated for this event and a Zoom training is set for December 18 at 11am that will show booth volunteers how to host the activity.

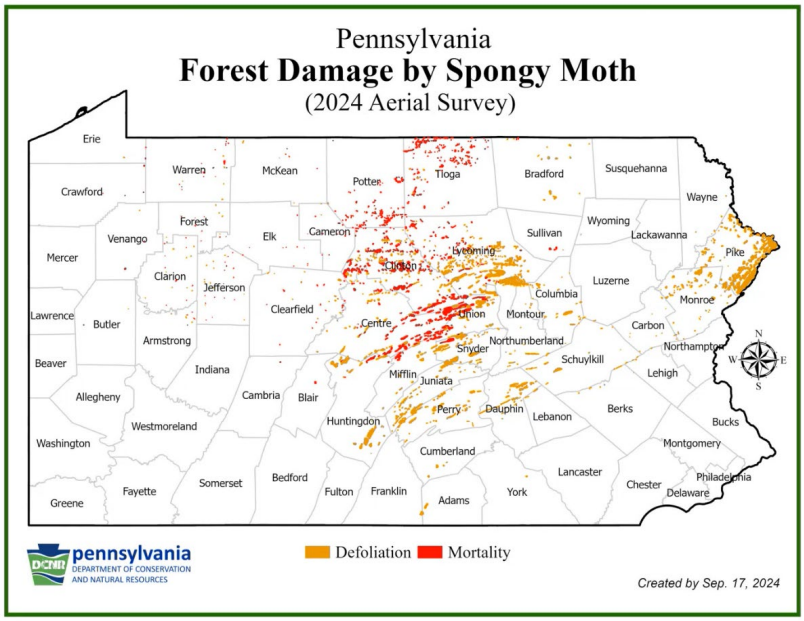
Andrew Rohrbaugh (DCNR) provided an update on the DCNR's Bureau of Forestry's annual aerial survey of forest damage and mortality across Pennsylvania, covering roughly 16,000,000 acres. Much of what was seen this year was spongy moth defoliation, which encompassed 331,000 acres. They also saw a native fall cankerworm continuing to cause issues in southwestern Pennsylvania.





Forest Pests mapped/ reported via aerial survey only.

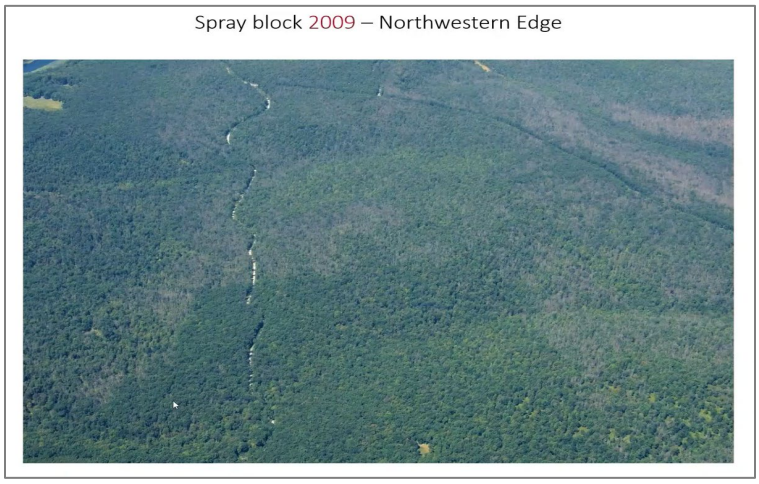
Forest Pest	ACRES
Spongy Moth	331,632
fall cankerworm	57,712
beech leaf disease	33,095
white pine needle damage	14,279
Others	21,613
Grand Total	**458,331**



Spongy moths continue to have impacts across the state, with 2024 being the third or fourth year that this species outbreak is still causing significant damage. Unfortunately, that damage often leads to mortality in some of these areas. (The map above shows what was observed in terms of defoliation vs. mortality by spongy moth across the state; unfortunately, it is quite extensive.)

Hopefully in 2025, the DCNR will have a much smaller spray program in the state because we think that populations of spongy moths are diminishing. For example, the following two images show aerial views from Black Moshannon State Park. In 2007, a spray block was treated during one of the outbreaks. Much defoliation can be seen (brown areas). Then in 2009, a picture was taken of that same area which shows no defoliation from spongy moth. The mortality that is visible in the surrounding landscape is outside of the spray block.

Spray block 2007 – Northwestern Edge



Brenda Shambaugh (Executive Director, PA Association of Conservation Districts – PACD) provided an update on some of the Conservation Districts in northwestern PA that have been working on projects (*in relation to the pilot PRISM program being administered by PACD*).

The Erie County Conservation District has been working on a restoration and control project since the beginning of the pilot program. Their projects also involve educational components, many of which will be implemented in Spring 2025.

The Clarion Conservation District installed educational signage in four regions of the county, specifically in places like trail heads, boat launches, and local parks. Additional new signage will be going up in Spring 2025.

The McKean County Conservation District held four workshops that discussed managing invasive species, specifically Japanese knotweed, and had over 100 people in attendance. Their group also gave away native plants to 20 people. Plans are in place to host additional events in August 2025. Treatment of goatsrue continues in McKean County with approximately 50-60 properties identified and management occurring in those areas. Their group will be installing invasive species signage along some of the trail routes. They also hosted a native plant walk in October 2024.

The Venango County Conservation District asked for input from people who live in the county on what kind of projects they would like to see, with input being received. They had a round of invasive species funds that ended on September 30, 2024 and received seven eligible applications by that time. They will fund those projects in Spring 2025.

The Potter and Elk County Conservation Districts are working together on a draft program that will be worked on in Spring 2025.

That is an overview of projects happening with some of the County Conservation Districts; however, Brenda did not have time to mention what is going on with all the districts. All the districts are working diligently to put their projects in place.

Fred Strathmeyer (PDA) remarked that based on the presentation Brian Daggs (WPC) gave about the NW PA stakeholder survey, he encouraged Brenda and the NW county conservation districts to share information from the pilot PRISM program for that information to be included in the StoryMap and database being made. Brenda said that a final report will be created for the PACD pilot PRISM program; however, the program will not wrap up for another 1-2 years. Information given to Brian at this point would be very preliminary; however, something could be put together and given to Brian.

Public Comment Period

No public comments.

Concluding Remarks

The 2025 proposed PGISC meeting schedule is as follows:

- Thursday, March 13 (in-person with virtual option)
- Tuesday, June 10 OR June 17 (in-person with virtual option)
- September field tour meeting (date & location TBD)
- Thursday, December 11 (virtual only)

Contact Kris Abell (PDA) if you have concerns or conflicts with any of these proposed meeting dates. Brenda Shambaugh (PACD) mentioned that the State Conservation Commission (SSC) has a meeting scheduled on June 17.

Fred thanked all the presenters that shared information and remarks during today's meeting as well as participation from the public. He values all the work being done by the various subcommittees.

Fred wished everyone a safe and happy holiday season!

Next PGISC Meeting

Thursday, March 13, 2025 (10:00am – 12:30pm)
Pennsylvania Department of Agriculture
2301 N Cameron Street, Harrisburg, PA 17110

Meeting will be in-person with a virtual option.

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

Questions or concerns regarding 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 PGISC meeting, please contact Kris for more information on the meeting's date, time, and location.