

Meeting of the Pennsylvania Governor's Invasive Species Council (PGISC)
Tuesday, December 6, 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 Rohrbaugh, Brian Harris, Brian Pilarcik, Donald Eggen, Fred Strathmeyer, James Grazio, Jeffrey Wagner, Jocelyn Behm, Joseph Demko, Lisa Murphy, Mary Beth Ruh, Piper Sherburne, Sarah Whitney, Scott Bearer, Sean Hartzell

Other Participants Present: Ali Bowling, Amber Rose Stilwell, Andrea Ferich, April Moore, Becca Manning, Brant Portner, Brenda Shambaugh, Brenda R. Wasler, Brian Daggs, Brian Gallagher, Brian Koehler, Bryon Ruhl, Cecile Stelter, Dani Jurina, Darrel Eugene Showers, Deb Klenotic, Derek Eberly, Destiny Zeiders, Ekaterina Nikolaeva, Emilee Boyer Euker, Eve Adrian, Grace Wildermuth, Houping Liu, Jennifer Pavao, Jenna Davis, Jessica Lenker, Jill Rose, Johnny Zook, Jonathan Geyer, Jordan King, Justin Challenger, Kate Wehler, Kate Zipp, Kendra McMillin, Kierstin Carlson, Kris Abell, Kyle Schutt, Larissa Cassano-Hamilton, Lawrence Barringer, Linda Lohner, Lisa Candelore, Michael R. DiMatteo, Michael Hutchinson, Michael Roth, Michele Long, Nate Lotze, Nick Decker, Nick Trivelli, Paul Weiss, Philip Light, Robert Caccese, Scott D. George, Shane Phillips, Stephen Rudman, Susan Marie Boser, Tara Ramsey, Thomas Allgaier, Trilby Libhart, Victoria Challingsworth, Zachary Newby

Welcome and Introductory Remarks

Fred Strathmeyer (Deputy Secretary for Plant Industry and Consumer Protection, Pennsylvania Department of Agriculture – PDA) gave opening remarks and commented that today's meeting attendance is really good; it shows a high participation rate from folks around the state and is something he and others are very happy with. Fred thanked everyone for their commitment and work in between PGISC meetings as this speaks volumes to what this Council can accomplish.

Announcements, Roll Call, Approve September Meeting Minutes

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

MOTION: Donald Eggen (Forest Health Manager, DCNR) moved to approve the September 8, 2022 meeting minutes. Lisa Murphy (Professor of Toxicology, University of Pennsylvania) seconded the motion. **Motion approved.**

As a reminder, the 2023 proposed meeting schedule for the Council is as follows:

March 7: In-person and virtual options (changed to March 16 after this meeting took place)

June 6: Tentative site visit with virtual option (changed to June 8 after this meeting took place)

September 12: In-person and virtual options (changed to Sept 7 after this meeting took place)

December 5: Virtual only

Kris Abell (PGISC Coordinator, PDA) mentioned that if anyone has issues or conflicts with these proposed dates, please let him know ASAP. Meetings listed as “in-person and virtual options” will be held at the PA Department of Agriculture office in Harrisburg with the option to attend virtually.

Kris is seeking suggestions or requests from Council members and others for a location where a site visit can take place for the June 6 meeting. Currently, a location has not been chosen.

Moving forward, the PGISC meeting structure of in-person and virtual options, virtual only, and site visits will be how the Council meets from year to year.

Brenda Shambaugh (Executive Director, Pennsylvania Association of Conservation Districts - PACD) asked if the meeting start time will remain at 10:00am? Kris said yes; Council meetings will continue to be held from 10am to 12:30pm.

Donald Eggen (Department of Conservation and Natural Resources - DCNR) thought it would be good for the site visit location (for the June 6 meeting) to accommodate both aquatic and terrestrial components. This could be at one location, or two locations near each other.

Fred Strathmeyer (PDA) thought that for people traveling to attend the June 6 meeting (the site visit meeting), it might make sense to extend the meeting start time out further to accommodate people coming from a distance.

Kris mentioned that Victoria Challingsworth (Resource Conservation Technician, Elk County Conservation District) is awaiting approval to serve as a Council member representing the Allegheny Plateau Invasive Plant Management Area (APIPMA).

DCNR and PGC Spongy Moth Treatment Program

Guest Speakers:

Donald Eggen, Forest Health Manager with the PA Department of Conservation and Natural Resources, Bureau of Forestry, Division of Forest Health

Paul Weiss, Chief Forester with the PA Game Commission



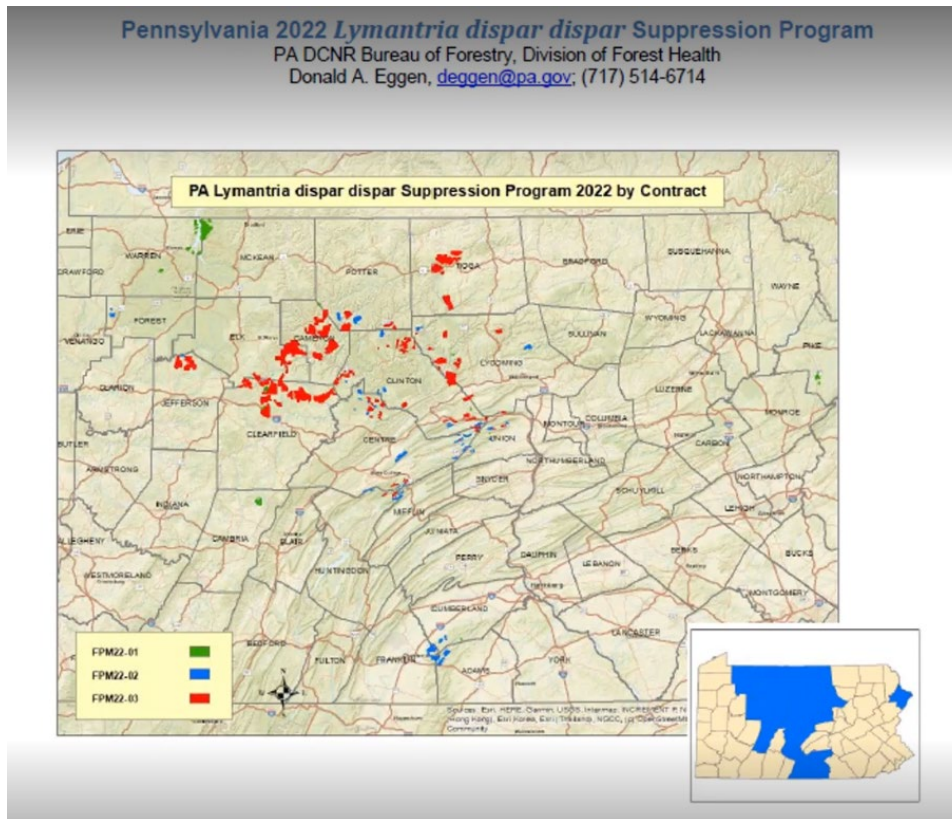
Don Eggen, DCNR



Paul Weiss (right), PGC

Donald Eggen began by saying that the PA DCNR has been running a suppression program for [spongy moth](#) (*Lymantria dispar dispar*) since 1972 (50 years). Nationally, there are three programs for spongy moth management: eradication, slow the spread, and suppression; Pennsylvania is in the suppression mode. The object of management is not to get rid of spongy moth, but rather to protect enough tree foliage to prevent trees from becoming stressed,

declining, and dying. (Statistically speaking, the PA-based program aims to prevent defoliation from exceeding 30% on 80% or more of the highly favored host trees in a treatment block.)



The image above shows areas where treatment occurred during the 2022 Spongy Moth Suppression Program in Pennsylvania. The 2021 program was very similar and in the same locations, except for work done in Pike County.

- Green polygons = Application of Bt using a [rotary helicopter](#)
- Blue polygons = Application of Bt using a [fixed-wing aircraft](#)
- Red polygons = Application of Mimic using a fixed-wing aircraft

Notes:

[Bt](#) = *Bacillus thuringiensis* ssp. *kurstaki*

[Mimic](#) = Tebufenozide (an insect growth regulator)

Both insecticides are applied to tree foliage with the intention of young spongy moth caterpillars feeding on the affected foliage. The insecticides do not impact other things at the time of application, except for leaf-eating Lepidopteran caterpillars. The Bt insecticide lasts about 3-10 days on the foliage; the Mimic insecticide lasts at least a couple weeks. The Mimic insecticide is like a really strong Bt, and if Lepidopteran caterpillars feed on it, they will die. The Mimic

insecticide “mimics” the molting hormone of a Lepidopteran caterpillar, causes premature molt, and creates a lockjaw-type symptom in the insect which causes its mandibles to lock up.

The 2023 PA DCNR Suppression Program will likely occur in the same areas as shown above, except for some of the more western PA locations. In 2022, the PA DCNR Suppression Program treated about 210,000 acres. See table below for more details.

Treated Acres by Ownership and Contract:

2022 L. DISPAR SUPPRESSION BY ACREAGE AND OWNERSHIP								
Ownership	Rotary Btk		Fixed Wing Btk		Fixed Wing Mimic		Total	
	Blocks	Acres	Blocks	Acres	Blocks	Acres	Blocks	Acres
State Forest	5	1,247	71	26,128	113	165,981	189	193,356
State Parks	19	4,608					19	4608
Fed	12	11,874					12	11,874
Totals	36	17,729	71	26,128	113	165,981	220	209,838

Currently, the DCNR Spongy Moth Suppression Program treats only DCNR State Forest lands and DCNR State Parks. DCNR also treats federal lands when needed.

In the past, DCNR also treated PA Game Commission (PGC) lands. However, because of the program’s large scale and the uncertainty of receiving federal funding, DCNR currently only treats on DCNR-owned land. (Note: The DCNR does receive internal money, but these funds can only be used on DCNR lands.) This is why in 2022, the PGC conducted their own Spongy Moth Suppression Program.

2022 DCNR Suppression Program details:

- Timeline: Calibration: May 9-10; Spray operations: May 15-28
- Incidents/Accidents/Mechanical or Other Notable Issues: The year 2022 was a year without major incidents. In fact, it was one of the smoothest suppression programs that Don remembers. He credits that to a good Forest Health field staff and good contractors. They knew what they needed to do, got the job done, and did it safely. There was a minor technical issue with the GPS/Spray system on one contractor’s airplane (a brand-new airplane). They quickly found a way to deal with the issue and got the plane back in the air and continued to keep the system working throughout the program.
- Weather: Weather was good-excellent. After a late start (one of the latest Don remembers), the conditions were finally favorable for spraying, and daily progress moved along rapidly. DCNR had several days where they expected to stay on the ground because of the weather, but were later able to get in the air and were very productive. There was a total of six spray aircraft used during the 2022 suppression program. The following screen capture shows the DCNR suppression program’s total costs for the year.

Contract	Product & Formulation	Cost per Acre	Total Cost
Btk Rotary	Foray 76B, 38 BCLU/acre; 0.5 gal/acre	\$48.44	\$858,793
Btk Fixed Wing	Foray 76B, 38 BCLU/acre; 0.5 gallons/acre	\$38.85	\$1,015,073
Mimic Fixed Wing	Mimic 2LV, 6 fl. oz./acre; 0.75 gal/acre	\$18.28	\$3,035,120

Estimated Total Program Cost 2022: TOTAL: ~ \$5.4M

- Percent Acres Treated Successfully: There were a few questionable blocks, primarily where Bt was used vs. Mimic (due to PA Natural Diversity Inventory [PNDI] hits) with very high spongy moth egg mass populations; however, the average success rate was estimated to be 98%. Sometimes, Bt doesn't do a complete job and there were some failures when using this insecticide. This is why DCNR started using Mimic in 2016. DCNR has very specific guidelines for where Mimic can be used. Also, it can only be used once in any three-year period.

2022 Suppression Program Summary:

- The operational period for the 2022 suppression program was May 15-28 and included aerial applications within 20 counties.
- A total of 220 spray blocks totaling 209,838 acres were treated with either *Bacillus thuringiensis* subspecies *kurstaki* (Bt) or tebufenozide (Mimic 2LV).
- Bt (Foray 76B) was sprayed undiluted at a dose of 38 BCLU/acre and at a rate of ½ gallon per acre (single applications only).
- Mimic 2LV was sprayed at a dose of 6 fl oz active ingredient/acre with a spray volume of 0.75 gallons/acre (single applications only).
- Participating locations included State Forest lands, State Parks, and some federal lands (Allegheny National Forest [ANF]).
- About 12,000 acres of the ANF was sprayed in 2022.
- Thirty-two of the 220 spray blocks (~15%) were selected for post-treatment evaluation. The evaluation data from these blocks are currently being analyzed.
- The success rate is estimated to be >98%.
- Pennsylvania had 852,000 acres of defoliation by spongy moth in 2022, up from 325,000 acres in 2021. This number (852,000) is probably the highest rate of defoliation there has been in Pennsylvania since the 90s.

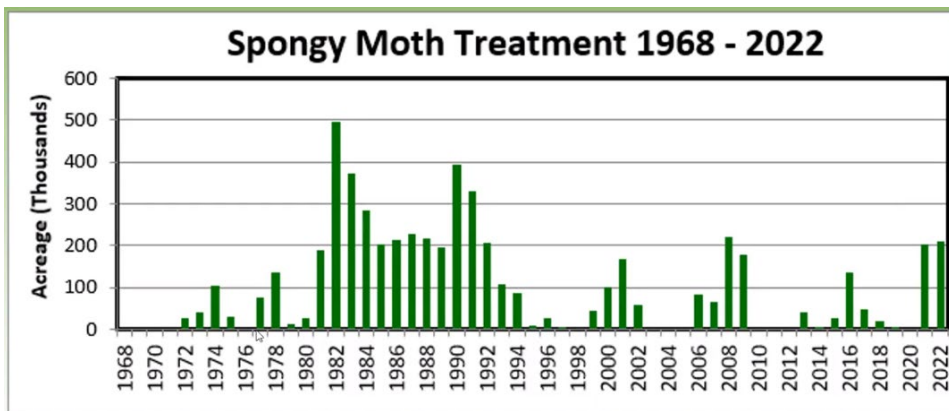
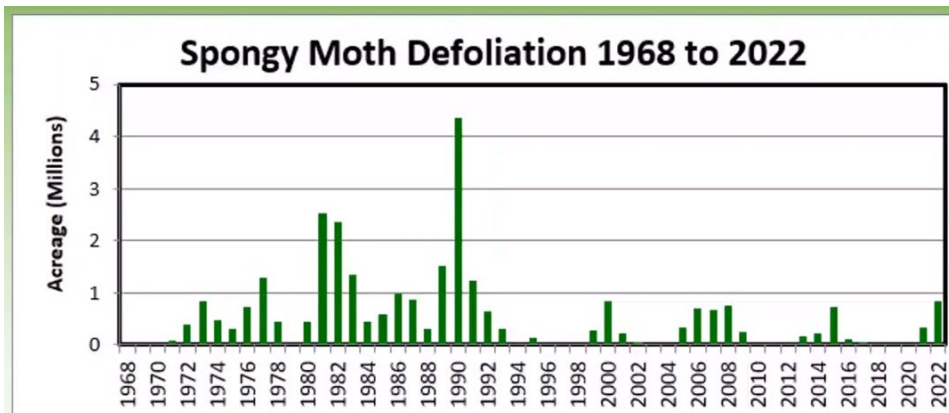
2023 Outlook:

- DCNR is currently finalizing the data from the 2022 aerial defoliation surveys. Because egg mass counts (2022 hatch) were very high (2,000-12,000/acre), they anticipate another large

suppression program in 2023. More accurate numbers will be available in September 2022 after the data is compiled and analyzed.

- In 2/2023, the DCNR will not be treating the Allegheny National Forest as part of their suppression program because spongy moth populations have collapsed.
- A total of 390,000 acres of DCNR land is proposed for management in 2023; however, DCNR does not have enough funds to treat that many acres. More realistically, a total of 285,000 to 295,000 acres can be treated with funds available. This means that an estimated 100,000 acres of State Forest land will have to be dropped from the list of areas to be treated. A priority methodology is in place to determine areas to be treated (and not treated).

As a brief history lesson, the spongy moth eradication effort in Pennsylvania ended in the late 60s to early 70s. However, in 1972 the PA DCNR Division of Forest Pest Management was created as a response to establishment of spongy moth. (As you can see in the graph below, 1972 was the year when defoliation from spongy moth started escalating in the state.)

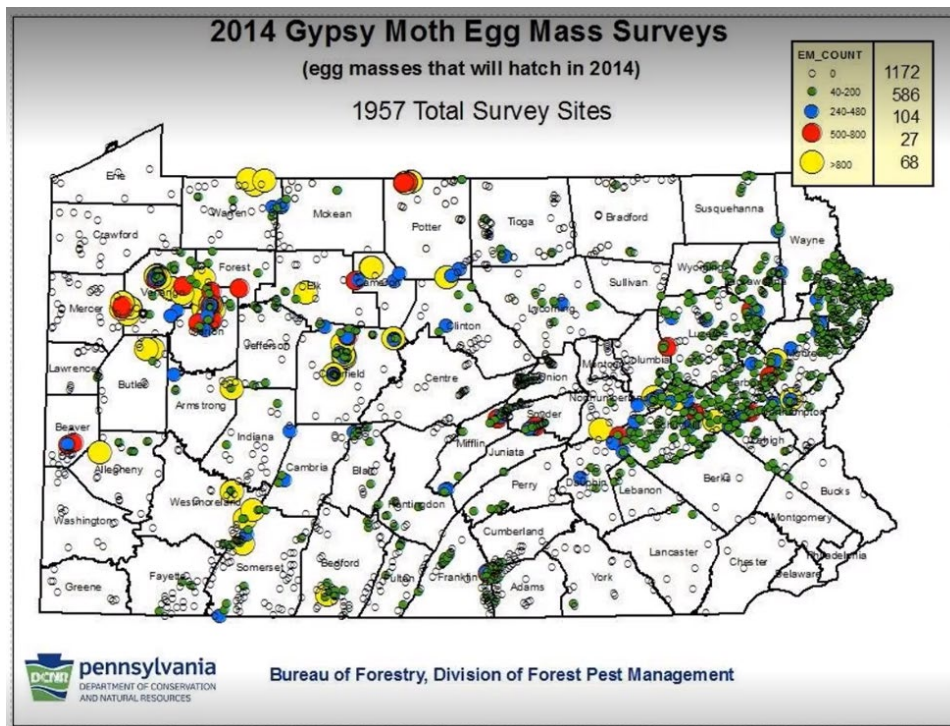


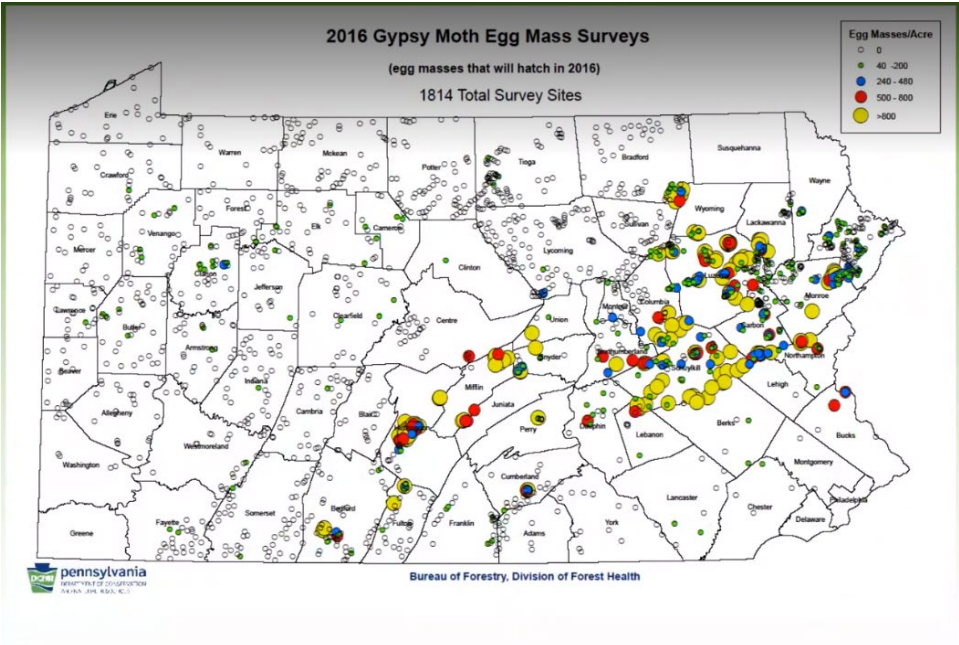
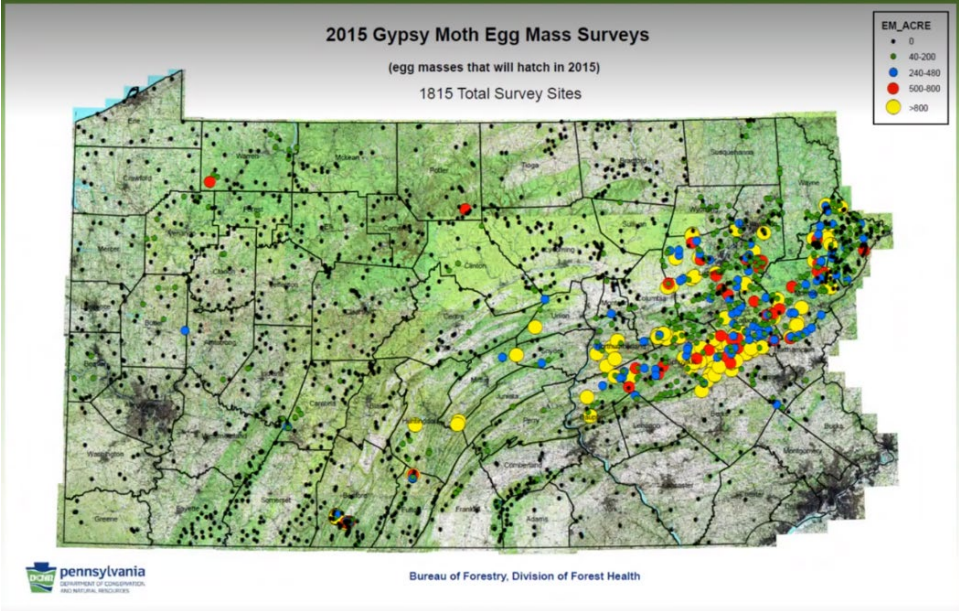
The defoliation graphs above show several time periods when there was a lull in spongy moth defoliation (e.g., 1994 to 1998, 2002-2004, 2010-2012, and 2018-2020.). This was due to the fungal pathogen of the spongy moth. This fungal pathogen helped to decrease and shorten

spongy moth outbreaks in Pennsylvania. Spongy moth outbreaks typically last 1-3 years everywhere in Pennsylvania, except in eastern Pennsylvania where they last five years. The fungus, which impacts the spongy moth caterpillars, has also made an impact on the parasitoids of spongy moth. These parasitoids are supposed to develop inside the spongy moth caterpillar; however, they also cannot survive the fungus.

The following maps provide a brief history of the DCNR Spongy Moth Survey Program. When comparing the 2014 map to the 2015 map, populations of spongy moth noticeably collapsed in almost all parts of the state in 2015, except in eastern PA. The reason for this has to deal with the fungal pathogen of spongy moth.

[Dr. Ann E. Hajek](#) of Cornell University did a study of the fungal pathogen (which contains spores that can last up to seven years in the soil) and found the pathogen to be less virulent in eastern Pennsylvania, for some reason. Therefore, outbreaks of spongy moth tend to last five years in eastern Pennsylvania, but not elsewhere in the state.

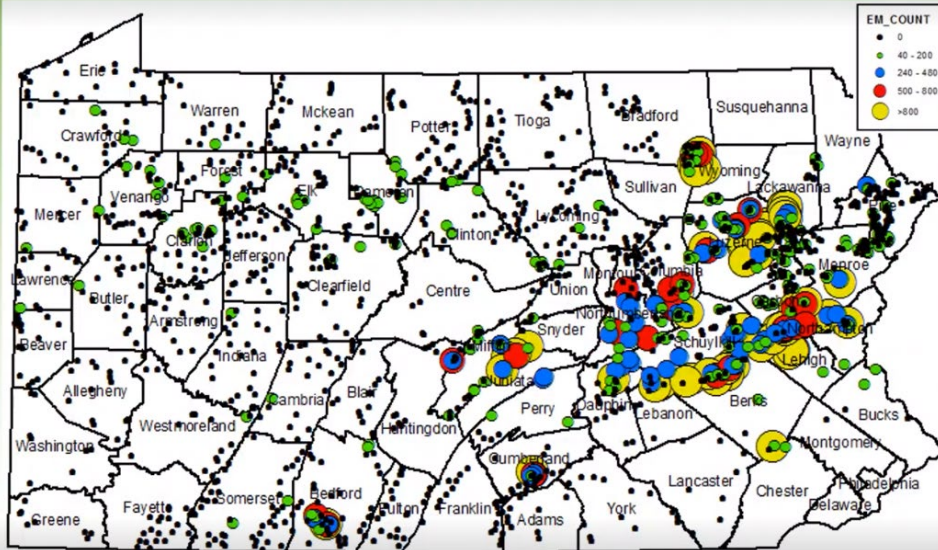




2017 Lymantria dispar Egg Mass Surveys

(Egg Masses that will hatch in 2017)

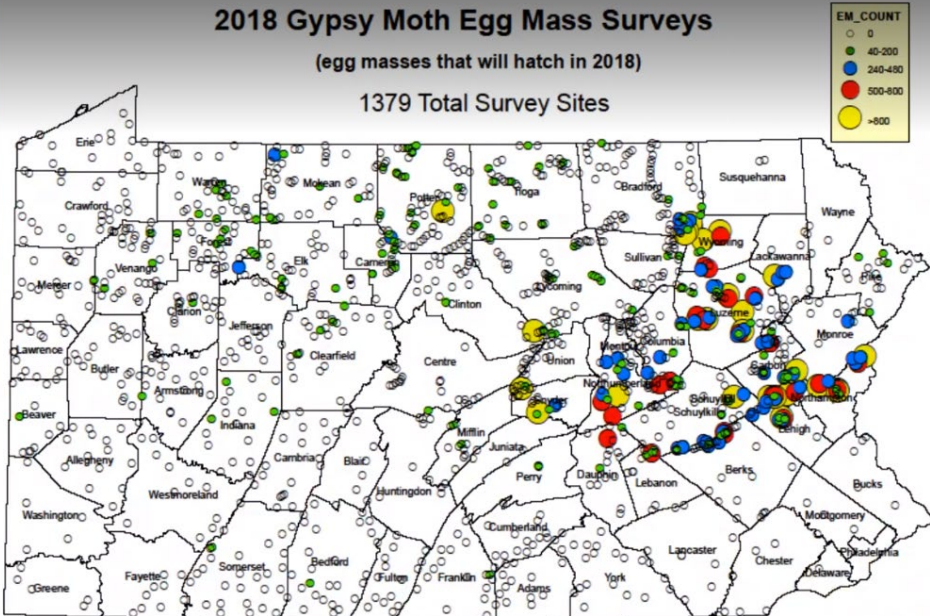
1697 Total Survey Sites, 371 Positives



2018 Gypsy Moth Egg Mass Surveys

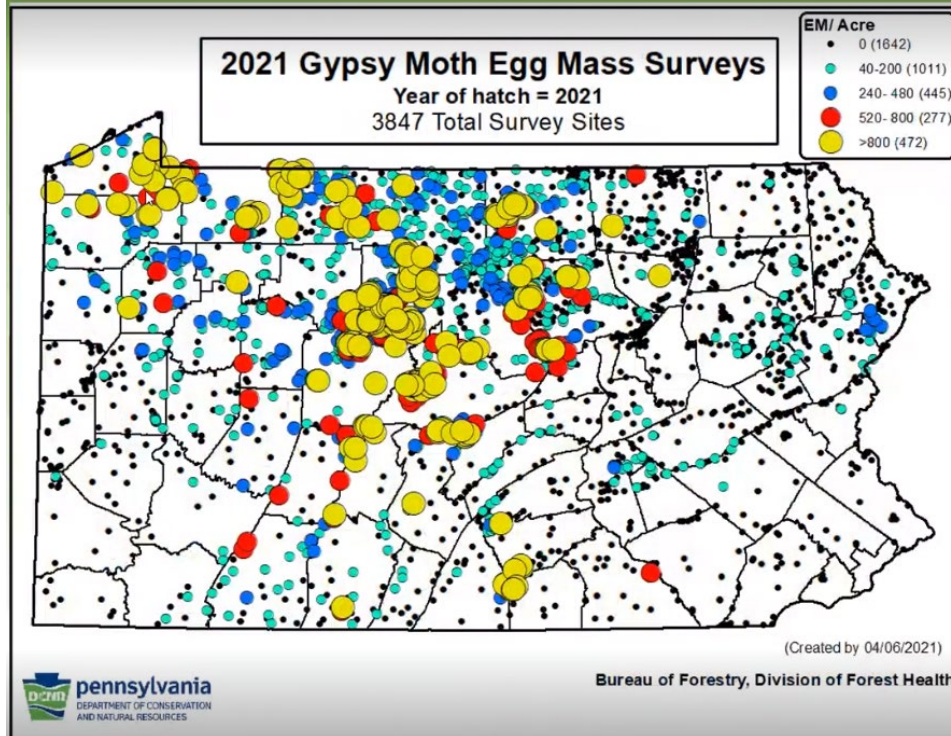
(egg masses that will hatch in 2018)

1379 Total Survey Sites



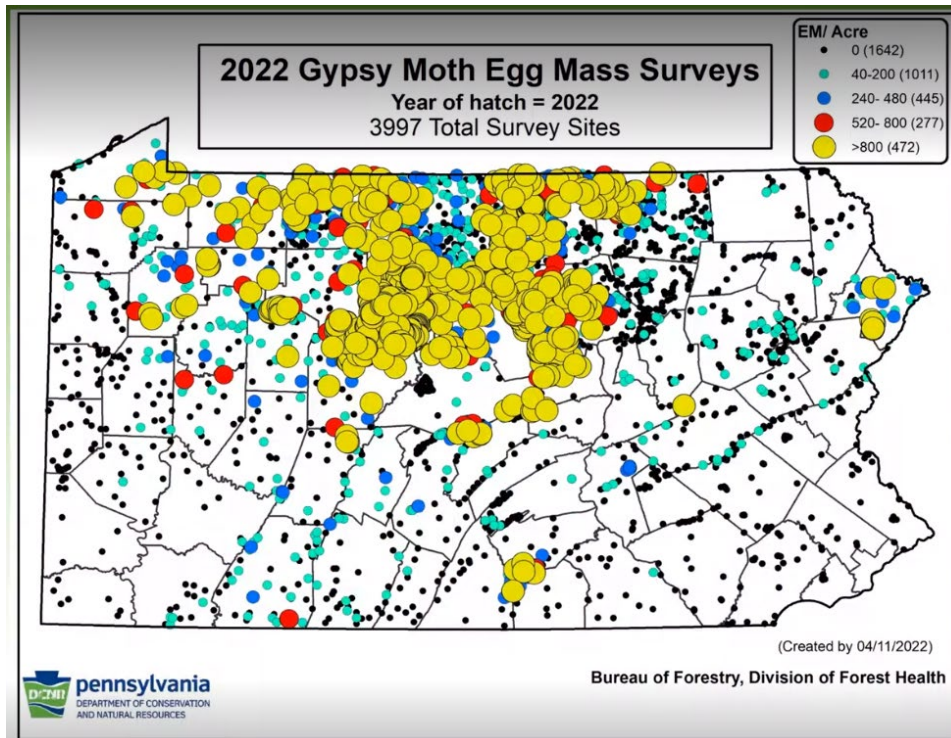
Bureau of Forestry, Division of Forest Health

L. dispar dispar Egg Mass Survey



When comparing the maps from 2020 to 2021, a “big jump” can be noticed regarding the total outbreaks of spongy moth in Pennsylvania. Note: It only takes 250 egg masses per acre to cause significant defoliation; however, in 2021, the egg mass densities were “through the roof” and averaged 10,000 egg masses per acre.

The survey map from 2022 shows similar areas being hit, but more so in northwest Pennsylvania.



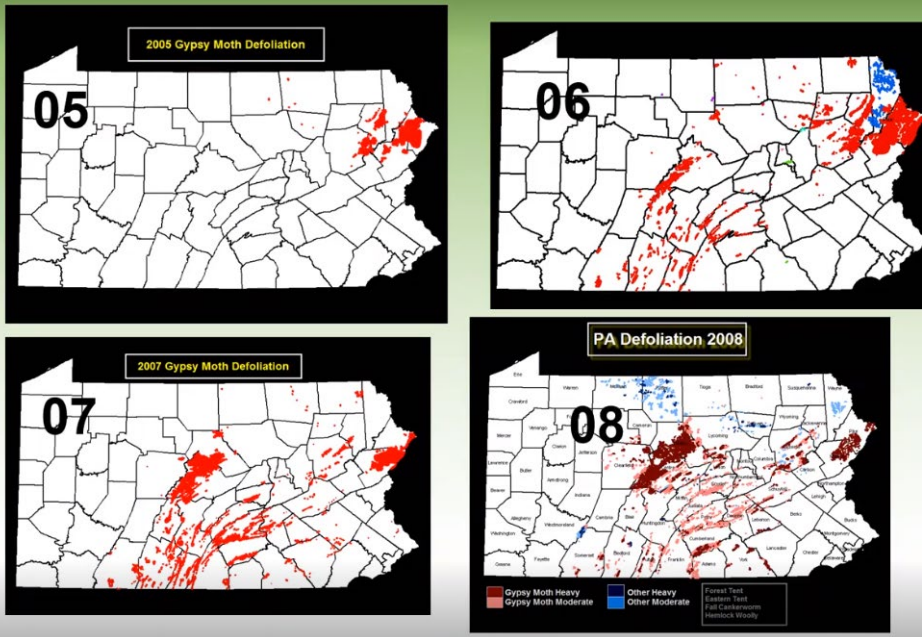
In 2003-2004, there were virtually no spongy moth outbreaks in Pennsylvania. However, beginning in 2005, an outbreak occurred in the Poconos and impacted roughly 330,000 acres. Then in 2006, defoliation by spongy moth increased across the central and south-central regions.

In the maps below:

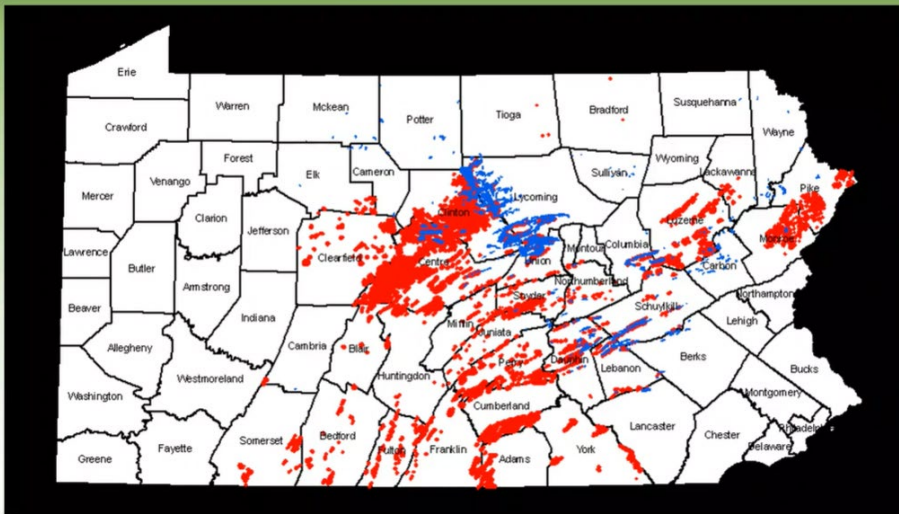
Red polygons = Spongy moth outbreaks

Blue polygons = Forest tent caterpillar (which can be ignored for purposes of these minutes)

L. dispar Defoliation 2005-2008



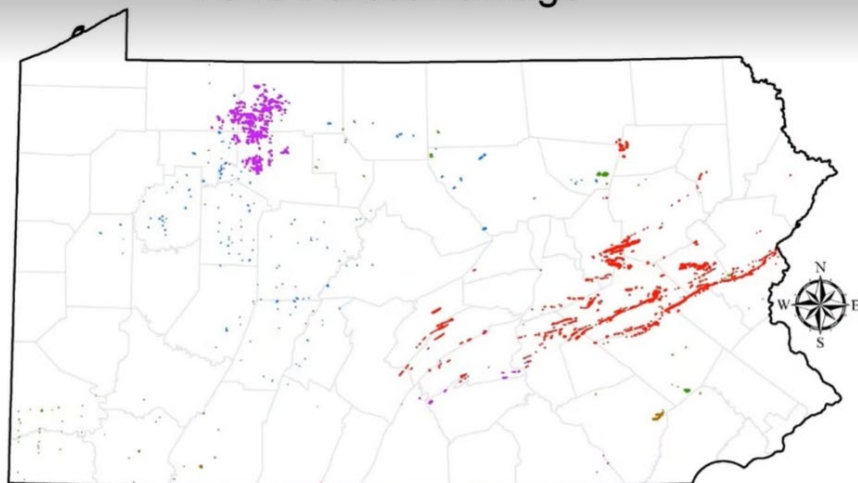
L. dispar Defoliation 2009



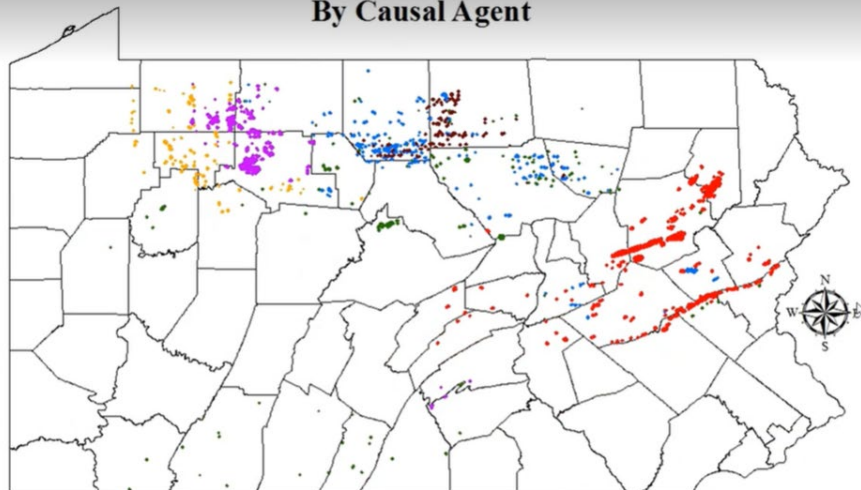
The year 2010 marked the first time when there were zero acres defoliated by spongy moth in Pennsylvania since the 1960s. This shows how quickly outbreaks by spongy moth can collapse.

By looking at the following series of “Forest Damage” maps, specifically the areas in red, you can see the variable rates at which spongy moth outbreaks occurred in Pennsylvania over the years.

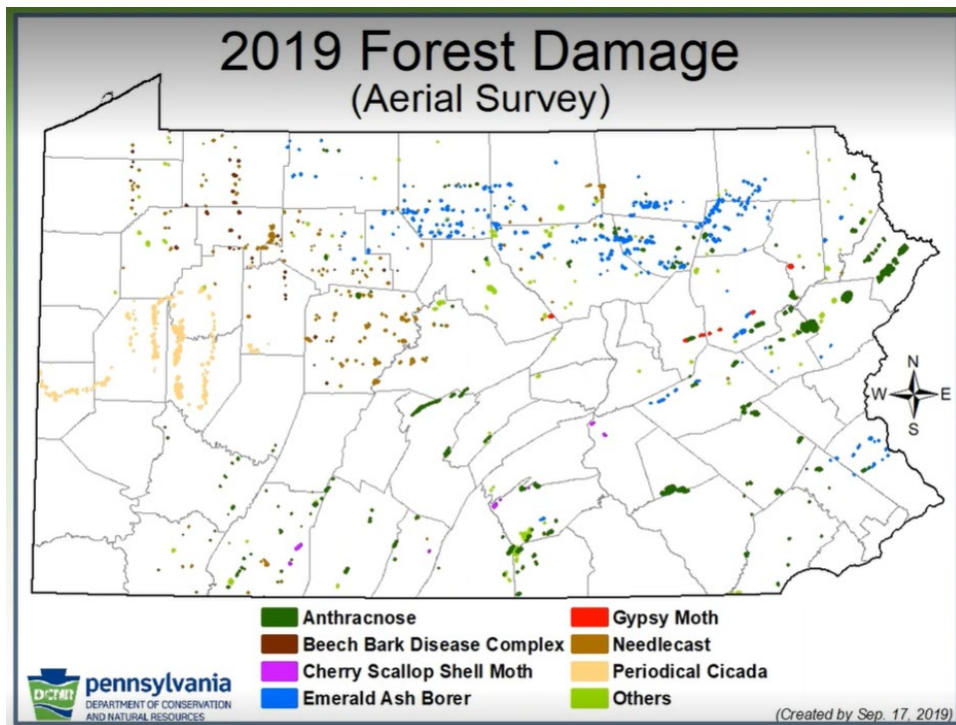
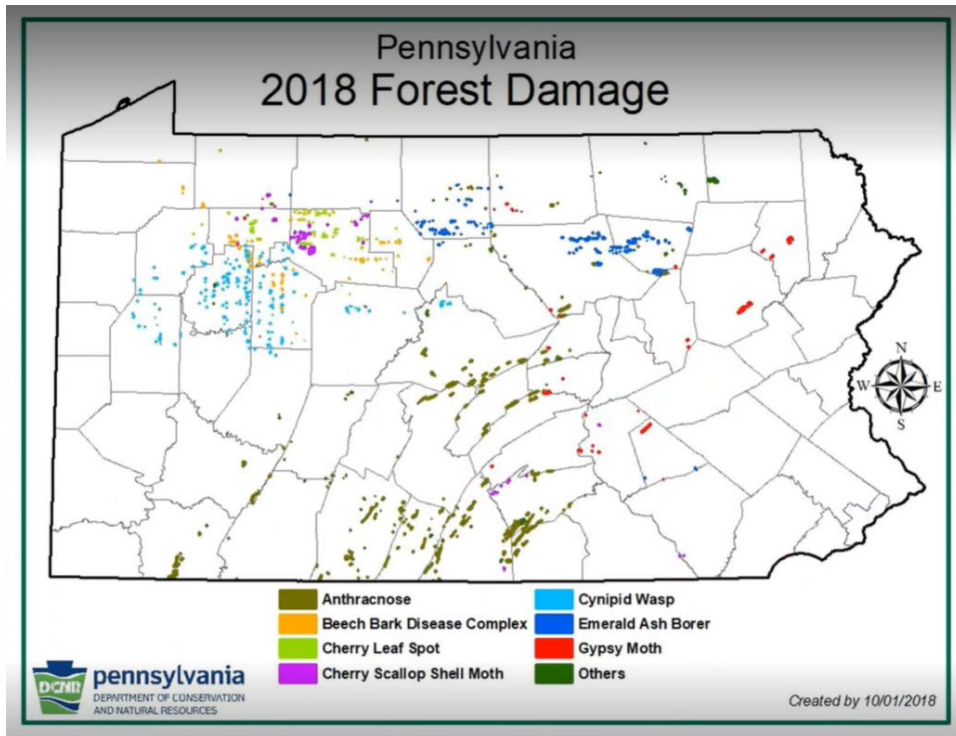
2016 Forest Damage



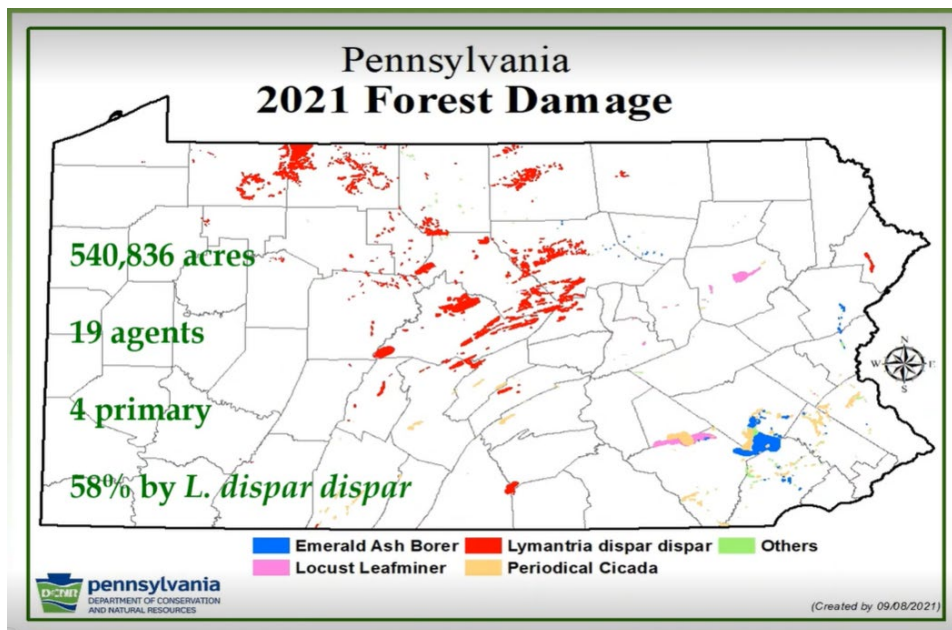
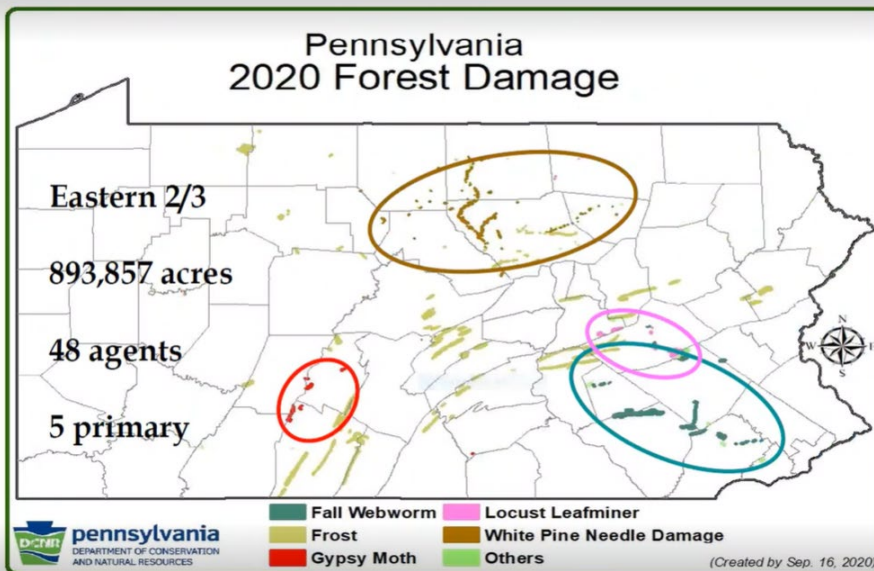
2017 Forest Damage By Causal Agent

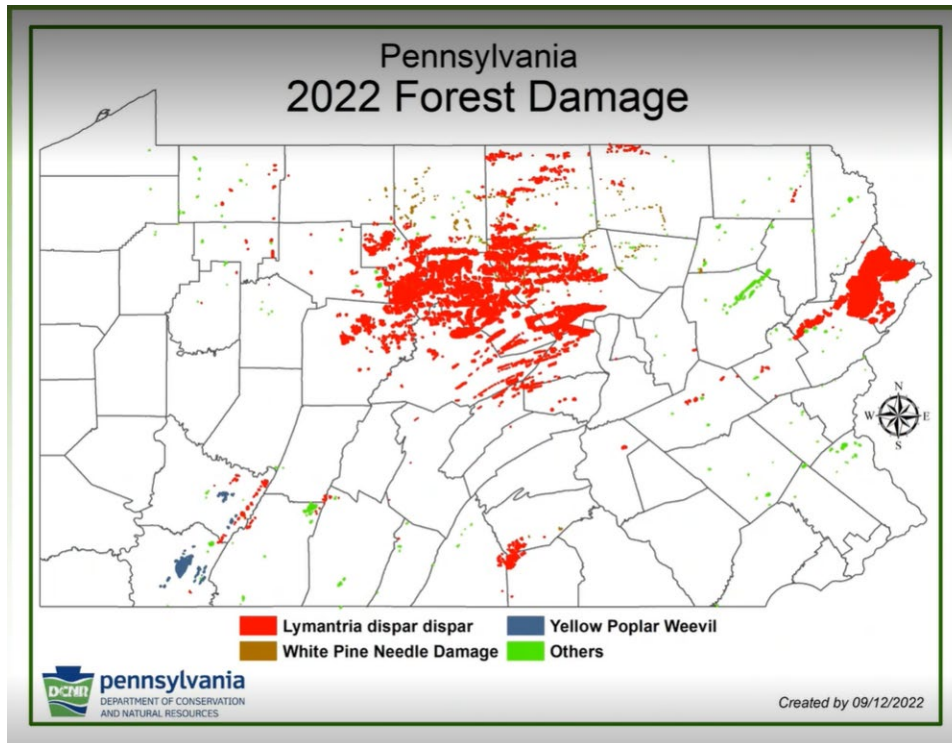


Created By 09/06/2017



2020 Forest Damage in Pennsylvania





The fungus (that attacks spongy moth) likes cool, wet weather. In springtime, when this type of weather can occur, fungus spores will latch onto spongy moth caterpillars and cause mortality which is often not noticed by people. However, during warm dry springs, the fungus doesn't "kick in", causing large outbreaks of spongy moth.

The PA DCNR receives funding for their spray program from multiple sources, including the USDA Forest Service and DCNR Environmental Stewardship Funds. For the 2023 program, the State Legislature appropriated General Fund money for the first time since 2009. The DCNR had asked for \$5 million, and the legislature appropriated \$2 million (however, Don still needed to gather additional DCNR ESF funds for spongy moth treatment purposes).

Information about private and residential treatment efforts for spongy moth is available on the [DCNR website](#). Included on the website is a list of [licensed aerial applicators](#). If there is interest, the DCNR can help set up privately-operated programs.

In 2021, more acres were treated for spongy moth because it was a culmination of efforts not only by PA DCNR, but also PA Game Commission, Kane Industries, various municipalities, and homeowner's associations. Limitations for how much spraying could occur was based on funding and available aircrafts.

Don Eggen has been working with spongy moth for 42 years and he will be retiring in March 2023. Staff with PA DCNR are gearing up for a big program and experienced people will be taking over these efforts after he retires.



Piper Sherburne (South East Region Director, PACD) asked if funding is available for conservation districts in south eastern Pennsylvania to conduct education, homeowner outreach, etc. on spongy moth? Don replied that DCNR does not have funding to give to the districts for this purpose; however, DCNR can provide information such pest alerts, fact sheets, and additional resources via the DCNR website.

Don mentioned there has not been a spongy moth outbreak in the southeastern part of Pennsylvania for quite a while; Further north, near the Poconos, is where defoliation from spongy moth typically occurs.

For questions regarding the DCNR portion of this presentation, please reach out to Don Eggen at deggen@pa.gov or 717-514-6714.

After Don's presentation concluded, Paul Weiss, Chief Forester for the PA Game Commission (PGC), provided an update on the PGC's spongy moth spray program.

In 2021, the PGC conducted their very first spongy moth spray program, spraying roughly 63,000 acres of PGC game lands using Mimic for all of their spray blocks. The program lasted approximately 13 days with no incidents. Protection (*of the impacted tree species*) went well with no failures in any of the blocks. The places on game lands where there were decent acorn crops were the areas that got sprayed.

The PGC is putting together another contract for a 2023 spray program and anticipates treating around 110,000 acres with Mimic. The PGC will likely continue to do their own spongy moth

spray program moving forward. As of right now, the PGC does not intend to use any Bt on any of their spray blocks.

Learn more about the PGC spongy moth spray program by viewing the [PGC's website](#) and/or by watching the following YouTube video.



[View video here](#)

Don Eggen mentioned that when both DCNR and PGC decide on their spray blocks for the following year, this information is posted online via interactive maps. Michele Long (from Pike County) asked when the new spray block maps will be available online. Don responded that before the maps can be released, Environmental Review must be completed and 100,000 acres must be “cut” (*removed from the list of areas to be treated*).

Don said the entire 395,000 acres of proposed area to treat for spongy moth is put through Environmental Review, in case plans need to be adjusted (i.e., spray blocks are added or taken away). Right now, a proposed map of areas to be treated can be made available, but that does not necessarily equate to the areas that will actually be sprayed (*too early to say*). Probably all areas to be treated for spongy moth in Pike County (state forests and state parks) will use Bt. Paul mentioned that PGC will be spraying in Pike County also.

The PGC is currently waiting on Environmental Review to be completed. All of PGC’s cuts and edits are done, so their 2023 maps will be ready soon for public viewing. Information posted to both the DCNR and PGC interactive maps (on their respective websites) will show the areas to be treated (not what got cut/eliminated from the spray program).

Communications Committee

Spokesperson: Deb Klenotic, PGISC Communications Committee Chair and Deputy Communications Director at the PA Department of Environmental Protection (DEP)

Pennsylvania Invasive Species Impacts Survey (first ever!)

- Purpose: To inform outreach to help drive legislative support for permanent PGISC and PRISM.
- Team: Ali Bowling (DCNR), Amy Jewitt (Western PA Conservancy), Andrew Rohrbaugh (DCNR), Deb Klenotic (DEP), Erin Lee Frederick (Penn State Extension), Eve Adrian (PDA), and Kris Abell (PDA)
- Outreach: Labor intensive. Many individual emails, including “cold call” emails, casting a wide net.
- Several media outlets covered the survey: PennLive, Republican Herald (Schuylkill County), Morning Call (Allentown), and the PA Department of Agriculture Communications office issued a press release.

The survey was open from November 3-18, 2022 and was created using SurveyMonkey. The idea for the survey grew out of conversations from the Communications committee regarding the need for research to inform outreach to legislators in support of PGISC and PRISMs in Pennsylvania. The survey was structured using a combination of multiple-choice and essay-style questions. Once ready, much effort was put into outreach and promotion of the survey. A variety of people from various industries were contacted in the hopes they would take the survey. Various news media also spotlighted the survey.

The survey team is currently reviewing the survey results, and the following information provides a first glance at this information:

- Over 1,100 people submitted surveys; more than half fully completed it. (Not a quick and easy survey.)
- Striking: Natural, rural, urban, and suburban areas were represented; all 67 counties.
- Backgrounds: Conservation and recreation, municipalities, agriculture, transportation, education, private property/homeowners, others; included at least two state legislators.
- Over 650 people identified limits to their ability to manage invasive species:
 - Time (58%)
 - Limited staff/volunteers (50%)

- Analyzing responses to determine key takeaways, commonalities, individual cases that may be spotlighted, etc. The following are examples of this:
 - Types of economic losses
 - Costs
 - Funding needs
 - Natural resources value and losses
 - Value of PRISM
- Provide initial top-line highlights for PA Department of Agriculture’s initial legislative outreach during Farm Show (*in January 2023*).
- Provide more information on PRISM to those who requested it.
- In late January 2023: State agencies will issue a PGISC press release on survey findings.
- Develop further communications to help drive support for PGISC and PRISM.
 - Messages, communications products, site visits – many possibilities! The key will be strategic impact.
 - Include following up with selected volunteers for potential communications.

Second Annual Pennsylvania Native Species Day

In 2022, the Communications committee launched the first ever Pennsylvania Native Species Day. This event garnered much attention and a great response from the public with many participants asking when the event would be occurring in 2023.

The 2nd annual [Pennsylvania Native Species Day](#) is scheduled for Thursday, May 18, 2023. Please help promote this event by spreading the word and saving the date. This event will have a dual message of celebrating our state’s native species while also learning about the challenges that the proliferation of invasive species presents to the Commonwealth.

PGISC News: Quarterly Newsletter

Deb asked if everyone on today’s meeting is familiar with the PGISC quarterly newsletter, and is everyone receiving it that wishes to? ([A sign-up form to receive the newsletter is available online.](#))

The [November 2022 newsletter](#) was sent out last week and Deb specifically highlighted the following items from that issue:

- The Department of Health is sharing federal funds with DCNR to enable staff from the Bureau of Forestry and Bureau of State Parks to remove barberry in state parks and forests. Funding also supports park visitor education on tick safety and personal protection equipment for staff to mitigate tick bites.
- PennDOT is updating its 2016 assessment of the effects of bridge replacement and maintenance on native protected mussel species in the Ohio River Basin. As part of the

process, PennDOT is developing standardized best management practices for contractors whose equipment enters waterways, to help reduce impacts to the mussel species and their habitat.

- Opportunities listed in newsletter:
 - Learn about Pennsylvania’s Noxious Weed List (which has been increasingly highlighted in the news) at the Council booth at Farm Show.
 - Apply for a Pennsylvania Fish and Boat Commission grant to reduce invasive species.
 - Watch videos and webinars on cork tree, invasive snails, and plants that burn.

Outreach

Share the PGISC newsletter with your stakeholders (people outside of your organization).

If you have a suggestion for a write-up to include in a future edition of the PGISC newsletter, please notify Deb Klenotic (dklenotic@pa.gov) or Kris Abell (krabell@pa.gov). The following are examples of stories that can be included in the newsletter from Council members and stakeholders:

- You have work underway that may be reaching a milestone.
- You have a project that needs public input.
- You have a project that shows innovation and should be highlighted.

Andrea Ferich (President, Pennsylvania Native Plant Society) asked in the Chat feature: “How do members of the public sign up to receive the PGISC newsletter?” Kris Abell replied, saying “You can sign up for the newsletter [here](#).”

Sean Hartzell (Aquatic Invasive Species Coordinator, Pennsylvania Fish and Boat Commission) mentioned in the Chat feature: “Just wanted to note that PFBC has recently provided significant input on the Aquatic Invasive Species (AIS) Best Management Practices (BMPs) for PennDOT.” Derek Eberly asked, “Are those comments publicly submitted?” Sean replied, “Derek - you would need to contact Jesse from PennDOT directly (contact info is in the newsletter).”

Legislative Committee

Spokesperson: Eve Adrian, Executive Policy Specialist 2 with the Pennsylvania Department of Agriculture, Office of the Secretary

The big-ticket item currently being worked on by the Legislative Committee is draft legislation that establishes PGISC as an advisory council in statute, expands the current Council

membership, and grants authority to the Pennsylvania Department of Agriculture (PDA) to administer PRISM and grants to fund other related projects.

This draft legislation is a bit different than the legislation that's been worked on previously by this Committee after getting feedback from PDA's legal counsel. This feedback from PDA's legal counsel has been incorporated into the draft legislation document by Kris Abell, Eve Adrian, Ruth Welliver, and Fred Strathmeyer (each of PDA). Kris then sent that updated draft document back to PDA's legal counsel (again) for final comments on Monday (*December 5*).

Any further feedback (if any, from PDA's legal counsel) can be reviewed by the Legislative Committee and then sent to all PGISC members as well as Secretary Redding (PDA) and appropriate external partners for their review too.

Once that review is complete, the document will go to the Governor's Office for feedback and final approval. It will then be sent to the [Legislative Reference Bureau](#) (LRB), the entity that would establish this document as a draft piece of legislation that legislators can look at.

The Legislative Committee is considering possible messaging and asks for the 2023 Farm Bill which expires in September 2023. Current discussions around Farm Bill have been occurring for about six months now. Members of the Legislative Committee are in early discussions regarding a suggestion (by the Leg Committee) to have federal invasive designations allow for funding through the Farm Bill, or other legislative means (federally). If you have any knowledge or other suggestions in regards to this, reach out to Eve Adrian (eadrian@pa.gov).

This Committee is using the Farm Show (in January 2023) as a way to promote outreach for all things related to the PGISC draft legislation. This will include discussions with legislators, industry leaders, and other organizations that are present at Farm Show.

Our committee has developed a list of possible legislators to reach out to for legislative field visits. These visits will be scheduled in January 2023. The hope is to have the visits occur sometime in spring and early summer of 2023. This will coincide nicely with site visits set up by external partners and organizations (e.g., Western Pennsylvania Conservancy has field visits they've planned during this time, and the draft legislation will be a priority topic to discuss by WPC during those visits).

The main objective in conducting outreach by members of this committee is done in the hope of building a coalition that can advocate for regular (*annual*) invasive species funding. This includes things like incorporating PGISC and PRISM into PDA's and other PISC agency's administrative transition documents.

We've also been talking with agencies and organizations about the different outreach they perform. For example, the Conservation and Natural Resources Advisory Committee has sent letters to legislators.

The Governor's Advisory Council for Hunting, Fishing, and Conservation has completed the Invasive Species Impacts Survey and has shared it with sportsmen's communities as well as the PA Sportsmen's Policy Workgroup. They also plan on working with the Youth Advisory Council for Hunting, Fishing, and Conservation, Future Farmers of America (FFA), and 4-H.

Reaching out to youth regarding invasive species was something we felt was very important. Specifically, outreach concerning invasive species management that is done regionally and holistically. Often, children will educate adults on certain topics, and so things can mean more coming from a child; there's weight to that! Our youth are the next generation that will be managing the invasive species impacting our state.

The Legislative Committee plans on developing some talking points from the Invasive Species Impacts Survey (as Deb Klenotic mentioned during the Communications Committee update). We want to have responses that we've pulled out of the survey that can be used as talking points for legislators and industry partners. These talking points will be useful for PGISC members and their legislative liaisons who advocate for and do outreach for this legislation. Essentially, it will allow us to speak with one unified voice.

In follow-up to Eve's remarks, Deb Klenotic (DEP) said she is hoping that the 270+ people who volunteered to join in with the Council's communications effort might offer site visit potential. Eve agreed and added that the Legislative Committee has started a list of possible organizations that can be tapped into for this purpose (and hopefully there is overlap on these two lists).

Invasive Species Listing Committee

Spokesperson: Sean Hartzell, Aquatic Invasive Species Coordinator and Fisheries Biologist II with the Pennsylvania Fish and Boat Commission (PFBC), Division of Environmental Services

Committee Team: Sean Hartzell (PFBC), Gregg Robertson (Pennsylvania Landscape & Nursery Association), Mary Beth Ruh (PennAg), Joe Demko (PennDOT), Andy Ernst (PA Farm Bureau), Norris Muth (Juniata College), Mary Walsh (Western Pennsylvania Conservancy), Andrew Rohrbaugh (DCNR), Jill Rose (DCNR), Houping Liu (DCNR), Scott Bearer (PGC), Lawrence Barringer (PDA), and Katya Nikolaeva (PDA)

This committee recently met on November 15 and discussed a few ongoing topics. At each of their quarterly meetings, the committee will have a regular call for updates, additions, or improvements to the [invasive species lists](#) that are posted to the PGISC website. These suggested changes can come from committee members or others. These invasive species lists are "living" documents and can be updated by the committee as needed. As of the last meeting, there are no new updates or changes to the lists.

Currently, there is a pathogen list on the PGISC website for aquatic species; assistance from some of Sean’s colleagues at PFBC helped to compile this list. The committee was discussing the possibility of producing a list of relevant wildlife pathogens (*for terrestrial species*). Scott Bearer (PGC), a member of the committee, suggested adding Chronic Wasting Disease. Scott and others will begin compiling a short list of wildlife pathogens that will be complimentary to the aquatic pathogens list.

The committee also considered including human and livestock pathogens on the PGISC invasive species list. However, the group consensus was that human and livestock pathogens are beyond the scope of PGISC and this group’s expertise.

Members of this committee continue to compile invasive plant and animal impact assessments at a slow, but steady pace. Andrew Rohrbaugh (DCNR) has been working on plants, and Sean Hartzell just recently completed an animal assessment. The committee is discussing working on impact assessments for other taxonomic groups, such as insects.

The committee discussed making changes to the Threat Categories that are mentioned in the species lists on the PGISC website. Currently, the categories are listed and described as such:

- Potential: Not yet found in Pennsylvania, but considered a potential threat.
- Emerging: Has been detected in some locations with risk of spreading.
- Established: Widely established in Pennsylvania.

Invasive Aquatic Animals of Greatest Concern to Pennsylvania

Threat Category:

- Potential: Not yet found in Pennsylvania, but considered a potential threat.
- Emerging: Has been detected in some locations, with risk of spreading.
- Established: Widely established in Pennsylvania.

Score: A composite score from 0-80 reflecting the potential invasiveness of a species and its economic, environmental, and human health impacts using a modified [Generic Impact Scoring System for invasive species](#). The scoring system was modified to include an assessment of invasive potential. Species without scores have yet to be evaluated.

*Native to some parts of Pennsylvania.

Common Name	Scientific Name	Threat Category	PA Fish and Boat Commission Status	Score
Bloody-red Shrimp	<i>Hemimysis anomala</i>	Emerging		
Chinese Mysterysnail	<i>Cipangopaludina chinensis</i>	Emerging		29
Fishhook Waterflea	<i>Cercopagis pengoi</i>	Emerging		
Freshwater Tubenose Goby	<i>Proterorhinus semilunaris</i>	Emerging	Banned	26
Goldfish	<i>Carassius auratus</i>	Emerging		
Grass Carp	<i>Ctenopharyngodon idella</i>	Emerging	Regulated	32
Greenside Darter	<i>Etheostoma blennioides</i>	Emerging		
Japanese Mysterysnail	<i>Cipangopaludina japonica</i>	Emerging		29
Mud Bithynia	<i>Bithynia tentaculata</i>	Emerging		
New Zealand Mudsnail	<i>Potamopyrgus antipodarum</i>	Emerging		39
Northern Snakehead	<i>Channa argus</i>	Emerging	Banned	41
Oriental Weatherfish	<i>Misgurnus anguillicaudatus</i>	Emerging		

The committee wants to “fine tune” this language being used since the current terminology being used focuses on both geographic location and the threat level. The committee feels it is difficult to fit both of these factors together into unique categories and still have the meaning of the terms be clear. The following are proposed changes:

- Change the status to Present or Not Present in Pennsylvania. (These categories put a focus only on the geographic status of a species.)
- Consider the column with an assessment score as a rank of the threat a species poses to Pennsylvania. (This would provide a quantitative number to better represent threat level.)

The committee requests feedback from PGISC regarding these proposed changes and how to best fine tune this terminology.

Jim Grazio (Great Lakes Biologist, DEP) asked what the thresholds are for low, medium, and high risk (that are posed by invasive species). Sean responded that the committee has discussed thresholds specific to geographic distribution (e.g., 30% or 50% of the Commonwealth), but no specific definitions are currently in place. However, Sean felt this may be a good first step to take.

April Moore (Non-Native Invasive Program Manager, Allegheny National Forest - ANF) suggested the committee could use the [PRISM region map](#) to show statewide distribution for specific species using color variation shading in each county. April agreed that the ecological threat of invasive species is important to note in terms of harm caused to native species. Also, if there is a vector that could be targeted for preventing the spread of an invasive species. Sean appreciated April’s feedback.

Fred Strathmeyer (PDA) mentioned the importance of having a column specific to the economic impact(s) posed to the Commonwealth by specific invasive species. Having this information would allow the Council to tap into one of PDA’s sister agencies in the [Department of Community & Economic Development](#) (DCED) because of tourism. Fred mentioned spotted lanternfly (SLF) as an example; when SLF first arrived in Pennsylvania, “the sky was falling”, however, we now have a better grasp on SLF’s economic impacts to something like our state’s vineyards.

Fred felt that having economic information in the PGISC’s species lists would be critical to building resources through the legislature and/or the new administration. To do more on this may require a separate (sidebar) conversation, but the topic certainly does tie into what Sean was presenting on.

Sean felt Fred brought up some great points, saying that factoring in economic impacts to more of the species’ lists is something that can be discussed at the next committee meeting. Sean also mentioned that information on the economic impacts is somewhat buried in the invasive species

risk assessment scores (i.e., assessments that the committee is doing). Having this information more up-front would be good and it would have value for use as a metric.

Fred followed up by saying that to show the value of PRISM, sometimes it comes down to money and what it means to Pennsylvania in order to get the funding the Council desires for PRISM as well as how to sustain that funding.

Deb Klenotic (DEP) followed up on April Moore's remarks regarding PRISM regions and the importance of showing these regions to more people. By doing so, we can raise awareness for and promote a better understanding of PRISM. For example, Deb deliberately put the PRISM regions map on two pages of the Invasive Species Impacts Survey and tailored several survey questions so respondents would consider their responses according to the PRISM regions. If it's possible to show invasive species distribution by PA PRISM regions, that type of communications effort would be helpful to continue promoting PRISM in Pennsylvania. Sean thanked Deb for her comments and remarked that he liked having an invasive species list that would be specific to each PA PRISM region.

Amy Jewitt (Invasive Species Coordinator, Western PA Conservancy - WPC) mentioned that on Sean's screen (*during the meeting*) was a star next to the words "Native to some parts of Pennsylvania". In case folks attending the meeting today wanted to dig more into what that meant, information is available from the USGS Non-indigenous Aquatic Species database. Specifically, if you look up individual species within that platform, USGS NAS provides the option to turn on a map layer that shows the native range of that species, making it easy to visualize. Sean commented that this circumstance (i.e., native to parts of Pennsylvania) was true for several species, such as the [Allegheny crayfish](#) which is native to western Pennsylvania, but not eastern and central Pennsylvania. Amy followed up by saying that on the PGISC species list, an update could be made that includes hyperlinks to the USGS NAS website for applicable species to show their native and exotic ranges.

Jeff Wagner (Director, Natural Heritage Program, representing the WPC) mentioned that WPC recently received a grant from the Richard King Mellon (RKM) Foundation. As part of work for that grant, one aspect is for WPC staff to help assess the invasiveness of any species that are on the PGISC list. Andrew Rohrbaugh (DCNR) already told Jeff there are plenty of species that need risk assessments completed. Sean commented that help from WPC would be appreciated as work on invasive species risk assessments by this committee is currently only happening at a "snail's pace".

April Moore (ANF) mentioned seeing Japanese barberry (*Berberis thunbergii*) on the PGISC list, but not Common barberry (*B. vulgaris*). Will Common barberry be added? Sean deferred to Andrew Rohrbaugh to answer this question. Andrew replied that he does not see European (Common) barberry very often in natural areas and does not currently view it as a top priority species. However, that does not mean Common barberry cannot be added to this list; simply that work on other species is currently more of a priority.

April also asked if anyone has a shapefile showing the proposed PA PRISM regions. (*No response.*)

Kris Abell (PDA) remarked that if there any thoughts, either during or after today's meeting, on this or any topic that is mentioned, please reach out to him (krabell@pa.gov), and he can share that information with the relevant committee members. Also, Kris is happy to share meeting times for all PGISC committees for anyone that would like to take part in discussions and/or share comments/questions during an upcoming meeting of any of the committees. All committees are open to Council members for more participation.

Controlled Plant and Noxious Weed Committee

Spokesperson: Trilby Libhart, Botany and Weed Specialist with the Pennsylvania Department of Agriculture, Bureau of Plant Industry

In October 2022, the Controlled Plant and Noxious Weed Committee (CP&NWC) held their third quarterly meeting. The following plants were voted on and assigned as Pennsylvania noxious weeds with the following class designations:

- [Burning bush](#) (*Euonymus alatus*) - Class B (2-year grace period)
- [Chinese privet](#) (*Ligustrum sinense*) - Class B
- [European privet](#) (*Ligustrum vulgare*) - Class B
- [Japanese privet](#) (*Ligustrum japonicum*) - Class A
- [Border privet](#) (*Ligustrum obtusifolium*) - Class B

These species will become official Pennsylvania noxious weeds on January 10, 2023 which is 60 days after this information is published in the [PA Bulletin](#), per the law.

At the CP&NWC meeting on January 19 2023, the following species and class considerations will be voted on. (Note: These species were presented on at the October 2022 CP&NWC meeting.)

- [Amur honeysuckle](#) (*Lonicera maackii*) - Class B consideration
- [Morrow's honeysuckle](#) (*Lonicera morrowii*) - Class B consideration
- [Standish/Fragrant honeysuckle](#) (*Lonicera standishii*) - Class B consideration
- [Tatarian honeysuckle](#) (*Lonicera tatarica*) - Class B consideration
- [Bell's honeysuckle](#) (*Lonicera x bella*) - Class B consideration
- [Starry stonewort](#) (*Nitellopsis obtusa*) - Class A consideration

- [Parrot feather](#) (*Myriophyllum aquaticum*) - Move from Class B to Class A based on its limited distribution in Pennsylvania.
-

Updates, Activities, and Events

Farm Show

Kris Abell (PDA) mentioned that the PGISC booth at Farm Show will focus on the Pennsylvania noxious weed list and invasive plants, like the theme of the booth last year, but with some new material this year that will cover new plants added to the [PA Noxious Weed List](#) in 2022. Kris thanked Andrew Rohrbaugh (DCNR) for helping to develop this new material.

Kris is also looking for help from Council members to staff the PGISC booth continuously during the entire week of Farm Show. He will follow up with additional information after today's meeting. You do not need to be a plant or invasive species expert to sign up; just greet anyone that stops by with an interest and refer any questions you do not have the answer for to someone that does. A list of referable sources will be provided for use at the booth.

Species Name Changes

Sarah Whitney (Director, Pennsylvania Sea Grant) wanted to know if there was interest from other Council members to discuss common names of invasive species that may have a negative impact on people. For example, the common name "gypsy moth" was [recently changed to "spongy moth"](#) (*because it used a pejorative term for Romani people*). This type of discussion would focus on PGISC's work, but also more broadly. We would not be renaming organisms, but this type of conversation would allow us to be more aware of what is happening with this general topic. There was a recent talk at the Aquatic Nuisance Species Panel on this topic which spurred Sarah and others to think more about this.

April Moore (ANF) asked if there is a repository for suggested names or synonyms currently being worked on by others? Sarah responded that the actual renaming process happens within relevant societies, organizations, and associations that work on/with specific species. (*For example, the Entomological Society of America was the entity to rename "gypsy moth" to be "spongy moth."*) Having presentations and talks on this topic could be an opportunity for us to get more background on how species names change, what thought goes into it, and how the process works.

Sean Hartzell (PFBC) said he was interested in learning more (i.e., participating in a learning role rather than being active in this larger conversation). Sean commented there is a group of invasive carp species that were formerly called "Asian carp", and in 2021, the U.S. Fish & Wildlife Service changed the terminology to "invasive carp" instead. This included silver carp,

bighead carp, grass carp, and black carp. This change came about due to cultural sensitivity. The PFBC has now adopted the terminology, “invasive carp”, involving changes to PFBC documents, etc.

Sarah Whitney suggested working with Kris Abell (PDA) to identify speakers and ideas for a future PGISC meeting.

Fred Strathmeyer (PDA) commented that Sarah’s idea may be a good opportunity to work with Conservation Districts around the state to create an educational conduit on this topic. Brenda Shambaugh (Executive Director, PACD) said the PACD would be interested in pursuing collaborative opportunities to work with others on this topic. Brenda also mentioned that PACD has some mini grant programs that may be able to appropriate to include as part of future discussions. Fred suggested Penn State as an additional partner to consider pulling into these conversations.

Kris Abell said a future presentation on this topic could be scheduled at a future PGISC meeting, possibly the next meeting in March 2023. With the idea of involving other partners, this topic of species name changes may lend itself to becoming a small ad hoc committee where future discussions can take place to discuss plans for outreach and activities. If there is enough interest from Council members to pursue this idea, Kris would be happy to set up a new committee and coordinate meetings.

Sarah felt a presentation and a conversation at a future PGISC meeting would be good next steps. This will help Sarah and others know if there is a need for a new subcommittee, or if the focus should only be on knowledge and learning that we need to do as professionals working in the field of invasive species.

Upcoming Lake Management Society Conferences

Brian Pilarcik (Watershed Specialist, Crawford County Conservation District) mentioned the upcoming [Pennsylvania Lake Management Society](#) (PALMS) annual conference will be taking place on February 28 – March 1, 2023 in State College. Also, PALMS will be hosting the [North American Lake Management Society](#) (NALMS) annual conference (for the first time ever) at the Bayfront Convention Center in Erie, Pennsylvania from October 22-26, 2023.

WPC Receives Richard King Mellon Foundation Grant for Invasive Species Work

Jeff Wagner (WPC) provided an overview of what WPC will be doing (over the next 18 months) as part of their RKM-funded grant work.

The RKM request for proposals (RFP) on invasive species was offered nationally. Jeff is not sure how many grants were given out or at what distribution, but WPC’s grant is for Pennsylvania specifically. The central focus is to evaluate 10 high value sites throughout the state and establish

baseline conditions for them by applying a focus on invasive species. These sites are what WPC considers sites with high biodiversity. The scale for each site is not yet defined; however, WPC hopes to coordinate efforts with DCNR and the [Pennsylvania Plant Conservation Network](#) (PPCN) to establish areas and partners to monitor and steward these areas. The ultimate goal will be to take care of rare plants known from these sites.

Of course, one of the biggest stewardship issues is invasive species for nearly all sites. Therefore, this project emphasizes getting partnerships together at these high value sites. Part of the site selection process will be to ensure the 10 sites are distributed regionally across Pennsylvania. Looking ahead for PRISMs in Pennsylvania along with efforts by the PPCN, these are great pilot/baseline projects that the PRISMs can pull in under their auspices, once they get started. In other words, this RKM project could help jumpstart the process of getting sites established in the various PRISM regions where work will occur over the next indefinite number of years.

WPC's work with this grant will be to establish baselines, monitor the 10 sites, and take care of any threats (invasive species) that impact rare plant populations. As part of this project, there is funding set aside to assist with invasive species risk assessments that must be completed for the Invasive Species Listing Committee to take further action. We are hoping this project will help contribute to the repertoire of the PRISMs once they get up and running.

Deb Klenotic (DEP) and Kris Abell (PDA) mentioned that this RKM-funded work would be something good to highlight in the PGISC e-newsletter (i.e., amount received and the project details). Jeff replied that he would be happy to do this.

Public Affairs Luncheon at Farm Show

Brenda Shambaugh (PACD) mentioned that she recently received an invitation to attend the Public Affairs Luncheon during Farm Show week. She assumed most of the agenda for this event has been finalized; however, if not, there may be an opportunity to do a 5-minute presentation about PGISC and what the Council is doing related to PRISM. There will be several statewide legislators, county commissioners, and municipal public officials in attendance. In the past (prior to COVID), an average of 400 people would attend this event. Fred Strathmeyer (PDA) said he will check with the folks who are organizing the luncheon and inquire about adding something to the agenda.

Public Comment Period

None.

Concluding Remarks

The next quarterly PGISC meeting is scheduled for Tuesday, March 16, 2023 at 10:00am. This meeting will have both in-person and virtual (*Microsoft Teams*) attendance options. Contact Kris Abell (krabell@pa.gov) with any questions or comments.

Adjourn

Fred Strathmeyer (PDA) thanked the public for their participation in today's meeting; at one point, there were 65 people in attendance. This high number of people can be attributed to interest in the Council and the work of Council members.

Fred reiterated Brenda Shambaugh's (PACD) point regarding Public Officials Day at the Farm Show and the importance of telling the story of the Council. If there is an opportunity to tell our public officials what our Council membership is doing, or things we are not doing that public officials think we should (as far as advising), then we are certainly open to that.

Fred thanked Kris Abell (Council Coordinator) and all the committee chairs of the Council for their work and dedication. He commented that the Council has become such a meaningful group and how PGISC has come "light years" since Fred first started at PDA eight years ago.

MOTION: Jim Grazio (DEP) moved to adjourn the meeting. Sean Hartzell (PFBC) seconded the motion. Meeting adjourned.

Next PGISC Meeting

Tuesday, March 16, 2023 at 10:00am.

Attendance options include both in-person and via Microsoft Teams.

Meeting minutes respectfully submitted by Amy Jewitt, Invasive Species 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.
