WNY PRISM

Partnering to Protect Western New York from Invasive Species

Spring 2022 Newsletter

The WNY PRISM mission is to proactively identify, evaluate and address invasive species priorities in western New York using a coordinated partnership of local professionals, organizations and private citizens to improve, restore and protect local aquatic and terrestrial resources.

2022 Data Gap Species.

A community scientist reports hemlock woolly adelgid to iMap.

Closing the Gap: How Community Scientists are Helping WNY PRISM to Map Data Gap Species

Each year, WNY PRISM works with partners to develop species priorities lists that help guide management efforts. In addition to identifying early detection and approaching region species, our survey priorities include a list of data gap species. These species are those for which more information is needed regarding presence and distribution within our region. We have identified five data gap species for 2022: hemlock woolly adelgid (*Adelges tsugae*), tree of heaven (*Ailanthus altissima*), leafy spurge (*Euphrobia esula)*, Japanese honeysuckle (*Lonicera japonica*) and callery pear (*Pyrus calleryana*).

WNY PRISM spans eight counties and 6,440 square miles. To effectively survey this vast area, and collect information on our data gap species, we turn to one of our most valuable resources: our community members. Anyone is able to survey and make reports to iMap; all you need is an iMap account and a mobile device that takes photos. It is easiest to survey for invasive species when their identifying characteristics are most pronounced.

The best time to survey for hemlock woolly adelgid (HWA) is from late fall to spring. During this time the infestation can be observed as white, woolly masses located on the underside of hemlock twigs. Other signs of HWA infestation include a weakened or declining crown, defoliation, pale, greyish folliage and a lack of new buds.

Tree of heaven can be identified by its bark, which resembles cantelope skin, and its distinctive heart-shaped

Closing the Gap

leaf scars. Clusters of bright orange seed pods develop from the flowers in late summer. Tree of heaven leaves are similar to sumac, but have a very distinct smell - some say like rancid peanut butter. This invasive tree is host to the spotted lanternfly, another invasive species that threatens economically important crops.

Leafy spurge is most easily identifiable from April to June when its greenish-yellow flowers, arranged in small clusters surrounded by bracts, splash the landscape with color. Leafy spurge releases a milky white sap when its leaves, stem or roots are broken. When surveying for leafy spurge, beware; its sap may cause rashes. This plant is an aggressive invader and can completely overtake areas of native vegetation.

Get trained by WNY PRISM staff and volunteer when you are able!

The best time to survey for Japanese honeysuckle is from late spring through summer, when flowers are visible. White-pink flowers emerge and fade to yellow throughout the season. In the fall, flowers give way to black fruits. Japanese honeysuckle kills native shrubs and saplings by twining around stems and girdling the plant.

Callery pear is most distinctive while it is blooming in early spring. This deciduous tree produces abundant showy white flowers. It develops shiny green leaves with slightly toothed margins and green or brown fruits that are often consumed by birds. Although it provides food for wildlife, the fruits provide poor nutrition compared to fruit from native species.

WNY PRISM offers many opportunities for volunteers to get trained on species ID and iMap by our expert staff, and volunteer to survey when you are able. This winter we launched a community science effort to map helmock woolly adelgid. The program included a virtual survey training and a field training at Chestnut Ridge Park. Volunteers learned how to identify hemlock and HWA and how to make reports to iMapInvasives on their mobile device. Throughout the season, as the program gained traction, we saw continued growth in the number of HWA Hunters. By the end of the HWA survey season, we had 17 HWA Hunters who collectively surveyed 18 different areas and made 35 presence and not-detected reports to iMap.

This upcoming field season will provide more opportunities to join our community science efforts and survey for other data gap species. To become a registered community scientist with WNY PRISM, and learn about upcoming trainings, fill out our registration form here.

To learn more about the data gap and other priority species, visit: https://www.wnyprism.org/priority-invasives.

Now Accepting Submissions!

Our **Data Gap Species Photo Contest** is another way to get involved! As part of an effort to expand our photo library, we are asking for photo submissions of the five data gap species, which highlight their distinctive characteristics. Submit your high-quality photos and you may be featured on our social media. Further, chosen photographs will be used in our Data Gap Species Idenfication Videos! For more information on how to submit photographs and contest rules, visit https://www.wnyprism.org/data-gap-species-photo-contest.

Upcoming Events

2022 Spring Partner Meeting
April 21, 1pm - 3:30pm
Click here for more information.

Rails to Trails Classroom Training
April 27, 5:30pm - 7:30pm
Click here for more information.

Great Lakes Slender False Brome Working Group Meeting
April 29, 9am - 10:15am
Please RSVP to hernonba@buffalostate.edu

For more information on these or other events, visit our website.

Regional and State Updates

- New York State is seeking volunteers to survey for spotted lanternfly and tree of heaven in your area. You can learn more and signup here: https://www.nyimapinvasives.org/slf.
- A ban on glyphosate use on state lands has gone into effect, however there remains an exemption for use to manage habitats, control invasive species, and protect ecosystem health, human health and rare species.
- Join the Center for Great Lakes Literacy for the 2022 Great Lakes BioBlitz, an event that focuses on recording the amazing biodiversity found within the entire Great Lakes Basin. The event runs from April 22 to May 20 and includes a photo contest.
- New York Invasive Species Research Institute and iMapInvasives Networks have released their 2021 Annual Reports.

Spotted lanternfly adult. Photo Credit: Rebekah D. Wallace, University of Georgia, Bugwood.org.

What to Avoid in Your Water Garden

Water lettuce can reproduce rapidly and cover the surface of your water garden.

As you head out to the nurseries for your water garden this spring, keep an eye out! Some plants available to water gardeners are invasive species. Not only can these species take-over your garden, but they can also cause a lot of harm if they escape to other bodies of water. Aquatic invasive plant species can change how an aquatic ecosystem functions and can reduce the food available to fish and other wildlife. Floating species such as water hyacinth (*Eichhornia crassipes*) and water lettuce (*Pistia stratiotes*) can reproduce rapidly and cover the surface of your water garden, creating habitat for mosquitos while also blocking sunlight necessary to support healthy native plants. Submerged species like parrot feather (*Myriophyllum aquaticum*) can form dense mats and prevent native species from growing. Check out our website to find out plants to avoid in favor of some native alternatives. To properly dispose of aquatic invasive plants, you can seal the unwanted plants in a plastic garbage bag and place them in the trash. Never release plants or animals into other bodies of water. Always be sure to keep your water garden away from other waterways and flood-prone areas.

Contact Us!

SUNY Buffalo State
Great Lakes Center, SAMC 319
1300 Elmwood Ave.
Buffalo, NY 14222

(716) 878-4708
wnyprism@buffalostate.edu
wnyprism.org

WNY PRISM

wnyprism8

Region 9 Gets A New Aquatic Invasive Species Program Coordinator

Written by: Lindsay Yoder, NYS DEC

Lindsay Yoder was recently hired as the NYS DEC Region 9 Aquatic Invasive Species Program Coordinator, through a partnership with Cornell University's NYS Water Resources Institute. She first began working with aquatic invasive species in 2017 as the Assistant AIS Program Manager for the Lower Hudson PRISM before assuming the role of AIS Program Coordinator in 2018 and establishing a rigorous program focused on education and the monitoring and management of invasive species in the Hudson Valley. She is excited to bring her experience to western New York and the lower Great Lakes to help strengthen the capacity for early detection and rapid response of emerging AIS threatening the health of the region collaboration with WNY PRISM and other NGOs, municipalities, state and federal agencies, and local stakeholders. She'll be managing a seasonal strike team to assist with these efforts and will be heavily focused on priority management projects, including regional efforts to manage *Hydrilla verticillata*. Lindsay has a B.S. in Fisheries and Wildlife Sciences from Oregon State University, where she focused on aquatic ecology and fisheries biology, and is primarily interested in the impacts of AIS on community dynamics in freshwater systems. WNY PRISM welcomes Lindsay!

Welcome Lindsay Yoder, Aquatic Invasive Species Program Coordinator for NYS DEC Region 9.

Meet WNY PRISM's Program Managers!

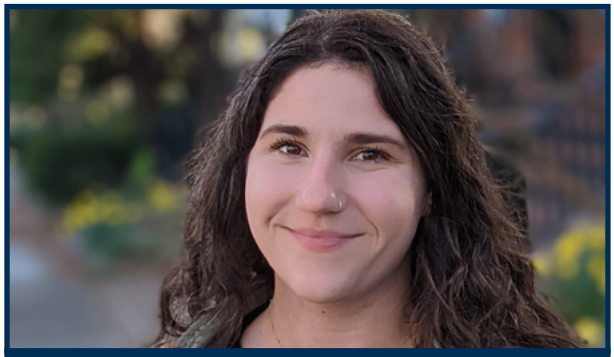
Brittany Hernon, Terrestrial Program Manager.

Brittany Hernon is the WNY PRISM Terrestrial Program Manager. Brittany started working with WNY PRISM in 2017 as the Slender False Brome Working Group Project Manager and then the Early Detection Project Manager before beginning her current position in 2021. She has a background in biochemistry and ecology and has spent time working on hummingbird surveys with the Hummingbird Monitoring Network. She also volunteers locally at Reinstein Woods Nature Preserve. Brittany develops and coordinates WNY PRISM's terrestrial and early detection species management efforts, including the Crew Assistance Program. She also works on internal data quality assurance to ensure WNY PRISM provides accurate and complete data in a timely manner for partners and the public. Brittany enjoys working with the seasonal staff each year and seeing their excitement and passion for the environment. And on warm summer days she can be seen taking her cat, Kashi, for walks on his leash.

Nicole Smeenk is the Aquatic Program Manager for WNY PRISM. She coordinates the Watercraft Inspection Stewardship Program and other aquatic invasive species projects including surveys and infestation management. She graduated from the University of Alaska Anchorage in 2017 with a B.S. in Natural Science and before coming to work for WNY PRISM, Nicole was a Watercraft Steward Program Coordinator with the Finger Lakes PRISM. She finds teaching people how to conduct effective education and outreach to be very rewarding and enjoys furthering the education and experience of budding environmentalists. Reviewing the numbers at the end of the season and seeing how many aquatic invasive species our staff stopped from

spreading to other waterbodies is also exciting. The most rewarding work, however, has been working with partners to manage known populations of invasive species. Whether it's communicating with the WNY PRISM Water Chestnut Working Group or surveying with partners for our early detection species, Nicole loves working with so many different people to combat the threats of aquatic invasive species.

Nicole Smeenk, Aquatic Program Manager.



Cecilia Pershyn, Education & Outreach Program Manager.

Cecilia Pershyn joined WNY PRISM in July 2021 as the Education and Outreach Program Manager. Cecilia is enthusiastic about connecting people and nature, and her work with WNY PRISM has allowed many opportunities to fulfill this passion. From helping to build a volunteer base for invasive species management and providing educators with resources to teach the younger generation, to coordinating outreach efforts, Cecilia enjoys educating the public on the importance of managing invasive species in our region. Before working for WNY PRISM, Cecilia was the Education Coordinator for the Blue Economy Program, where she provided project-based educational experiences for high school students focused on tourism and the ecology of western New York's many water resources. Cecilia has a B.S. in Environmental Science from Evergreen State College and earned her M.S. in Great Lakes Environmental Science at Buffalo State College. In her free time, Cecilia enjoys reading, cooking, and spending time with her Calico cats.

Douglas Knoph, Field Operations Manager.

Douglas Knoph joined WNY PRISM in February 2022 as the Field Operations Manager. During the field season, Doug oversees and works alongside the Invasive Species Management Assistants, as well as WNY PRISM's many partners, to complete priority management projects through the Crew Assistant Program. Before joining the WNY PRISM team, Doug earned a B.S. in Natural Resources Management form SUNY-ESF and an A.A.S. in Forest Technology from the SUNY-ESF Ranger School. After college, he spent a year working in forestry consulting, where he developed an interest in forest health and invasive species management. He then worked two years for NYS Office of Parks, Recreation and Historic Preservation as an Invasive Species Technician, where he conducted invasive species management across several regions, wrote management plans, participated in several bio-control projects and did vegetation monitoring and sampling. Outside of work, Doug enjoys outdoor recreation activities such as rock climbing and backpacking.

WNY PRISM Steering Committee Members

Buffalo Niagara Waterkeeper | Chautauqua Watershed Conservancy | Cornell Cooperative Extension
Ecology & Environment, Inc. | Natural Resource Conservation Service USDA - NRCS | New York Sea Grant
NYS Nursery and Landscape Association, Inc. | NYS Office of Parks, Recreation, and Historic Preservation
Roger Tory Peterson Institute of Natural History | Great Lakes Center - SUNY Buffalo State
United States Army Corps of Engineers, Buffalo District
USFWS, Lower Great Lakes Fish and Wildlife Conservation Office

Invasive Species Profile: Lesser Celandine

Lesser celandine (*Ficaria verna*) is an herbaceous, perennial groundcover that can form extensive mats. It's leaves are variable in shape, from arrow or heart shaped to kidney shaped, and are dark, shiny green with slightly toothed margins. The flowers are bright yellow and glossy, each with between eight and twelve petals. Beneath the soil, many finger-like tubers are produced on the root.

Lesser celandine has yellow, glossy flowers. Inset: It's leaves are variable in shape, from arrow or heart shaped to kidney shaped.

Lesser celandine shoots emerge from late-March to mid-April, and flowering occurs from late April to mid-May. Because it emerges earlier than most native plants, it may inhibit the development of some native wildflowers, especially spring ephemerals, and decrease species diversity. Native pollinators that rely on those spring ephemerals, are also affected.

It is easily spread by mowers, which yank out the shallow-rooted plant and fling them outward. It can also spread when its underground tubers become unearthed and are dispersed by animals, humans or flood waters. When it dies off in late spring, lesser celandine leaves behind exposed ground which may be colonized by other weedy plants.

Effective management of lesser celandine can be challenging due to how easily it's spread and early spring emergence. Small infestations can be removed manually, but it is important to remove the entire plant including tubers. Herbicide treatments can provide for greater success, but you want to treat prior to flowering and this can be difficult in our region due to how early it emerges, often while snow is still on the ground.

What Kept Us Busy This Winter?

An HWA-focused Walk and Talk series brought folks outdoors in the winter to learn about and search for hemlock woolly adelgid.

At the Rural Landowner's Workshop, WNY PRISM presented on our HWA community science efforts, aquatic invasives in ponds, and swallow-wort biocontrol.

WNY PRISM partnered with Letchworth State Park to present an in-person viewing of the NYS DEC documentary, ***Uninvited***.

Jason, our Early Detection Technician, collected samples of HWA from Chestnut Ridge and Franklin Gulf to contribute to NYS Hemlock Initiative's HWA overwinter mortality study.