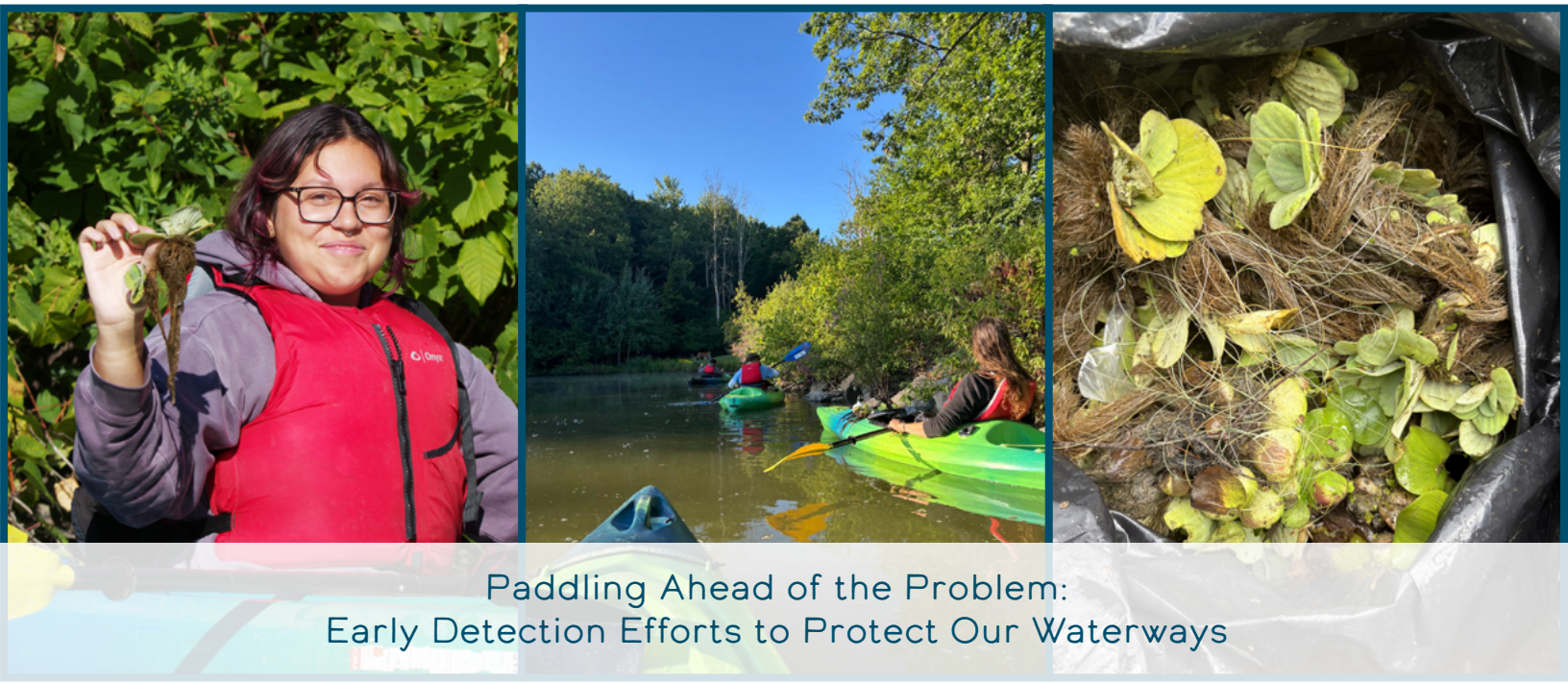
WNY PRISM

Partnering to Protect Western New York from Invasive Species

Fall 2025 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 community members to improve, restore and protect local aquatic and terrestrial resources.



Paddling Ahead of the Problem: Early Detection Efforts to Protect Our Waterways

In western New York, our waterways are more than just scenic views — they're crucial to our environment, economy, health and way of life. But aquatic invasive species don't announce their arrival and that's why early detection is so important. By staying one step ahead, WNY PRISM, our partners and community members, can catch problems before they spread, helping to protect the lakes, rivers and streams we all rely on. Early action makes all the difference, particularly for aquatic invasive species because once a new species arrives, eradication from the region is often not possible, mainly due to how connected our waterways are.

The best time to address an invasive species is before it settles into a new area. That's the principle behind Early Detection and Rapid Response (EDRR) – a proactive and coordinated approach to finding, documenting, assessing and removing invasive species before they become established. Of course, it's not feasible to manage every new aquatic invasive species that arrives in the region and that's where WNY PRISM's early detection priority species list comes in. This list is crucial for guiding EDRR efforts in the region and is evaluated and updated annually. Our early detection priority species are high impact species that have low enough abundance and suitable treatment methods available to make eradication feasible within the region.

With a prioritized species list in hand, our management efforts focus on eradicating those species from the region. This is achieved by responding to newly reported infestations and returning to early detection sites

Early Detection Efforts

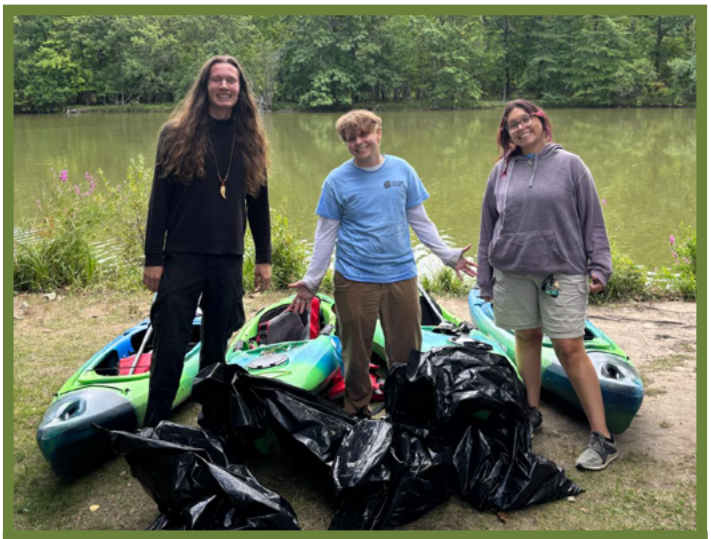
each year to implement site monitoring and removal efforts. A site is considered eradicated ("presumed eradicated") when the species has not been found for a minimum of five consecutive years. So, each field season, WNY PRISM's Aquatic Program Manager works in coordination with Boat Stewards and other seasonal staff to conduct early detection site monitoring and removal efforts to ensure these areas are free from priority aquatic invasive species.

WNY PRISM's aquatic early detection efforts have recently focused primarily on water hyacinth (*Oshuna crassipes*) and water lettuce (*Pistia stratiotes*), two species commonly sold for use in water gardens. When infestations of these species are small, it's effective to manage them by hand pulling or by collecting plants with nets or pond rakes. Water hyacinth and water lettuce have been present in the WNY PRISM region since 2001 and 2011, respectively. For water hyacinth, survey and management efforts began by partners in 2014. WNY PRISM has expanded on these efforts since 2016, initiating management efforts for water lettuce that same year.

Under favorable conditions, water hyacinth populations can double in size in a matter of weeks!

Four water hyacinth sites are now presumed eradicated, but active sites remain at Oppenheim Park, Tonawanda Creek/Erie Canal, Buckhorn Island State Park and Dunkirk Harbor, the latter two being monitored and managed by partners. Plants have been removed in multiple years at Oppenheim Park and Tonawanda Creek/Erie Canal. Most recent removals included six plants from Oppenheim Park in 2020 and thirty-eight plants from the Canal in 2021. WNY PRISM has surveyed both sites at least once a year since and no additional plants have been found.

Active water lettuce sites include Hyde Park Lake, Ellicott Creek and Tonawanda Creek/Erie Canal. WNY PRISM removed 730 water lettuce plants from Hyde Park Lake in 2020 and the lake was surveyed from 2021 through 2025, but no additional plants were found. Water lettuce was found at sites within Ellicott Creek and Tonawanda Creek/Erie Canal in 2021. Over the course of three separate surveys, 148 plants were removed from Ellicott Creek, and thirty-eight plants removed from the Canal. WNY PRISM has surveyed both sites since, but no additional plants have been found.



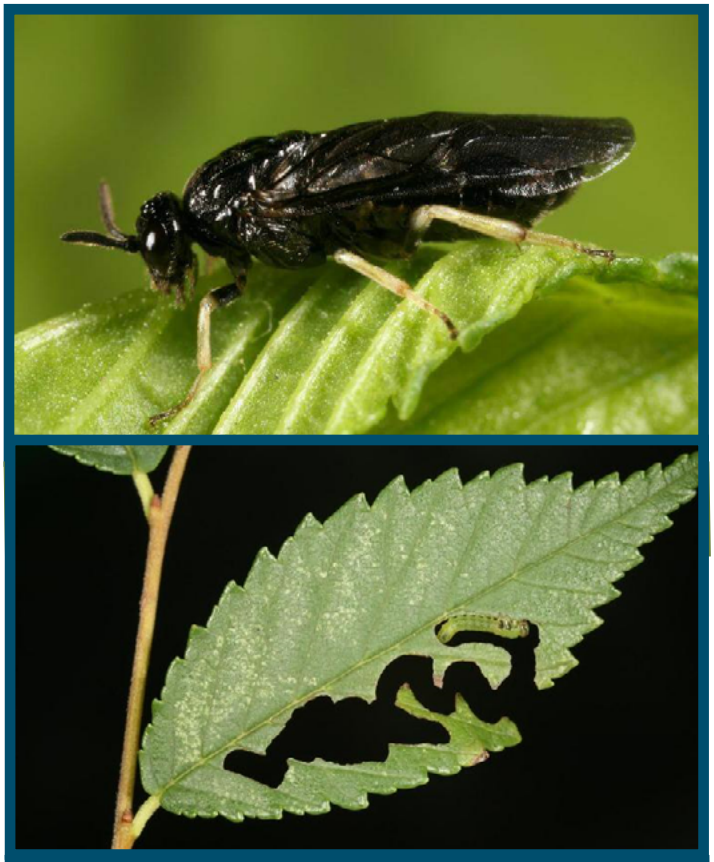
Six bags of water lettuce and water hyacinth removed from Walton Woods Park in 2025 by (left to right): Nikolai White Bear, E&O Assistant; Mason Schultz, Boat Steward; Mykayla Williams, Boat Steward; and Nick Farese, Aquatic Program Manager (photographer).

While no early detection aquatic species were found during this year's site monitoring, two new sites were identified thanks to iNaturalist reports. Water lettuce was reported at Walton Woods Park by a community member and in response, WNY PRISM staff surveyed the site and removed 601 water lettuce and twenty-nine water hyacinth plants. Water lettuce was also reported by a second community member in a pond at Tifft Nature Preserve. WNY PRISM staff surveyed the site and removed eighty-one water lettuce plants. Both sites will be monitored moving forward.

Our partners, community scientists and volunteers are integral to our early detection efforts. They help survey and manage priority species across the region, share resources to raise public awareness and much more! Remember, we all play a role in protecting our waterways, so paddle ahead, keep a lookout for invasive species and report those you find, properly dispose of aquarium or water garden plants and practice spread prevention efforts like Clean Drain Dry!

Page 1 Photos: Water lettuce and water hyacinth survey and removal at Walton Woods Park, 2025.

The elm zigzag sawfly (*Aproceros leucopoda*) is a relatively new invasive species in North America. Native to eastern Asia, it was first detected in southern Québec in 2020 thanks to a community scientist's iNaturalist report. Since then, elm zigzag sawfly has been confirmed in several U.S. states, including New York State in 2022. Within the WNY PRISM region, it has been reported in Allegany and Erie Counties, with additional detections in nearby regions such as the Finger Lakes. WNY PRISM has identified it as a Data Gap Priority Species, Tier 5 – Survey & Research, meaning that monitoring its presence and distribution and understanding its potential impacts are currently the highest priorities.



Elm zigzag sawfly adult (top) and larva feeding (bottom). Photo Credit: Gyorgy Csoka, Hungary Forest Research Institute, Bugwood.org.

Elm zigzag sawflies carry out their entire life cycle on elm trees (*Ulmus* spp.). The adults are small, 6-7 mm long, shiny, black insects with a wasp-like appearance, yellow legs and a white patch on the underside of the thorax. Females can reproduce without mating and lay up to 50 eggs at a time. Eggs are laid along the margins of elm leaves and hatch into larvae that start out greyish white before turning green as they mature. The larvae are distinguished by a dark head band and T-shaped markings on the second and third pair of true legs. During the summer months, larvae form loosely netted cocoons on leaves where they pupate, while winter cocoons are more solid and often found in leaf litter or soil.

The larvae feed exclusively on the leaves of elm trees and their distinct zigzag feeding pattern is the easiest way to detect the presence of elm zigzag sawfly. This pattern can become more difficult to see as the larvae mature and feeding progresses, especially if the entire leaf is defoliated and only the veins remain. Entire trees may become heavily defoliated and branch dieback or crown thinning may occur. Although tree mortality has not been observed, more persistant defoliation events could weaken trees over time and lead to greater susceptibility to other stressors. Another potential concern of the elm zigzag sawfly is competition with native elm feeding insects.

With up to four to six generations per year, it's possible to detect elm zigzag sawfly larvae and their zigzag feeding pattern from May through October, so keep a lookout! If you have any elms planted in your yard, neighborhood or in a nearby park, take a moment to visit them and inspect the leaves. If you observe elm zigzag sawfly or its feeding damage, please take photos and submit a report through iMapInvasives. Early reporting is critical in helping to track this species, understand its spread and develop management approaches to protect elm trees in western New York.

Want to learn more about elm zigzag sawfly?

Check out WNY PRISM's Invasive Species Profile at: wnyprism.org/invasive_species/elm -zigzag-sawfly.

Partner Spotlight: Niagara River Greenway

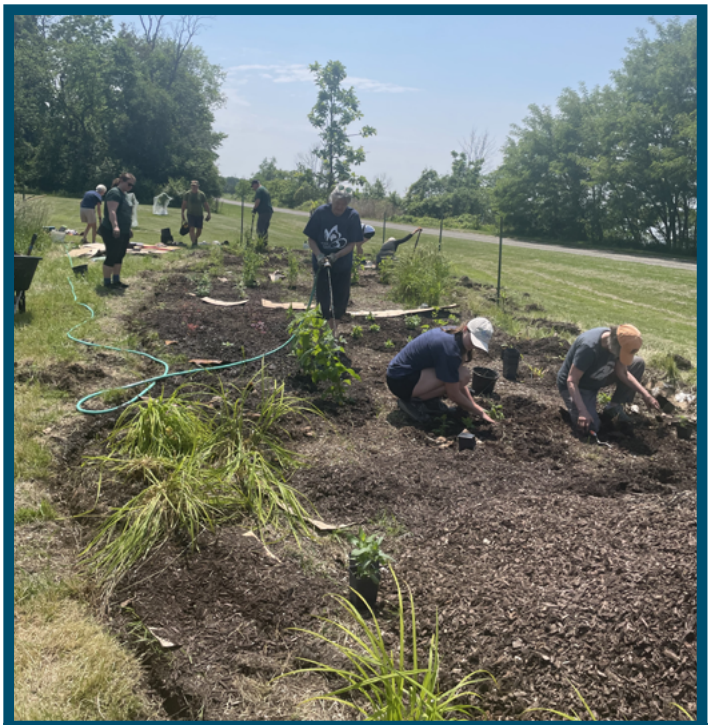
Written by: Michelle Lockett, Niagara River Greenway

The Niagara River Greenway is a world-class corridor of places, parks and landscapes that celebrates and interprets our unique natural, cultural, recreational, scenic and heritage resources and provides access to and connections between these important resources while giving rise to economic opportunities for the region.

The Niagara River Greenway (NRG) supports the recreational use and rehabilitation of the Niagara River and the greenspace surrounding it. It draws attention to the historical, cultural and ecological significance of the Niagara River through funded projects that align with the Niagara River Greenway Plan, developed in 2007. The NRG Commission reviews project proposals by non-profits working towards the betterment of the Niagara River and its surrounding communities. Examples of projects funded by the Greenway Ecological Standing Committee include the WNY Land Conservancy Nature Preserves on Grand Island, Living Shorelines projects by Buffalo Niagara Waterkeeper, and invasive species removal at Tifft Nature Preserve. While part of NRG's focus is getting people out to the shoreline to enjoy the amenities and surrounding nature, another major focus is stewardship and conservation.

NRG works with schools, businesses and community groups to organize clean ups, work on removing invasive species or planting native plants. In March of 2023 NRG helped organize a group of like-minded citizens who appreciate the abundance of nature in their community. They formed the Grand Island Nature Alliance (GINA) to help raise awareness around the many natural assets their community has, with the goal of educating people on how everyone can help to improve our ecosystems. GINA has held many educational talks and walks since its inception, from bird walks, an owl prowl, tree identification walks, native plant talks and an invasive species walk led by WNY PRISM. They installed a community native plant garden along the Shoreline Trail on West River Road that will serve as an example of what others can build in their own yard. Educational signage identifying the plants and their benefits will be installed next spring.

NRG strives to increase awareness of biodiversity loss and what that means to our water and soil quality. Annual events organized by NRG, such as Paddles Up Niagara, provide an opportunity for local environmental organizations, like WNY PRISM, to interact with the public and share information about the projects they are working on and the impacts they have on our local ecosystems. To learn more about NRG, please visit: https://www.niagararivergreenway.com.



Grand Island Nature Alliance members creating a native plant demonstration garden along the Niagara River Greenway's Shoreline Trail. Photo Credit: NRG.

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Common buckthorn outer and inner bark (left) and its berries persisting into winter (right).

Common buckthorn (left) and alternate-leaf dogwood (right) in the fall. Photo Credit (right): Randy Harter, from plants.ces.ncsu.edu/plants/cornus-alternifolia.

Hollow pith of an invasive honeysuckle.

As we move into fall, the fields, forests, and roadsides of western New York are full of plants setting seed and preparing for the coming winter. This can be a critical time for identifying invasive plants before they spread further – but many native plants share similar features, sometimes leading to confusion. By learning some key differences we can help protect our ecosystems more effectively. Let's dive into some common and not so common invasive species and their lookalikes.

1. Common Buckthorn vs. Dogwoods

Common buckthorn (*Rhamnus cathartica*) is one of western New Yorks's most common invasive shrubs and can look deceptively similar to native dogwoods (*Cornus* spp.). Key differences are common buckthorn holds onto their leaves late into the fall and their dark purplish-black berries often persist into the winter. Their silvery-brown bark is dotted with horizontal lenticels and the inner bark is orange. They have sub-opposite branching while most dogwoods have opposite branching. The exception is alternate-leaf dogwood (*Cornus alternifolia*), which as its name implies, has alternative branching. Dogwood leaves have smooth margins however, while common buckthorn leaves are finely toothed.

2. Invasive Bush Honeysuckles vs. Northern Bush & American Fly-Honeysuckle

Invasive bush honeysuckles (*Lonicera* spp.) are widespread in western New York's forests and forest edges, forming dense thickets that outcompete native vegetation. While much less common, our native northern bush (*Diervilla lonicera*) and American fly-honeysuckles (*Lonicera canadensis*) might be mistaken for an invasive at first glance. One noticeable difference as we move further into fall is invasive honeysuckles hold their leaves longer than most other natives. The hollow pith of invasive honeysuckles is another giveaway—cut an older growth stem and examine the center. If there is a small hole, it's an invasive honeysuckle, if it's solid, it's native.

Fall (and winter!) is a great time to manage many invasive species — check out WNY PRISM's Best Management Practices at: wnyprism.org/management/best-management-practices!

3. Tree-of-heaven vs. Staghorn Sumac

Tree-of-heaven (*Ailanthus altissima*) infestations are increasingly found in the region, along roadsides, urban areas, old fields, forest edges and openings. Staghorn sumac (*Rhus typhina*), a native tree, grows in many of the same areas and looks quite similar. It can become trickier in the fall and winter, but there's a few key differences to look for. The bark of tree-of-heaven is gray with diamond-shaped markings on younger trees and pale verticle lines on older trees. In contrast, staghorn sumac's smooth bark has narrow horizontal markings. Tree-of-heaven's younger leaves and petioles are hairless and staghorn sumac's are covered in dense hairs. In addition, tree-of-heaven's large, leaf scars are shield-shaped with the new bud at the top while staghorn sumac scars are more heart-shaped and the new bud is smack dab in the middle.

Tree-of-heaven (left) and staghorn sumac (right) leaf scar comparison. Photo Credit (right): Vern Wilkins, Indiana University, Bugwood.org.

4. Porcelain Berry vs. Native Grapes

Porcelain berry (*Ampelopsis glandulosa*) is an invasive vine that scrambles over vegetation, and at first glance, can easily be mistaken for our native grape species (*Vitis* spp.). Both are woody vines that produce curling tendrils and clusters of berries in late summer that can persist through fall. But, when more closely examined, porcelain berry fruits are speckled and can be various shades of white, yellow, lilac, teal and green, becoming bright blue when mature, and they have white, starchy flesh. The fruit of native grapes become black or purple when mature and have a watery flesh that's not white. Another clue is the bark: the bark of mature porcelain berry is relatively smooth and has noticeable light-colored spots (lenticels) while native grapes' bark peels or shreds in narrow strips and there are no obvious lenticels.

Grape vine (top) and porcelain berry (bottom) bark comparison.

Learning to distinguish between invasive plants and their native lookalikes takes practice, but every accurate identification strengthens our ability to protect native biodiversity. This fall, as you hike or work in your yard, take a closer look—you might be surprised at what you find.

WNY PRISM Steering Committee Members

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New York Sea Grant | NYS Department of Environmental Conservation - Great Lakes Program
NYS Department of Tranportation | NYS Office of Parks, Recreation and Historic Preservation
Royal Fern Nursery | U.S. Army Corps of Engineers - Buffalo District
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U.S. Fish and Wildlife Service - Lower Great Lakes Fish and Wildlife Conservation Office