SLELO PRISM

St. Lawrence Eastern Lake Ontario Partnership for Invasive Species Management

"Teaming Up to Stop the Spread of Invasive Species"

2022 Spring Newsletter

107 Trees, 32 Species Local Communities Continue to Plant Street Trees

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About the Cover

*SLELO PRISM – **Rob Williams and Megan Pistolese-Shaw***

Healthy trees play an important role in urban settings. They provide shade in the summer and act as a wind barrier in colder seasons. They reduce pollution from urban runoff and beautify our streets and yards. Climate change and invasive species threaten the health of the street trees that make up our parks and urban forests.

In recognition of the importance healthy trees play in our communities, our Terrestrial Restoration and Resiliency Coordinator Robert Smith along with the NYS DEC, and several partners, continue to help our communities sustain urban forest health through an **Urban Forest Sustainability Initiative** (UFSI). This initiative provides guidance on how to enhance the resiliency of urban forests to climate change and invasive forest pests by maintaining diverse, climate adaptable and invasive species resistant trees.

In addition to supporting tree plantings, the UFSI offers an **Urban Forest Sustainability Guide** that enables communities to develop community tree programs that include climate adaptability, carbon storage, tree diversity and invasive species components.

To date, the communities of Watertown, Massena, Canton and Pulaski have participated in the UFSI, planting 107 trees with 32 different types of tree species. According to Rob Williams, PRISM Director, "This is a great way for people in our communities to connect and do meaningful work in an outdoor setting". **Learn more** about how these communities are participating in the UFSI.

Community members can further engage in urban forest health by taking a Pledge to Protect their community's urban forests from invasive species. After taking the pledge, they will receive a monthly email that showcases simple actions they can take to fulfill their pledge. The Pledge to Protect also offers virtual toolboxes with a plethora of resources to help pledgers prevent the spread of invasives, manage invasives on their own property, and opportunities to get involved. The **Community Protector's Toolbox** offers resources specifically themed towards preventing the spread of and managing invasives in an urban setting. Unlock these resources by taking the Pledge to Protect at, **iPledgeToProtect.org**.

Tree planting in Canton with the NY SLL BOCES Agriculture Studies Academy, and the SLC Soil and Water Conservation District -©Megan Pistolese-Shaw.

Oswegatchie River Water Chestnut Removal Effort

SLELO PRISM ***-Megan Pistolese-Shaw***

There is an infestation of water chestnuts on the Oswegatchie River near the dam in the Village of Heuvelton. Water chestnut is an invasive aquatic species that have environmental and economic impacts. Water chestnuts grow thick dense floating mats that shade out native aquatic vegetation, impede outdoor recreation, and reduce shoreline property values; the hard, pointy seeds of water chestnuts can puncture vehicle tires or injure feet if stepped on. If not managed, the infestation of water chestnuts on the Oswegatchie River can grow and easily spread to connecting waterbodies, like Black Lake.

On Saturday, June 25th, 2022, there will be a removal effort including manual hand-pulls along with the use of mechanical harvesters. Food will be provided by the Village of Heuveloton Fire Department. This is a great opportunity for community members to spend some time on the water, and help protect the Oswegatchie River.

If you are interested in assisting this removal effort by helping to hand-pull plants, or by providing equipment or services, please visit the SLELO PRISM **events page** and register by June 21st.

This effort is being supported by SLELO PRISM, The Black Lake Association, NYS Office of Parks Recreation and Historic Preservation, NYS DEC, Indian River Lakes Conservancy, Save The River, Thousand Island Land Trust, the Cornell Cooperative Extension of St. Lawrence County, the Village of Heuvelton Fire Department, the City of Ogdensburg Fire & Rescue, the Town of Morristown, the Chippewa Bay Fish and Game Club, St. Lawrence Waterfowlers, St. Lawrence Valley Sportsman Club, St. Lawrence Federal Credit Union, Comprehensive Weed Control of Northern New York, and many volunteers.

Water chestnut infestation on the Oswegatchie River, ©Brittney Rogers-SLELO

Jumping Worms Confirmed in Jefferson County

Sue Gwise-CCE-Jefferson County

The invasive jumping worm (JW) has been confirmed in Jefferson County. In November, a suspicious worm sample that was brought into CCE Jefferson was sent to Colgate University for positive identification. This destructive earthworm was first found in the SLELO PRISM region in St. Lawrence County in 2018. Jumping worms create an ecological disaster by rapidly consuming all the organic matter in the soil. This leaves behind a soil that looks like coffee grounds, is devoid of nutrients, and is highly susceptible to erosion. Worst of all, there is no control.

Identification: Also known as 'crazy snake worms' or 'Alabama jumpers' the worms will thrash about wildly when disturbed. They can also detach their tails when handled. They range from 1.5 to 8 inches in length. Jumping worms have a smooth, white-colored clitellum *(the narrow collar found around the body of most earthworms)* as opposed to European worms which have a raised pink-red clitellum. All other characteristics are subjective, making identification difficult.

To minimize the spread of AJW:

- Do NOT buy or use jumping worms for bait, vermicomposting, or gardening.
- Only purchase or trade compost that was heated to appropriate temperatures and duration following protocols for reducing pathogens.
- Clean compost, soil, and debris from vehicles, personal gear, equipment, and gardening tools before moving to and from sites.
- Be careful when sharing and moving plants. Always check for worms and know where your plantings come from. Buy bare root stock when possible.
- Dispose of all live worms in the trash or place them in a bag and leave them out in the sun for at least 10 minutes. Then throw the bag away.

What to do: If you are suspicious that your soil is infested, apply a mustard pour to your soil. This will irritate any worms and bring them to the surface (this is a sampling method, not a control method). You can then look for any jumping worms and bring suspicious samples to your local CCE office for identification.

Stewardship on the River

Lauren Eggleston-Save the River

Save The River's Riverkeeper Volunteer Program emphasizes stewardship. These outings teach basics on assessing river health, identifying potential pollution problems, and offering positive changes. Volunteers are trained to assess and report pollution and wildlife die-offs, monitor river health, and engage with the community to promote a healthy river. Participants receive the Riverkeeper Handbook, and a Save The River t-shirt.

The training includes familiarizing volunteers with invasive species in the St. Lawrence River, Lake Ontario, and the Ottawa River. Participants learn what fish to watch out for, how to identify frequently encountered plants, the basics of iMapInvasives, and the principles of clean, drain, and dry.

We encourage our Riverkeepers to volunteer with SLELO-PRISM to continue building their knowledge on aquatic invasive species.

If you'd like to become a Riverkeeper, host a program, or polish up your skills, join Save The River this summer! Dates are listed below, with more announced on **STR's Facebook page** as they are confirmed.

- June 14, Minna Anthony Common Nature Center
- July 8, Minna Anthony Common Nature Center
- August 11, Minna Anthony Common Nature Center
- September 9, Minna Anthony Common Nature Center

Learn more about Save The River and our work on the St. Lawrence River at **savetheriver.org**.

© Save the River

Native Alternatives to Common Invasive Garden Plants

SLELO PRISM - Megan Pistolese –Shaw

Many invasive plants were once considered desirable ornamentals that were intentionally introduced to our gardens and landscapes only to escape into our natural environments. Once established, invasive species easily outcompete native species which reduces the availability of food and shelter for native wildlife and hinders the functionality of natural systems. Gardeners can play a vital role in the introduction and the prevention of invasive plants by choosing to grow native plants in their yards. Showcased below are a few examples of native alternatives to common invasive garden plants.

Invasive Butterfly Bush

Buddleja davidii

Native Alternatives

Summersweet (*Clethra alnifolia*)

Blazing Star (Liatris spicata)

Butterfly bushes may be beautiful, but they can escape cultivation and invade natural areas, crowding out native plants. Despite its name, the butterfly bush supports pollinators at only one stage in their life cycle. Butterflies need host plants to lay eggs on and for their larvae to eat. There are no native caterpillars that eat butterfly bush leaves. Instead of butterfly bush, plant native summersweet *Clethra alnifolia*, and blazing star *Liatris spicata*. These native plants will support pollinators and provide benefits to the natural ecosystem.

Burning bush has attractive fall color and eye-catching fruit which makes it a common invasive found in gardens. However, like other invasive shrubs, the burning bush can easily escape your yard and invade natural areas where it can outcompete native vegetation and alter habitats. Instead of burning bush, plant native black chokeberry *Aronia melanocarpa,* or highbush blueberry *Vaccinium corymbosum,* these native plants will not only produce fruit for wildlife, but you can use their berries to make tasty jams.

Invasive Burning Bush

Euonymus alatus

Native Alternatives

Black chokeberry (*Aronia melanocarpa*)

Highbush Blueberry (*Vaccinium corymbosum*)

Invasive Yellow Flag Iris

Iris pseudacorus

Native Alternatives

Blue Flag Iris (*Iris versicolor*)

Cardinal Flower (*Lobelia cardinalis*)

If you have water near your property, be sure to avoid growing yellow flag iris. This riparian flower forms dense rhizomes that expand quickly creating monotypic stands that can replace and crowd out valuable aquatic plants like cattails, and other important wetland/riparian plants. Instead of yellow flag iris, plant native blue flag iris *Iris versicolor*, or cardinal flower *Lobelia cardinalis*. These native flowers are not only beautiful, but they support pollinator wildlife.

Take the **Pledge to Protect** to get more tips like this sent to your inbox each month!

Novel Approaches to Invasive Species Management

Garrett Chisholm –Huyck Preserve

Now in its fourth year, invasive species management at the Huyck Preserve located in Rensselaerville is more visible than ever. Walking our twelve miles of trails, across over 2,000 acres of land, one might come across autumn olive that has been solarized with black plastic, a fairly standard treatment for this species. One might, though, also see a singed multiflora rose, all that remains from a recent flame treatment. This more novel approach to invasive species management uses a weed torch on resprouts of multiflora rose, Japanese barberry, and autumn olive. But, our most visible management effort might be the hardware cloth being used as an experimental technique to manage Japanese knotweed, an invasive species similar to bamboo that spreads through fragments and underground rhizomes.

This experimental management is thanks to funding provided by the Capital Region PRISM through their RFP program. Before 2021, management of knotweed involved cutting back above-ground biomass and repeatedly hand pulling its resprouts, with the overall goal being suppression. With this new technique, we are hoping to see the knotweed girdle itself as it grows through the half-inch x half-inch galvanized steel mesh, reducing both the quantity of annual resprouts and the time that staff spends working on its management.

At the beginning of the study, all above-ground biomass in the experimental knotweed plot was removed, and the hardware cloth was rolled out and secured to cover the area. Meanwhile, the

© Garrett Chisholm– Huyck Preserve

adjacent control plot was managed as normal and no hardware cloth was installed. Four study plots were created in both the experimental and control plots and, after 30 days, we returned to count the number of stems and measure the height of each stem in the plots.

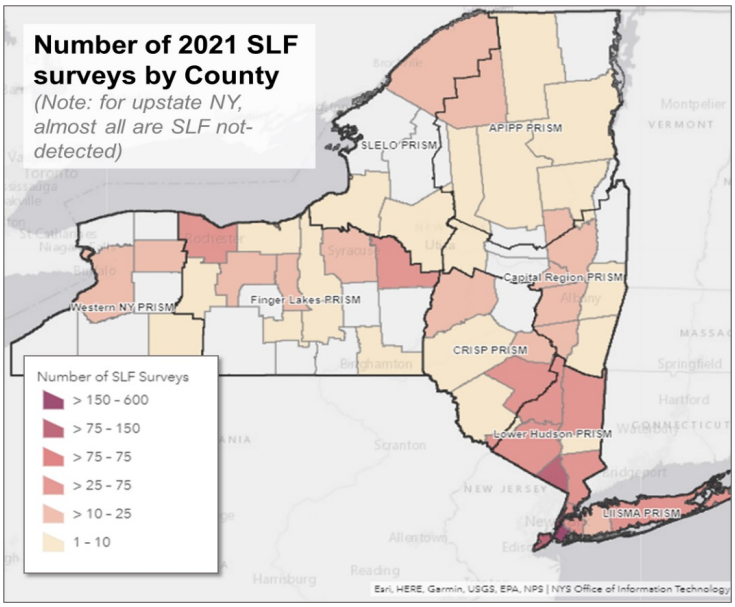
Initial results showed that there were more stems but shorter individuals in the experimental treatment compared to the control. Notably, neither population flowered. More information will need to be gathered through future monitoring, but this response may be a reaction to stress caused by the hardware cloth. This is a multi-year study, and we look forward to sharing these findings across the larger PRISM network.

To learn more about the experimental invasive species management techniques being used at the Huyck Preserve, contact the Stewardship Coordinator Garrett Chisholm **garrett@huyckpreserve.org**.

Updates to SLF Grid Square Program

Mitch O'Neil– iMap

Last year's "Claim A Grid Square" initiative is back – pick your spot to survey for spotted lanternfly this year (over 70 squares claimed already!).



In 2021, we saw spotted lanternfly expand into several areas in NY. Luckily, volunteers across the state took action - 169 grid squares across the state were claimed and surveyed, and nearly a thousand spotted lanternfly records were submitted to iMapInvasives (thankfully these were almost all not-detected reports in upstate NY!)

Spotted lanternfly (SLF) is an invasive pest from Asia that feeds on a variety of plants including **grapes, hops, and maple trees**, posing a severe threat to NY natural resources (visit the NYS Agriculture & Markets website for info). SLF has been found in several locations in NY but has not yet spread to much of the state. One potential pathway for the spread of SLF is its preferred host plant, tree-of-heaven (ToH), which is already found in many locations across NY.

Luckily, spotted lanternfly has not made its way to SLELO yet – but when it does, we want to know as soon as possible. And mapping any locations of tree-of-heaven will help us identify some of the most likely spots for SLF to show up.

We are seeking volunteers like *you* to look for SLF and ToH in your area a couple times throughout the year. You can help protect New York's agriculture and forests by knowing what to look for and how to report it to New York's official invasive species database, iMapInvasives.

To learn more about this project, sign up for a grid square, and register for our upcoming virtual event on May 25th @ 1pm visit, **nyimapinvasives.org/slf**

Terrestrial Restoration & Resiliency Initiatives

SLELO- Robert Smith

2022 Hemlock Woolly Adelgid (HWA) Survey Results: This year, Team SLELO surveyed 14 sites for HWA. Only one of these sites, Noyes Bird Sanctuary, was found to have HWA present. At this site, five trees were found to have HWA present on its lower leaves. All trees surveyed appeared to be in good health. This sanctuary is owned by the Onondaga Audubon Society and we will be going back with a small group of volunteers to assist them in determining the quantity and size of the trees, and to delineate the hemlock stand. To date HWA has been found at 6 Sites by SLELO PRISM and NYS OPRHP. Sites indicate HWA is progressing up the Lake Ontario shoreline to include: Camp Hollis, Independence Park, Mexico Point State Park, Selkirk Shores SP, Noyes Bird Sanctuary, Oswego County Reforestation Area. The Summary Report will be available soon on the SLELO PRISM website **Field Reports Page**.

Early Detection Surveys remain on a two-year rotation for our Priority Conservation Areas. This year, Brittney and Robert will return to the nine sites surveyed in 2020 to include:

- Black Lake
- Black Pond WMA
- Chaumont Barrens
- Chaumont Bay
- Deer Creek WMA
- El Dorado Preserve
- Lakeview WMA
- Oneida Lake and Three Mile Bay WMA
- Salmon River Estuary

Most of these sites are both aquatic and terrestrial, with a few that are just aquatic or terrestrial. There are several other sites that have never been surveyed and we will visit some of these sites time permitting.

Robert Smith & Megan Pistolese Shaw-SLELO PRISM at Lake Julia Preserve. Photo taken by SLELO Volunteer, Frank Williams.

2022 Invasive Species Control Work: As a result of last summer's early detection surveys and treatments conducted by our licensed subcontractor, we retired some treatment areas and added some new sites. This year, we will be treating 12 more sites than last year (26 new sites, 5 retired sites, 9 sites merged into 3 sites, (3 sites inactive/resurveying). Species managed include- pale swallow-wort, Japanese knotweed, phragmites, oriental bittersweet, and yellow iris.

As part of SLELO PRISM's use of integrated pest management, we will also be conducting volunteer hand pulls of swallowwort and yellow iris at certain Priority Conservation Areas (PCAs) where they are present in low numbers with sparse/scattered distribution. The sites involved are, Deer Creek WMA, El Dorado Preserve/Black Pond WMA, and Oneida Lake/Three Mile Bay WMA. Anyone interested in participating should contact Megan Pistolese –Shaw at **megan.pistolese@tnc.org**.

As part of DEC's Giant Hogweed Program, we will be monitoring and treating, if necessary, at 44 sites in Lewis and Jefferson counties. To date, giant hogweed has been eradicated (that is free of giant hogweed for three or more years) at 49% of our sites. Of those eradicated sites, 58% involved manual treatment using the root cut method to reduce the use of herbicides.

©SLELO PRISM, Robert Smith

Biological Controls for Invasive Species Management in SLELO PRISM: Continuing with the theme of using integrated pest management, we have several planned biocontrol releases in the SLELO PRISM Area. Starting with pale swallowwort, we will again be releasing *Hypena opulenta*, the moth that feeds exclusively on swallowwort as larvae. Two cages will be set up at Grenadier Island and two cages will be set up at Robert Wehle State Park. This will occur in early June. Next, we will be releasing three species of parasitoid wasps that target Emerald Ash Borer at Rice Creek Field Station (SUNY Oswego). This will occur from spring through fall and will continue into next year with another series of releases at that location. We are also planning to release two biological control species (a silver fly species and a *laricobius* beetle), starting in the spring of next year at Independence Park, which is in the heart of where HWA has been found. Lastly, we have noticed an increase in several areas of purple loosestrife. To help control the numbers of this species, we will be releasing *Galerucella* beetles this year. These beetles are a well-known biocontrol for purple loosestrife and have been used for many years. Our hope with all these biocontrol releases is that they will establish a population in the area and act as a long-term control for these invasives.

Urban Forest Sustainability Initiative (UFSI): This program is about strategies that increase urban forest resiliency to invasive pests, pathogens, and climate change. We offer participating communities a guide outlining these strategies, a presentation about the program, and up to $5,000 reimbursement for the purchase of non-invasive tree species. The two communities that we are working with are, Utica, which is planning a fall planting, and Ogdensburg, which is currently in early conversations about the program. The only requirements for the reimbursement are that the community allows us to give a presentation about the program and receipts showing the purchase of non-invasive tree species.

Canton Tree Planting ©SLELO PRISM, Megan Pistolese-Shaw

Aquatic Restoration and Resiliency Initiatives

SLELO PRISM – Brittney Rogers

WISP 2022: On May 27 the 2022 Watercraft Inspection Steward Program kicks off! In addition to conducting voluntary inspections at the launches, stewards will also be participating in NY ISAW, Great Lakes AIS Landing Blitz Week, our new Launch and Learn, writing articles for local papers/website, Water Chestnut Pulls, and attending some local fishing tournaments. Be on the lookout for the stewards and remember to Protect Your Waters by always following the simple steps to Clean-Drain-Dry your equipment.

Aquatic Restoration Initiative: at South Sandy Creek will include monitoring for regrowth of phragmites and Japanese knotweed and treatments will occur as needed. We will be continuing our native seed installation, and drone flights following the patterns from Phase I as well as the development of a long-term monitoring plan. To learn more about this work, be sure to attend the South Sandy Creek Experience event on June 11. More details for this can be found on our **events page** both online and in this newsletter.

Dunes Restoration: Following the 2021 Dune Assessment of Invasive Species, SLELO PRISM Special Project Funding was allocated to Phase II of the Dunes Restoration Initiative which began this April to manage the invasive *Phragmites australis* and initiate native species restoration with the development of a long-term monitoring plan. This project would not be possible without the numerous project partners and local private landowner support. This project is also receiving additional funding to support more native species installation at the site in an effort to reduce dune destabilization from the removal of the invasive species.

Environmental DNA - We are pleased to share that we will be collaborating with the Adirondack PRISM for our 2022 eDNA project which will be assessing the distribution of invasive species between connected waterways of the Eastern Lake Ontario, St Lawrence River, and the Adirondacks. We will be collecting samples from five major rivers in the region. Stay tuned for updates on this project!

For more information on these projects or any other aquatic invasive species focused project, contact the Aquatic Restoration and Resiliency Coordinator, Brittney Rogers at **Brittney.Rogers@tnc.org**

Learn More About our eDNA Project

Partner Spotlight: Trees Bring Us Together

Christina McLaughlin– Partnership Coordinator for Urban Forestry, NYS DEC

The last two years have taught us a lot about the value of green spaces for communities. Parks and nature preserves have seen an increase in usage across the state since the start of the pandemic. Growing concerns about climate change and its impacts on our everyday lives is leading to recognition of the importance of trees as a tool for mitigating urban heat islands, managing storm water, storing carbon, and cleaning the air. That's why the theme of this year's ReLeaf Conference is "Trees Bring Us Together."

ReLeaf is a part of the Urban Forestry Program at NYSDEC and it is run in partnership with the NYS Urban Forestry Council. Consisting of eight committees around the state, ReLeaf brings together tree care professionals, municipal staff, utility arborists, state and local government officials, educators, tree board members, and interested members of the public in support of urban forestry. It promotes the value of trees, proper tree care, and sound urban forest management practices by connecting communities to technical expertise, educational resources, training, and potential funding sources that will help them meet their local needs and maintain and improve their urban forests.

We are pleased to announce our keynote speaker for the conference is Ian Leahy, Vice President of Urban Forestry at American Forests. Ian was the urban and community forestry coordinator for the District of Columbia before joining American Forests, where he has overseen development of their Tree Equity Program since 2014.

Please join us at Jefferson Community College in Watertown, NY, July 21–23, 2022. Registration information will be available in May on the Council's ReLeaf webpage. To get timely news and updates about urban forestry events and issues you can subscribe to NYSDEC's monthly email newsletter, "Plants, Trees, and Land Conservation," and the Council's monthly newsletter "Taking Root." You can also follow both NYSDEC and UFC on social media.

SLELO PRISM will be presenting at the ReLeaf Conference about our Urban Forest Sustainability Initiative and Pledge to Protect Program on June 23rd.

Learn more about ReLeaf online.

Get ReLeaf conference details and register

To sign up for NYSDEC's monthly email newsletter, "Plants, Trees, and Land Conservation"

To sign up for the UCF's "Taking Root" newsletter.

Upcoming Invasive Species Events and Announcements

CLICK TO REGISTER

CLICK TO REGISTER

- May 25th, 1:00pm to 2:00pm iMapInvaisves Identifying and Reporting SLF and TOH.
- May 25th, 11am NY Invasive Species Speaker Series– *Lymantria dispar* in NY. View the 2022 schedule and zoom link.
- June 8th, 8am-4pm: Black River Watershed Conference.
- June 11th, 10am-2pm NYISAW Wellesley Island's Swallow-wort Shovel.
- June 7th, 1pm: NYISAW Webinar- Native Alternatives to Common Invasive Plants.
- June 25th, 9am-2pm Oswegatchie River Water Chestnut Removal Effort.
- July 21-23, ReLeaf Conference.

<<Notable Announcements>>

June 6-10th join PRISM-led Webinars at 1pm & 7pm

View State-wide Events

Read the Study

View the new Spongy Moth Factsheet

From Our Director

Managing Invasives for Resilience

From time to time, I hear folks say things like "invasive species are always going to be around and there's not much we can do about them". Naturally, this results in great contemplation. Now, I could go on referencing all the studies that contradict this statement, but in the time I have in this column, let me just say this.

Our work has and continues to reduce the negative impacts of invasive species especially when we close the loop with ecological restoration. We have reduced the impacts of forest pests such as the emerald ash borer and hemlock woolly adelgid across New York's forested lands, ensuring the recreation and timber industries in NY remain strong, while also protecting the ability of trees to continue to store carbon. Recently and along with our partners, we have protected 750,000 acres of the Tug Hill Forest by preventing the spread of forest pests and planting diverse species of trees making the Tug Hill landscape more resilient to external stressors. Our urban forest sustainability efforts have the same benefits within our populated communities.

The Salmon River corridor and the Sandy, South Sandy, and Deer Creek riparian areas are also more resilient today, thanks to our invasive species suppression and ecological restoration efforts along these tributaries. By adding ecological restoration post suppression, we rehabilitate the native plant assemblages of these areas returning them to more biologically diverse areas, which in turn augment the resiliency of the aquatic/riparian system benefiting the complex interactions of nature.

Restoring a diverse assemblage of native plants causes a site to be resistant to invasive reoccurrence and creates subtle resilience to external stressors such as climate changes, increasing biodiversity even in aquatic environments. *(Source, Science Daily & Cambridge University Press).*

~Rob Williams

SLELO PRISM Partner List

- NYS Department of Environmental Conservation
- The Nature Conservancy in New York
- Cornell Cooperative Extension Offices
- NYS Office of Parks, Recreation & Historic Preservation
- NYS Department of Transportation
- NY Natural Heritage Program
- Soil & Water Conservation Districts
- Fort Drum Military Installation
- CNY Regional Planning & Development Board
- NY Power Authority
- Tug Hill Commission
- Tug Hill Tomorrow Land Trust
- Thousand Islands Land Trust
- Indian River Lakes Conservancy
- Save The River
- NY Sea Grant
- Ducks Unlimited
- Onondaga Audubon
- US Coast Guard Auxiliary
- St. Regis Mohawk Tribe-Environmental Unit
- Algonquin to Adirondack Collaborative

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SLELO PRISM

The Nature Conservancy — *SLELO PRISM Host Organization*

NEW YORK STATE OF OPPORTUNITY. Department of Environmental Conservation

Eastern Lake Ontario Swallow-wort collaborative