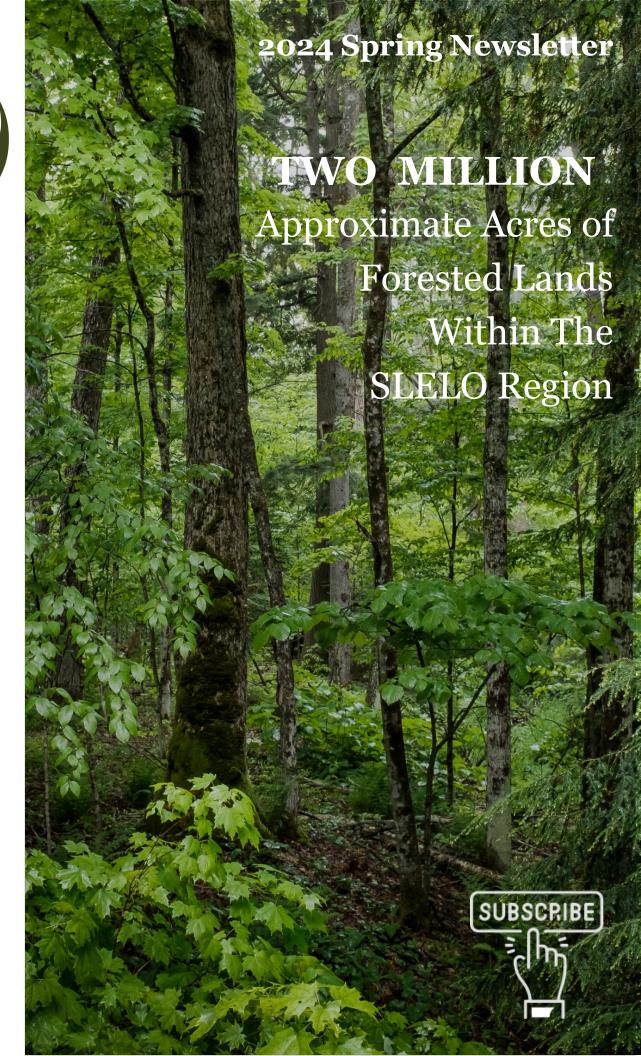
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St. Lawrence Eastern Lake Ontario Partnership for Invasive Species Managemen Teaming Up to Stop the Spread of Invasive Species"



# **About the Cover: Protecting Forests Through Collaboration**

SLELO PRISM-Robert Smith

The St. Lawrence and Eastern Lake Ontario (SLELO) Region lies within the largest temperate deciduous forest in the world. This extends along the Appalachian Mountain range from Alabama through New York and into Nova Scotia, representing a pathway corridor for native species that must move long distances to find suitable habitat as climate changes. In the fivecounty SLELO region, there are nearly 2 million acres of forested land with additional acreage in urban forests. Invasive forest pests and tree diseases currently affecting the SLELO region, and those soon to arrive, can reduce the ability of our forested lands to store carbon which further worsens climate change, and the ability of wildlife to move through this corridor.

A recent study showed forest plots damaged by insect pests stored 69% less carbon than less disturbed plots and plots recently impacted by disease stored about 28% less carbon (Quirion et al 2021). SLELO's efforts to slow the spread of forest pests and pathogens is a key strategy for enhancing the resilience of our forested areas against a changing climate and invasive species.

Current forest pests of concern include emerald ash borer (EAB), hemlock woolly adelgid (HWA), beech leaf disease (BLD), and elm zigzag sawfly (EZS). Forest pests close to our area include spotted lanternfly (SLF) and invasive long-horned beetle (LB). Key steps that we take to limit the spread of these species are Prevention, Early Detection & Rapid Response, and Invasive Species Management.

Prevention involves raising awareness of existing and approaching forest pests in our region and showcasing prevention and control meth-



ods. Some way in which we accomplish this is by sharing information with other agencies involved with forest pests, and by hosting informative events for the public. Early Detection & Rapid Response involves identifying new forest pest arrivals when they are in low abundance and then applying appropriate management techniques aimed to reduce the ability of the identified population to become widespread. Invasive species management involves eradicating, containing, or suppressing invasive species depending on their current population (tier) level. Methods of management include manual, mechanical, chemical, or biocontrol methods (integrated pest management). These efforts can be complemented by restoration that returns native plant assemblages to the sitestrengthening the health of the applied ecosystem. These steps will help maintain the resiliency of our forests if we work together to make them happen.

This is a collaborative effort among our team, partnership, and the public. Alone, none of us can survey for and manage every invasive pest found in our region, but together, we can get this job done!

# **Enhancing Aquatic Early Detection Efforts**

SLELO PRISM – Megan Pistolese-Shaw

Within the SLELO PRISM region, there are multiple waterbodies that span over 7 thousand acres of surface area. We've identified 17 Priority Conservation Areas (PCAs) with waterbodies or wetlands that our early detection team monitors on a biannual rotation. With our new 5-year contract we're enhancing early detection efforts for Aquatic Invasive Species (AIS) by engaging existing, recruiting new members through our Volunteer Surveillance Network to become Water Protectors. Through this initiative, we're developing a new platform for volunteers to 'adopt-a-water' to survey for priority AIS. Using ArcGIS, this platform will collect observation data and generate a metric dashboard that we can use to measure the impact of our volunteer's efforts and reveal data gaps more easily.

To kick off this new initiative, we're hosting a special 3-part Aquatic Invasive Species (AIS) Learning Experience to be held this May through June. A single or all events can be attended, but registration is required. This training is perfect for, waterfront property owners, lake associations, kayaking groups, seasonal staff, or anyone who wants to learn more about AIS. Attendees will be invited to join our new Water Protectors initiative and 'adopt-a-water' to monitor for and report priority AIS. Continuing Education Credits from the Society for Ecological Restoration and Master Naturalist Program have been awarded for this learning experience.



The first event will be held on May 22<sup>nd</sup> via Zoom from 6:30-8 PM. This session will include identification for AIS and native plants, as well as, training on how to report observations to NYiMapInvasives, and use apps like Seek and iNaturalist to identify and report native species.

The second event will be held in observance of New York Invasive Species Awareness Week (NYISAW) on June 5th from 6-8 PM at Keewaydin State Park's Marina Building. This session will showcase preserved and live native and aquatic invasive species in a classroom setting, as well as training for the community science tools mentioned.

The final event in the series will be a presolstice paddle held on June 19th, 6-8 PM at Kring Point State Park. This will be a fun evening on the water where you can test your new identification skills and learn how to survey for and report AIS. A rake toss demo will be included along with underwater viewing scopes for you to explore the world below the surface!

# **Protector's Activity**

SLELO PRISM-Megan Pistolese-Shaw

April is Earth Month! Take action by joining volunteer efforts and events, becoming a climate-smart gardener, aiding community science, and learning about invasive species that threaten your region. Check out the Earth Month Actions below to learn more!

Get involved: One of the most rewarding ways to take action is to get involved in your community! SLELO PRISM and our partners invite community members to join us for volunteer efforts and events year-round! Learn of upcoming hikes, paddles, invasive species removals, and site restoration efforts that you can join on our website.

At a statewide level, you can get involved with the Partnerships for Regional Invasive Species Management (PRISM). The PRISM network raises awareness of invasive species, provides prevention guidance, and are involved in the management of invasives across the state. Learn more about the PRISM network.

Be a climate smart gardener: Native plants biodiversity risks increase and reduce associated with invasive species, which supports resilient ecosystems in the face of climate change. Learn of climate-smart native plants in the Northeast from the Regional Invasive Species and Climate Change (RISCC) Network.

Aid community science: You can aid community science by reporting invasive species observations to NYiMapInvasives-New York's invasive species database. Using the NYiMapInvasives mobile app or website you can easily report presence and distribution data directly to invasive species management



professionals. Data helps to locate new invasive species populations and strengthens management efforts.

Invasive species threaten the lands Learn: and waters on which we all depend. You can help by learning what species are invasive in your region. The New York State Department of Environmental Conservation has developed an interactive storymap that features invasive species threatening New York State while the Partnerships for Regional Invasive Species Management (PRISM) network have developed a storymap highlighting regional invasive species threats.

Did you enjoy this blog post? Take our Pledge to **Protect** and get monthly emails showcasing actions you can take to protect your favorite hiking trails, paddleways, forests, garden, and community from the impacts of invasive species!

## Fire as a Control Method for Invasive Plants

Budd Veverka- Director of Land Management, Mianus River Gorge, INC.

In 1953, a group of concerned neighbors of a 60 -acre old-growth hemlock forest in Westchester County NY convinced the fledging Nature Conservancy to purchase their first parcels of land to protect them from development. This land, designated a national natural landmark in 1962, has become the 938-acre **Mianus River Gorge Preserve**.

With the Mianus River Gorge's proximity to New York City and its populous suburbs, invasive species are abundant. Annually, our Preserve Steward and I actively manage over 50 species of invasive plants and forest pests through manual, chemical, and biocontrol methods. Many invasives are native to East Asia, a region of the world where fire is uncommon, and most species from this region are intolerant to fire. This got me thinking that prescribed fire could be an extremely effective tool for invasive species management. Through my previous work managing land with the Indiana Department of Natural Resources, I had experience with setting more than 300 acres on fire in a single day, but the sheer mention of using fire in Westchester County to control invasives was initially met with laughter or disgust.

To help support my claim, I found some published literature for methods to effectively kill Japanese stilt grass and Japanese barberry using the controlled fire of a high BTU weed torch. To test it out, I purchased a 400,000 BTU backpack-mounted weed torch on Amazon; my experience with fire made me comfortable using this equipment.

SLELO PRISM



Since propane is expensive, we wanted to know if our burning efforts would be a cost-effective approach, so we had a student in the high school science research program conduct a research project to compare the time and cost of burning versus other methods for treating Japanese stilt grass. The study found that the time saved by burning made it the most affordable method.

Currently, our organization uses 4 torches to control invasive plants when the conditions are right. It is important to point out that we only conduct burnings when it is raining (but not pouring), just after a rainfall, or early in the morning when it is very dewy. We found that burning stiltgrass is most effective when the plant is less than 16 inches in height. It's best to start treatments in areas where there is more sunlight and it can grow faster and to save the more shaded areas for later in the treatment period. Move the fire quickly across the plant and wilt the leaves, taking care not to burn the plant to the ground as this pushes all the energy into the roots and the plant may re-sprout.

# Fire as a Control Method for Invasive Plants (Continued)

Budd Veverka – Director of Land Management, Mianus River Gorge, INC.

We have continued to experiment with this method for other plants such as pachysandra, yellow arch-angel, and bishops weed, and it appears to be most effective on annuals and biennials such as over-wintering and early-season garlic mustard.

We also use weed torching effectively on Japanese barberry where we will torch the root crown of the shrub for 25-30 seconds. Because this is a long burn in one spot, for safety, we typically do this when snow is on the ground. We have also found that is it highly effective to cut larger shrubs in the summer and fall and torch the re-sprouts in late winter and early spring, again when we have snow or the ground is very wet.

My hope is, that as invasive species management continues to gain more support publicly and wildfire becomes more common in the northeast, people and agencies will eventually feel more comfortable with the use of prescribed fire. Until then, weed torching is an effective method for many common invasive plants in our region and another important tool to have in our management toolbox.

If you have questions about the methods mentioned in this article, please reach out to Budd Veverka, the Director of Lands Management at the Mianus River Gorge, INC. at budd@mianus.org.



# **Restoration & Resiliency Initiatives**

SLELO PRISM- Robert Smith

**Hemlock Woolly Adelgid (HWA) Survey Results**: This year, SLELO PRISM surveyed 18 sites for HWA. 13 of these were completed by the early detection team with some help from volunteers, while 5 were volunteer surveys led by Megan Pistolese-Shaw. Of these 18 sites, none were found to have HWA present. Also, no reports of HWA were reported by other organizations this year. The 7 known HWA Sites are as follows: Battle Island State Park, Camp Hollis, Independence Park, Mexico Point State Park, Selkirk Shores SP, Noyes Bird Sanctuary, and Oswego County Reforestation Area. The Summary Report should be available soon on the SLELO PRISM HWA Field Reports Webpage.

Early Detection Surveys: This year, we will be conducting surveys at 12 sites. Five of these are aquatic, four of these are terrestrial, and three sites are both aquatic and terrestrial. As part of our CLAW Initiative, we will be visiting two new sites this year that are along the A2A Corridor. Those sites are Bombay & Brasher State Forests and Ironsides Island. Due to these additions, we will not be surveying at Oneida/Three Mile Bay WMA or Lakeview WMA this year. Restoration sites will still be visited at these sites including South Sandy Creek. The other 10 PCAs that we will survey this year are as follows: Black Pond, Carleton Island, Chaumont Barrens Preserve, Deer Creek WMA, El Dorado Preserve, Lakeview WMA - Lakeview Pond, Lakeview WMA - Cowell Pond, North Sandy Pond, Salmon River, and Three River Intersections.

Invasive Species Control Work: We plan to treat 89 sites, which is 1 less than last years 90 sites. 10 sites from last year were retired due to no presence of the target species, while 8 sites associated with PCAs that we have placed on our inactive list will not be chemically treated this year. Two sites at El Dorado will now be managed by volunteer hand pulls, while other sites were merged due to close proximity. This left room for new sites that we found during last years surveys. Sites treated for the following species changed as follows: swallowwort decreased by 7, phragmites increased by 10, knotweed increased by 1 and bittersweet decreased by 4. The greatest increase in sites treated will occur at Tug Hill ISPZ, going from 2 to 11. The greatest decrease occurred at Lakeview WMA due to it being added to our inactive PCA list. South Sandy Creek Restoration Site at Lakeview will be treated this year by Zack, SLELO PRISM's herbicide applicator, while yellow iris and bittersweet at Lakeview will be removed by volunteer hand pulls.



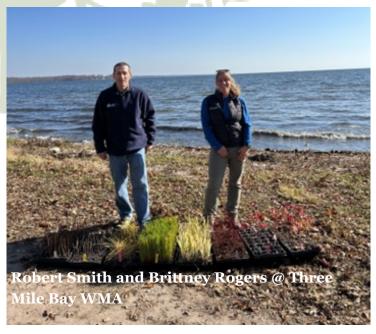
# **Restoration & Resiliency Initiatives**

SLELO PRISM- Robert Smith

**Biological Controls for Invasive Species** Suppression: We have several planned biocontrol events in the SLELO PRISM area this year. 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 Wehle State Park in mid- May. In late May, Hypena adults and pupae will be placed in these cages, while Hypena larvae will be placed 10 feet from the cages. I plan to work with New York State Parks to conduct Hypena presence surveys at Wehle State Park. Residents of Grenadier Island will conduct informal surveys for Hypena. Next, we will be conducting the 1st of 2 years of EAB Biocontrol Establishment Surveys at Rice Creek Field Station (SUNY Oswego). Yellow pan traps will be set up on 15 ash trees located in the area where we released 10,199 EAB biocontrol wasps in 2022/23. Surveys will be conducted weekly from June to September. Collection/sorting of insects will be conducted by SLELO PRISM, OCSWCD staff, and volunteers. The Director of Rice Creek Field Station has offered the use of a lab and the equipment to examine the insects. Lastly, as a continuation of the HWA biocontrol releases that have occurred in SLELO PRISM during the last two years, a release of Leucotaraxis silver flies is planned at Mexico Point State Park for April. Laricobius nigrinus beetles were released at this site in October 2022. All HWA biocontrol insects are provided by the New York State Hemlock Initiative (NYSHI).



Restoration: We currently are managing 8 restoration sites at 7 PCAs (El Dorado Preserve, Black Pond WMA, Selkirk Fen Preserve, Lakeview WMA, Three Mile Bay WMA, Upper & Lower Lakes WMA, and Deer Creek WMA). Restoration starts once invasive species management opens up patches which can then be filled by planting of native plant species. Native plant selection is determined by surveys and the New York Natural Heritage's guide for Ecological Communities. Our goal is to increase native species richness of treatment area to at least 50% of surrounding region in 3yrs. and to reduce target invasive species by 95% within 5yrs.



# **Debunking Myths About Spotted Lanternfly**

Brian Eshenaur – Cornell University Integrated Pest Management Program

If you visited an area of the northeast that has an infestation of the invasive spotted lanternfly (SLF) you could imagine that the shear abundance of these large insects might sparked some concerns and misconceptions. As this invasive species continues to expand its range, it's crucial to separate fact from fiction. Here, we debunk some common myths surrounding the spotted lanternfly and shed light on the truth behind this formidable pest.

### Myth 1: There's nothing an individual can do to help protect this region from SLF.

**Truth:** Right now, reporting any sighting is key! Observations should be sent to ReportSLF.com where they are reviewed by the NYS Division of Agriculture and Markets and if the insect is reported in an area not known to have spotted lanternfly inspectors will follow-up, and appropriate actions will be taken. Familiarize yourself with **SLF** appearance throughout the year so you can submit a report if you see one.

### Myth 2: SLF pose a threat to people and pets.

**Truth:** Fortunately, spotted lanternflies do not bite or sting, and they can only survive indoors for about 48 hours. Dogs and cats have been known to eat the occasional spotted lanternfly but although the partially chewed insects may be a physical irritant that could cause an upset stomach, there is no known toxin that has been shown to harm mammals.

### Myth 3: Spotted lanternflies cannot survive in the colder climates of Upstate NY.

**Truth:** Unfortunately, this insect overwinters in egg masses that can easily survive subzero temperatures so, our low winter temperatures won't kill them. However, they do require a rather long growing season to reach maturity and then lay their eggs, so we do not expect them to be able to complete their life cycle in regions with higher elevations in the North Country or Adirondacks. Lower areas particularly where temperatures are moderated near water bodies, such as Lake Ontario, or the St. Lawrence River, may be suitable for the spotted lanternfly to develop and reproduce.

### Myth 4: SLF cause significant harm to all our landscape and woodland trees.

Truth: Most trees are unaffected by spotted lanternfly feeding and they cannot feed on any conifer (pine, spruce, or fir). Among the broadleaf trees, spotted lanternflies have their favorites, which include maple, willow, and tree of heaven (TOH) (Ailanthus altissima); of these, TOH, which itself is an invasive species, is the only tree suffering from significant feeding damage. Research is still underway to determine if there will be a loss in sap/syrup production from sugar maples infested with spotted lanternflies. Looking at non-tree species, grapevines can be killed by spotted lanternfly feeding so vineyard managers are watching closely and will treat infestations needed to protect their grapevines.

### Myth 5: SLF can spread great distances on their own.

Truth: They are clumsy fliers and through a series of climbing trees and launching off, they can travel only a few miles. Most of the spread in the eastern U.S. seems to be due to the insects or their egg masses moving on our vehicles or train cars. So, if you travel to an area affected by spotted lanternfly please be sure to inspect your vehicle or cargo to prevent this hitchhiker from sharing a ride.



# Partner Spotlight: Invasive Species Management at Lakeview

Tim Pyszczynski– NYS DEC

The current restoration project on Lakeview WMA began in 2021 when funding was secured through the Great Lakes Restoration Initiative (GLRI) and US Environmental Protection Agency through the National Oceanic and Atmospheric Administration (NOAA)/Great Lakes Commission (GLC) Regional Partnership to create more open water habitat in an area of Lakeview WMA dominated by cattail. The New York State Department of Environmental Conservation (DEC) partnered with the National Oceanic and Atmospheric Administration (NOAA), Great Lakes Commission (GLC), National Audubon Society's Great Lakes and New York programs, and Ducks Unlimited (DU) to develop and implement a design resulting in 5,000 linear feet of eight-foot channels, seven acres of open water habitat, and the restoration of 180-acres of coastal wetlands.

The restoration provides connectivity to spawning grounds for northern pike and other fish, as well as breeding habitat for nesting black terns and migrating marsh birds and waterfowl. Measures were taken throughout the project to minimize the spread of invasive species including treating stands of phragmites in the immediate project area. Additionally, the open water and new water depths will be more resilient to the spread of the invasive narrow-leaf cattail that is generally less productive for most fish, mammal, and bird species and dominates a lot of the emergent habitat found on the WMA.

In March 2024, the channels and potholes were completed. The group is now in the final monitoring state of the project that will include post-bird and fish surveys, and a final phragmites treatment.



Lakeview WMA ©Brian Gottfried - DU Mitigation Biologist . \*Before and after photos show a portion of the project area. The orientation of the photo is north and there were more potholes and channels created south of what we see here.

Although the project priority was habit restoration, one of the channels extends near an existing parking lot that will provide public access to this portion of the WMA that did not exist before.

DEC also continues the fight against water chestnut that showed up at Lakeview around 2012. With a combination of hand pulling and spraying the infestation has been maintained but does not appear to be getting better or worse. Every summer since 2013 DEC staff, volunteers, and Student Conservation Association (SCA) stewards remove what we can when weather and schedules permit. After last year's season, we have now removed an estimated 20,115 pounds of water chestnut in 25,976 man - hours since 2013. We will again organize one or two large-scale removal efforts this summer and if you are interested in participating, please contact the NYS DEC office in Watertown, NY.

# **Volunteer Opportunity Highlight**

SLELO PRISM is seeking volunteers to assist with an emerald ash borer biocontrol monitoring program occurring on Wednesdays at 10 AM from June 5th through September 25th at the SUNY Oswego University Rice Creek Field Station. A virtual training will be provided in May and guidance will be given during each monitoring survey.

The purpose of this project is to determine if three parasitoid wasps (Oobius agrili, Spathius galinae, and Tetrastichus planipennisi) have become established at the site. These wasps have been deployed as part of an effort to naturally suppress populations of the invasive emerald ash borer.

Volunteers will assist with the deployment and weekly monitoring of yellow pan traps at the site. They will learn how to identify the target biocontrol agents and assist with collecting and examining the specimens found in the traps.



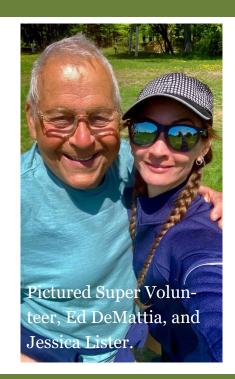
Guidance will be given during each monitoring survey by the SLELO PRISM Terrestrial Restoration and Resilience Coordinator, Robert Smith. Specimens collected from the traps will be examined through microscopes at the Rice Creek Field Station and sent to a lab for confir-mation. Get details, and sign up to assist this project on our **website**!

# **Volunteer Spotlight**

Ed DeMattia is a longtime volunteer with SLELO PRISM, and our host organization The Nature Conservancy. He has supported many volunteer efforts ranging from assisting outreach initiatives, participating in work days to build trail walkways or remove invasive plants, to being in front of a camera during the development of our volunteer video.

Ed not only has been an asset in supporting our program, but he has become a friend and advocate for our missions. He encourages others to get involved and shares his knowledge and experience with others. He's encouraged Jessica Lister, pictured next to Ed, to join the efforts as well. Plus he is a lot of fun to be around!

Thank you for all your hard work Ed, we appreciate you!



# **EVENTS & ANNOUNCEMENTS**



- April 27th, 9 AM <u>Tree Planting</u> in Watertown at Ives Street High School Campus.
- April is Earth Month! Join tree plantings, clean-ups, events, and more! <u>Get details</u>.
- June 3-9th <u>New York Invasive Species Awareness Week</u> (<u>NYISAW in SLELO</u>)



5/17/24 @ 1 PM-2 PM EST, Via Zoom

Birds as Habitat Health Indicators

Continuing Education Credits Available

Presented by:

Neil Gifford, Conservation Director Albany Pine Bush Preserve Commission



### **Get Details**

- NYS IPM First Fridays Webinar Series
- <u>Volunteer Opportunities</u> Join guided hikes, paddles, removal efforts and more!
- View PRISM-Network upcoming events: <u>ADK</u>

PRISM; Capital Region; Catskill; Finger Lakes;

Long Island; Lower Hudson; SLELO; WNY

### << Funding Opportunities >>

•US Fish and Wildlife Service: <u>Invasive Species Eradication Funding</u> & <u>Rapid Response Funding</u>



**View Recordings** 



**Learn More** 



April 1 - July 31, 2024

Co-Founder Doug Tallamy







# From Our Director

Thank you, Strategic Planning Ranger Teams!



During the past few months, numerous partners have participated in planning sessions to refine the future of our program including setting priorities for the coming years. Ranger Teams were formed to focus on specific aspects of our strategic approach and each Ranger Team was led by a PRISM staff member.

The SLELO partnership has three levels of participation: Principal Partners (those organizations with the greatest vested long-term interest in our mission), At-Large Partners (representatives from each of the five counties within the PRISM), and Cooperating Affiliates (any organization that takes an active interest and a desire to collaborate on SLELO endeavors). Currently, we have 23 partner organizations participating.

This year's Ranger Teams were energized, focused, and members contributed their individual expertise to the future of our land and water protection initiatives. So, on behalf of Team SLELO, we would like to express our gratitude to the following individuals for contributing your time and expertise to our most recent Strategic Plan revisions.

### Rangers:

Jason Wagner, Fort Drum - Sue Gwise, CCE
Crystal Wixon, Fort Drum - Gabriel Yerdon, THC
Sarra Learned, OCSWCD - Daniel Bellinger, STR

Anna Hardiman, IRLC - Emily Fell, DEC, WRI Zack Simek, TNC - Jennifer Dean, NYNHP

Spenser Busler, TILT -Tim Pyszczynski, DEC

- Stacy Furgal, Sea Grant

### Ranger Team Leads:

Robert Smith, SLELO Megan Pistolese-Shaw, SLELO Brittney Rogers, SLELO

~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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The Nature Conservancy



SLELO PRISM Host Organization



Department of Environmental Conservation



