

SLELO PRISM

St. Lawrence Eastern Lake Ontario Partnership for Regional Invasive Species Management

Teaming Up to Stop the Spread of Invasive Species



Strategic Accomplishments in 2014

By: Rob Williams, PRISM Leader and Shelby Alavekios, Education and Outreach Coordinator

In any given year, the success of the St. Lawrence Eastern Lake Ontario Partnership for Regional Invasive Species Management (SLELO PRISM) is driven by the ability of its partners to work collaboratively. Our cooperative capacity has made the SLELO PRISM the model of success for PRISMs throughout New York State. The 2014 accomplishments of the SLELO PRISM are a result of shared partner efforts and the ongoing acknowledgement that our partners make the difference.

Strategic accomplishments of the PRISM in 2014 include the protection of freshwater resources with hands-on citizen science based control efforts, pathway mitiga-



Eastern Lake Ontario in winter.



Great Lakes alvar.

tion, and environmental DNA sampling. This included harvesting 85.5 cubic yards of water chestnut and treating an additional 215 acres on the Oswego River. This year SLELO has also encouraged the development of biological controls for water chestnut and pale swallow-wort.

Together, partners completed early detection surveillance on ten priority conservation areas throughout the region. An early detection at Limerick Cedars Preserve resulted in a rapid response to swallow-wort at that site. This early detection, rapid response initiative allowed PRISM partners to act quickly to reduce the impacts of swallow-wort at the preserve.

Further pale swallow-wort suppression was funded on Point Peninsula and Perch River through our “special projects” initia-

tive. In conjunction with swallow-wort suppression, aquatic invasive species drop-boxes and signage were developed and coincided with the removal of water chestnut in the region. Additionally, combined efforts of partners have led to the reduction of giant hogweed on 61 treated sites and the complete eradication of hogweed from 14 sites.

As a whole the SLELO PRISM is highly vested in restoring lands disturbed by invasive species. Consequently, in 2014 the SLELO PRISM suppressed 86% of Japanese knotweed infestations along the Salmon River and its estuary and jump-started restoration by planting native riparian grasses. In addition, the PRISM continued to restore 50 acres of globally rare alvar communities along Eastern Lake Ontario by suppressing pale swallow-wort and promoting native succession.

To increase awareness of invasive species and their associated impacts, the PRISM was involved in education and outreach activities that reached approximately 550 individuals. Our feature event was the first ever Eastern Lake Ontario Invasive Species Symposium which is now the PRISM’s largest education and outreach event to date.

The SLELO PRISM cannot emphasize enough the importance of our partners to these accomplishments. A list of partners can be found on the last page of the newsletter or at www.sleloinvasives.org.

Phragmites

By: Paul Hetzler, Cornell Cooperative Extension of St. Lawrence County

Move over cattails, there's a new top dog in town: Phragmites (frag MY tease) australis. Not a dog, really, but an invasive plant that becomes "top dog" in wetlands when introduced. It's taller and more aggressive than cat-



Phragmites infestation. Citation: Leslie J. Mehrhoff, University of Connecticut.

tails and other native plants, and edges them out of wetlands ecosystems.

Its official genus, Phragmites, doesn't exactly roll off one's tongue, so people use the nickname "phragmites" for short (we all know italicized words are harder to pronounce).

Unfortunate name or not, it's good to know about this perennial reed that can reach up to eighteen feet tall. Even in lake-effect snow areas of upstate New York its tan, plume-like tassels can be seen all winter long waving above the snow. Phragmites is easy to spot along margins of wetlands throughout the Northeast, especially in areas with recent site disturbance.

The problems with phragmites are numerous. It forms expansive, dense monocultures which have little or no food value to wildlife. Its habitat value is limited as well. While a handful of bird species like the least bittern nest within it, water-

fowl and mammals such as muskrat cannot. Even deer have a tough time getting through tracts of phragmites.

Native plants are shaded out by its height and crowded out by the density of its stems and root system. Phragmites reduces access to waterways for birdwatching, boating, fishing and swimming, and blocks scenic views. In addition, its dry stalks can become a fire hazard in late winter and early spring.

Most likely of European origin, Phragmites australis arrived at the east coast of North America in the early 1800s. The development of highways, rail lines and utility corridors in the 20th century hastened its rate of spread. A native species of Phragmites is found along the eastern seaboard of the US, but it's relatively rare.

Phragmites advances by means of fast-growing horizontal roots, or rhizomes, as well as through above-ground horizontal stems called stolons. Its rhizomes can grow outward thirty feet in a year, and have been known to sprout through asphalt. Impressive as these abilities are, humans disperse it miles at a clip by moving soil and contaminated equipment. It only takes a fragment of a rhizome to start a new phragmites infestation. Seed dispersal by animals or wind can also play a role in its spread. In some cases phragmites has been intentionally planted for its value in adding texture and motion to the winter landscape.

Control strategies are situation-dependent. Where water levels can be managed, flooding infested areas for several months can destroy phragmites roots. Conversely, in places dry enough to mow, regular mowing for several years will eventually bring it to heel. Very often, though, neither strategy is available, and herbicide treatment is required.

The least-objectionable chemical for wetlands use is glyphosate, the active ingredient in herbicides like Roundup. Glyphosate is applied to phragmites by licensed applicators in late summer, and the chemical finds its way to the root system. Most often, a follow-up treatment is necessary the next summer. Mowing at two-three weeks post-treatment is considered helpful.

(Continued on Page 4)

A New Member on Our Team

Based on the recommendation of the SLELO PRISM's extremely busy Education & Outreach Committee and after completing a lengthy interviewing and hiring process, the SLELO PRISM would like to welcome our new Education and Outreach Coordinator Shelby Alavekios to our team. Having lived and worked in the Eastern Lake Ontario and Northern New York regions, Shelby is committed to preserving and restoring New York's natural ecosystems. She holds a degree with honors from the State University of New York's College of Environmental Science and Forestry, where she studied wildlife and conservation science. Prior to graduation, Shelby studied the genetics of Prairie Warblers and served as a conservation technician in the Albany Pine Bush Preserve. She also received SUNY ESF's Maple Leaf award for service and excellence for her work as a student leader, mentor, and ambassador striving to involve new students in their community through community service. Shelby worked with the PRISM seasonally in 2013 and has experience in educating both youth and adults on invasive species issues along with experience in coordinating citizen science and other outdoor events. After her work with the PRISM she accepted a position at Fort Drum as a Natural Resource Technician where she studied native and nonnative vegetation. Shelby is ecstatic to work with the PRISM partners once again, welcome back Shelby!



Partner Spotlight

Cornell Cooperative Extension

By: Sue Gwise, Horticulture Educator, Cornell Cooperative Extension of Jefferson County



Cornell University Cooperative Extension

When asked what Cooperative Extension does people generally don't have any idea. They see Cooperative Extension as a helpful entity, but they find it hard to describe what we actually do. Part of that ambiguity is because every Cooperative Extension office is different depending on the needs of the community they serve.

First a little history: nationwide, Cooperative Extensions grew out of the land grant university system. The Morrill Acts of 1862 and 1890 granted federally controlled lands to each state to sell. The funds raised were used to establish and endow 'land-grant universities' in each state. In Massachusetts the funds were used to found University of Massachusetts, in Iowa it was Iowa State and in New York it was Cornell University. The cooperative extension system was developed as an outreach from the land grant universities to help people use research-based knowledge to improve their lives.

In New York State every county-based Cornell Cooperative Extension office is unique. In Nassau County for example, Cooperative Extension programs are related to urban issues. The Cooperative Extension offices in the SLELO region have a greater focus on agriculture.

Cornell Cooperative Extension of Jefferson County educates youth, families, farmers and communities using research-based knowledge for practical application and lifelong learning. Our programs include:

- Agriculture and Natural Resources- Dairy, livestock, farm business, field crops, agriculture outreach, horticulture and the Master Gardener Volunteer Program.
- Energy and recycling education.
- Nutrition and Health- Community food and nutrition education, maternal and infant nutrition, and local foods.
- Fort Drum programs include Army Community Service, Army Emergency Relief, Army Volunteer Corps, financial readiness; and mobilization, deployment and relocation education.

(Continued on Page 4)

FORT DRUM REVS UP CONTROL

By: Travis Ganter—Soil Conservationist, Fort Drum, New York

Fort Drum Natural Resources personnel have been actively monitoring, and cataloging invasive species using new Army guidelines for the past few years. Some small efforts have been initiated in the past to control some plant species using hand pulling and biological control, but persistent efforts were lacking.

In the past two years a more intense effort using new standardized data procedures has lead to increased knowledge and understanding of impacts to the environment of Fort Drum. As a result of our venture we have increased control projects and attempts at potentially eradicating some species.

In 2013 we treated 26 sites containing invasive species. Despite a formal survey effort to find and catalogue invasive plants in 2014 we were still able to discover 95 more sites and were able to increase our treatment efforts to 135 sites. Most sites treated were small in size but some larger efforts for control have also been undertaken.

This includes an approximately 30 acre understory removal and treatment in an area heavily infested with Oriental bittersweet. The infestation of the woody vine is accompanied by invasive honeysuckles and buckthorn. Mechanical treatment is currently in progress while follow up chemical treatments will be applied next year. Chemical treatments are planned for Japanese knotweed, common reed, swallow-wort and Oriental bittersweet next season using various application methods.



Oriental bittersweet infestation chokes out native pine species on Fort Drum.



Restored forest post bittersweet removal.

COORDINATOR'S COLUMN

Strategizing Collaboratively Leads to Success

As in past years, 2014 has been another successful year in our mission to protect native habitats, biodiversity, natural areas and to promote community preparedness. Many of our accomplishments are achieved not by default, but through commitment and robust collaboration within our partnership. So true is this commitment that this year we obtained a 6% increase in volunteer participation with our citizen science events.

In addition to our citizen science events and given that we received a new five year service contract with New York State this past summer, we felt that this would be an appropriate time to conduct an interim review of the strategies (tasks) outlined within our PRISM's Strategic Plan. In doing so, many of our partners volunteered to be on review teams, again demonstrating interest, commitment and

collaboration. Although still in process, many sound ideas have come forth and best of all, these new ideas continue to link directly to the objectives and overall goals of our Strategic Plan—*talk about being on the same page!*



Better yet, by going through this process, we have been able to evaluate our progress during the first 3.4 years (formal years) of our PRISM. Check this out! In our original Strategic Plan our partners identified 72 total strategies to help us meet our objectives and goals. Of the original 72 strategies we have (together) completed 53 strategies. Six were incorporated into other similar strategies providing a total

implementation of 59 strategies. Translated this equals an 81% success rate of our Strategic Plan.

Now the big question: do we measure our success based on numbers and percentages or do we measure our success based on reaching the definition of our mission? The best answer lies within the objectives and overall goals that we identified within our Strategic Plan. That said, we must remember that during our initial strategic planning session, it was absolute priority that all of our strategies link directly to our objectives, all of our objectives link directly to our goals and all of our seven goals be directly linked to our PRISM's mission. The numbers tell a great story, but its how we as a partnership set up our strategic plan and since everything is directly linked, its safe to say “were on a roll”.

Rob Williams

PRISM Coordinator

SLELO PRISM Partners

- ◆ Cornell Cooperative Extension County Offices
- ◆ The Nature Conservancy
- ◆ NYS Department of Environmental Conservation
- ◆ NYS Office of Parks, Recreation & Historic Preservation
- ◆ NYS Department of Transportation
- ◆ NY Sea Grant
- ◆ Ducks Unlimited
- ◆ County Soil & Water Conservation Districts
- ◆ Fort Drum Military Installation
- ◆ Tug Hill Tomorrow Land Trust
- ◆ Tug Hill Commission
- ◆ Save The River
- ◆ Audubon - Central NY Chapter
- ◆ Thousand Islands Land Trust

C/O The Nature
Conservancy, CWNY

Acknowledgements:
NYS Invasive Species Council
NYS Environmental Protection
Fund

Phragmites continued from page 2

A permit from the NYS Department of Environmental Conservation and/or from the U.S. Army Corps of Engineers may be required for herbicide treatment in wetlands areas.

General control measures include limiting (or eliminating) lawn chemicals and restoring natural water flow through wetlands. It's imperative to clean heavy equipment between moves. Skidders, excavators, bulldozers and other equipment can spread phragmites and other invasive plant species. For more information, visit www.nyis.info, www.greatlakesphragmites.net or www.sleloinvasives.org.

Partner Spotlight continued from page 3

Youth and Family Development- 4-H clubs, 4-H Camp Wabas-so, afterschool programs, STEM education, parenting programs and support for military youth.

Cornell Cooperative Extension of Jefferson County became involved with invasive species issues in 2001 when swallow-wort became a problem in the county. Since then we have helped to establish the county weed management area which evolved into the SLELO PRISM of today. Master Gardener Volunteers receive training in the identification and control of invasive species. Cornell Cooperative Extension of Jefferson County has an ongoing commitment to support the SLELO PRISM through educational outreach on all forms of invasive species.