SLELO PRISM

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

Teaming Up to Stop the Spread of Invasive Species

Invasive Species – A Contemporary Perspective"

By: Rob Williams, SLELO PRISM Coordinator

The evidence is compelling that invasive species have and continue to pose a real threat to the environment, our economy, human health, and the livelihoods of community members. These impacts are a global threat and New York State is considered to be at a higher risk for the invasion and spread of invasive species. These circumstances should make invasive species prevention and management a top priority for New York State and beyond.

Invasive species have the ability to alter food webs, diminish vital habitat and reduce the abundance and biodiversity of native species. On a national level, invasive species cost the U.S. economy $100 billion each year [1]. Globally, the combined cost of environmental damages and control efforts for invasive species equate to 5% of the world's economy each year[2]. Reports abound in the news and on the internet about children being permanently scarred by the noxious sap of giant hogweed.

Giant hogweed burns. Photo credit: http://www.goodhousekeeping.com/health/news/a33

The New York State Department of Health reports that West Nile Virus, an invasive pathogen, has sickened 490 and caused the death of 37 people in New York State since 2000[3]. The European starling, an invasive bird, damages agricultural crops and spreads infectious diseases that sicken humans and livestock, costing the U.S. millions for health treatment and agricultural damages[4].

As part of a 21st Century Global Invasion Risk Report, 17% of global land surface is highly threatened by new invasive species[5]. The report names New York State as "ground zero" for the import of harmful invasive species into North America due to its many ports of entry, placing the Empire State at a very high risk for the introduction of new invasives. This risk, combined with NY State's freshwater connectivity, via its canal systems, to the Great Lakes and Finger Lakes, and the attraction of our world-class fisheries, creates an extreme opportunity to spread harmful invasive species throughout North America.

A continental hub for the import and export of invasive species, New York has rightfully become a focal point for invasive species management efforts, which are key to protecting its residents' way of life. Numerous individuals, families and water-based businesses derive sustenance from Lake Ontario's fisheries, a fact brought home in SLELO PRISM's soon-to-be-released Cultural Impacts Survey. The lake-based way of life found along Eastern Lake Ontario occurs throughout the Great Lakes, with charter captains and river guides supporting their families on the bounty provided by the lakes and their tributaries. Restaurants depend on locally caught perch, trout and bullhead. New York's Atlantic coastal fishery and shellfishery provide the same way of life to its coastal residents.

Invasive species not only dramatically impact our environment and economy, they have a direct effect on people who depend on healthy lands and waters for their wellbeing and livelihood. Therefore, protecting these vital ecosystems from invasive species continues to be paramount and must continue as a local, regional and global priority.

European Starling, Lee Karney, US Fish and Wildlife Service, Bugwood.org

[1] Pimentel et al. 2005. Update on the Environmental & Economic Costs Associated with Alien-Invasive Species in the U.S.. http://www.sciencedirect.com/science/article/pii/S0921800904003027?via%3Dihub.

[2] The Nature Conservancy. 2017. *No Habitat is Immune From the Threat of Invasive species.* https://www.nature.org/ourinitiatives/urgentissues/land-conservation/forests/invasives-101.xml.

[3] NYS Department of Health. 2017: https://www.health.ny.gov/diseases/west_nile_virus/

[4] Linuz et al. 2007. European Starlings: A Review of an Invasive species with Far-Reaching Impacts. https://www.aphis.usda.gov/wildlife_damage/nwrc/publications/07pubs/linz076.pdf

[5] Early et al. 2016. Global Threats From Invasive Alien Species in the Twenty-First Century & National Response Capacities. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4996970/

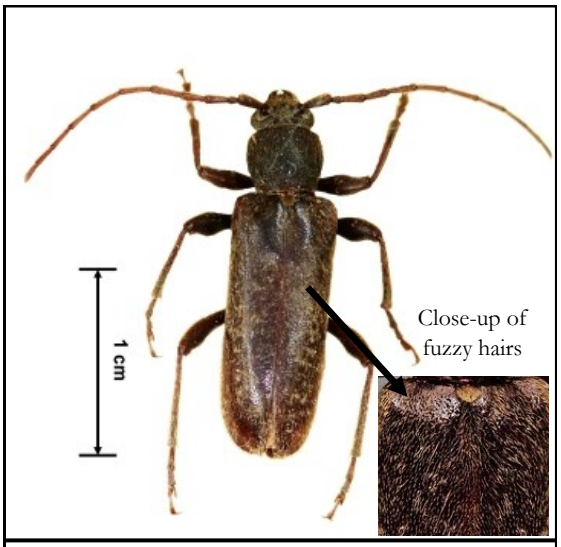
Species Spotlight: Velvet Longhorned Beetle (*Trichoferus campestris)*

By: Paul Hetzler, CCE St. Lawrence County

Some invasive insects appear to be trying to win us over through sly public-relations moves. Emerald ash borer (EAB), the Asian beetle killing our ash trees, arrived looking like it just came from a Mary Kay convention, all bright, glitzy and glitter -coated. And it could have been simply called the green ash borer, but instead managed to get itself branded "emerald," something everyone likes.

A new forest pest on the horizon seems to have taken a page from EAB. *Trichoferus campestris*, better known as the velvet longhorned beetle (VLB), has cleverly brought the cuddliness of the Velveteen Rabbit and the romantic image of Texas Longhorns together in its name. Don't be fooled by this brilliant strategy, however. Let's pull back the curtain and expose the velvet longhorned beetle for what it really is.

Native to eastern Russia, most of China, Korea, and parts of Japan, VLB is smaller and less glossy than its cousin the Asian longhorned beetle. Its antennae, or "horns," are also much shorter. Ranging from 11mm to 20mm (about 7/16" to 3/4"), it is brown, with patches of fuzzy hairs on its wing covers, pictured below.



Adult *T.campestris*, photo credit: Christopher Pierce, USDA APHIS PPQ, Bugwood.org. Close up of fuzzy hairs on *T.campestris*, photo credit: Steven Valley, Oregon Department of Agriculture, Bugwood.org.

The main issue with velvet longhorned beetle is that it infests and kills several tree species, including pine, spruce, willow and birch, although its favorite is apple. It has an unusually long life cycle, in some cases taking more than two years to mature. But it really stands apart from other boring insects (in other words, is less boring than they) because it is able to infest almost any kind of dry wood. Not just dead, but powder-dry wood.

Photo credit: Minnesota Department of Agriculture, www.mda.state.mn.us.

In fact, it has emerged from imported rustic furniture a full 18 months after it had been purchased, which is one of the ways it has found its way around North America.

Since 1999, VLB has been found in at least ten U.S. states as well as one Canadian province, though most of those detections are not believed to be from established populations. Inspections conducted by the Division of Plant Industry through the Agriculture and Markets Administration resulted in the discovery of a single VLB adult in Westchester County, NY in 2014; the following year, five VLB adults were found in black-light traps near the initial detection but no active infestation was discovered. The largest North American infestation may be the area around Salt Lake City, Utah, with another in the twin cities of Minneapolis-St. Paul, MN. Fortunately, VLB does not seem to have spread as quickly as Asian longhorned beetle nor has it been as devastating.

However, much is still unknown about VLB and its potential to damage regional ecosystems. There is some discrepancy between studies in terms of VLB's host preferences and other aspects of its biology. One of the challenges in studying it is that no one has yet come up with a reliable pheromone lure. Trapping is done by pulsing specific light wavelengths over the course of a night, a labor-intensive process that yields erratic results.

One take-home message is that we should be careful about what we take home. Any imported rustic-style furniture where the bark is still intact could harbor velvet longhorned beetle larvae, and as mentioned, it can be a year or more before one would notice anything. Another theme is that we should be wary of slick marketing.

Help keep an eye out for the velvet longhorned beetle, and report suspected findings to your nearest NYS Department of Environmental Conservation, Cornell Cooperative Extension office or PRISM leader. For more information on VLB, visit sleloinvasives.org.

Citizen Science Reference Guide Available

Fish, crustaceans and other aquatic organisms constantly shed DNA-rich material such as scales, mucus and feces. This is known as Environmental DNA or eDNA. DNA from these materials can be extracted from water samples in such a way as to detect as little as one single cell from a particular species. This process can be used to identify harmful aquatic species before they become well established. Working with eDNA is relatively straightforward, and through a grant from the US Fish and Wildlife Service, the SLELO PRISM has been using eDNA analysis for two years. A final deliverable of this project is the production of a Citizen Science Reference Guide to promote the use of eDNA among local and statewide stakeholders. The guide is now available for download from the SLELO PRISM website at www.sleloinvasives.org under the "Resources" tab on the main menu bar.

Casey Harkleroad collecting water samples for eDNA project.
Photo Credit: Zach Bengtsson, SLELO PRISM.

SLELO Partners Promote Cultural Impact Survey

The St. Lawrence Eastern Lake Ontario Partnership for Re-gional Invasive Species Management is currently wrapping up a survey that will help us to better understand the impacts that invasive species may have on people's well-being and liveli-hoods. Much is known about the environmental and economic impacts of invasive species; however, less is known about how invasive species affect people's daily way of life. Through this survey, we intend to gain a better understanding of the person-al impact of invasive species, with a local/regional emphasis. Valuable information continues to be garnered from charter captains, trail guides, nature guides, river boat guides, hunting guides, restaurateurs and other outdoor enthusiasts that de-pend on high-quality freshwater and terrestrial resources to thrive.

Photo Credit: Mat Levine, TNC.

Early Detection Produces Results

Earlier this summer our Invasive Species Early Detection Team collected, documented and recorded Rusty Crayfish (*Orconectes rusticus*) from within the St. Lawrence and Eastern Lake Ontario Region. The sample was collected from the east end of Oneida Lake near the mouth of Fish Creek, and subsequently confirmed by the New York State Department of Environmental Conservation. Likely introduced through improper live bait disposal, this species of crayfish can be highly dominant and aggressive towards other native species of crayfish and bottom dwelling organisms. Management of this species is difficult once it is introduced, making spread prevention a key long-term approach. Our Education & Outreach Committee is evaluating ways for our partners to better promote a "Don't Dump Bait" initiative on local wa-terways.

Rusty crayfish (*Orconectes rusticus*)
Photo credit: Alicia Wood, SLELO PRISM

SLELO 2017 Field Season Updates

SLELO PRISM Water Chestnut Control Efforts

Eurasian water chestnut, or EWC, (*Trapa* natans) is an aquatic invasive species that is commonly found in SLELO PRISM and other waterbodies throughout New York state. Despite its vast distribution, EWC can be suppressed manually by hand-pulling and water chestnut pulls serve as a volunteer activity—as folks seem to like to get out on the water and remove it.

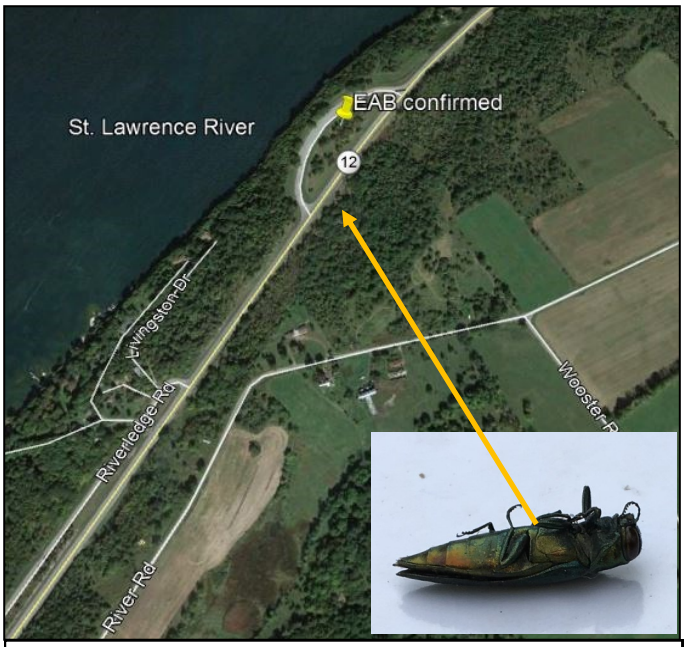
The SLELO partnership works hard every summer to control Eurasian water chestnut at priority conservation areas located at Lake View Wildlife Management Area, Port Ontario, Grindstone Marsh, Oswego, Oneida & Salmon Rivers, Rice & Sage Creek, Guffin Bay, Toad Harbor and Oneida Lake. This season, partners, volunteers and the Oswego Soil & Water Conservation District's Water– Chestnut Assault Team (Water-CATS) have removed over 24 thousand pounds of Eurasian water chestnut! Water chestnut pulls such as these helps to suppress well estab-lished populations of this invasive aquatic plant, that if left unat-tended, would otherwise take over entire waterbodies.

SLELO partners and volunteers at the Guffin Bay water chestnut pull. Photo credit: Liz Truskowski, DEC.

Adopt-A-Trap Project Reveals Unwanted Pest

As you may know, the emerald ash borer (EAB) has been established in many areas in the southern and western parts of New York State, resulting in a quarantine zone to limit the movement of firewood. EAB has also been established across the St. Lawrence River in the Province of Ontario. Everyone has been saying that it is only a matter of time before EAB crosses the river into northern New York – well, that time has come. Earlier this season, partners initiated an "Adopt-A-Trap" project with volunteers throughout the SLELO region. As a result of this project, EAB has recently been confirmed in one of our traps at a rest area on NYS Route 12 in St. Lawrence County in Hammond, NY(44°31'22.1"N 75°44'27.5"W). The specimen, that was later confirmed to be EAB by the NYSDEC lab in Delmar, was collected by the St. Lawrence County Task Force members John Payton & Shawn Reed with National Grid.

The SLELO early detection team will be helping the NYS DEC survey the observation area to determine the extent of EAB in St. Lawrence County. It is likely this detection will effectively modify the quarantine zone for much of the state. Thanks to all SLELO partners and volunteers, especially National Grid and the Department of Environmental Conservation, who helped make the early detection of this invasive forest pest possible!



EAB specimen was found in a project trap off Route 12 in St. Lawrence county GPS: 44.52280, -75.74091. Photo credit: John Payton, Shawn Reed, National Grid, Adopt-a-Trap Project Volunteers.

SLELO 2017 Treatment Updates

Terrestrial Invasive Plant Treatments

The 2017 Rapid Response Team, Mike Parks and Ed Miller, have been hard at work treating target invasive species on priority conservation areas throughout the SLELO PRISM region. Treatment locations and details are listed in the table below.

Photo right: SLELO Rapid Response Team, Mike Parks (left), Ed Miller (right). Photo credit: Rob Williams, SLELO Coordinator.

Treatment Location	Target Species	Total Treated
Jefferson and Lewis Counties	Giant hogweed	48 sites. 19 eradicated
Limerick Cedars	Pale swallow wort	.63 acres
Mudbay	Pale swallow wort	.36acres
Isthumas Boat Launch	Pale swallow wort	13 acres
Three Mile Bay	Pale swallow wort	.53 acres
Tryon Road	Pale swallow wort	.15 acres
Carlton Island	Pale swallow wort	36.35 acres
Ontario Bay Initiative	Pale swallow wort	13.15 acres
Chaumont Barrens	Pale swallow wort	48.5 acres

Treatment Location	Target Species	Total Treated
Selkirk Fen	*Phragmites*	.23 acres
Limerick Cedars	Pale swallow wort	.63 acres
Three Mile Creek	Pale swallow wort	.57 acres
Black River Trail	Pale swallow wort	1.64 acres
Little John	*Phragmites*	.49 acres
Deer Creek	Pale swallow wort	3.1 acres
Eldorado	Pale swallow wort, *Phragmites*, Japanese knotweed	4.4 acres

Tis the Season for Hemlock Woolly Adelgid

Fall and winter are ideal seasons to search for hemlock woolly adelgid (HWA), an invasive forest pest native to Asia. This sap-sucking insect threatens our precious hemlock trees. Located in the heart of SLELO PRISM is the beloved Tug Hill region, otherwise known as the Lesser Wilderness due to its vast unfragmented forests, in which hemlock trees are abundant. Early detection efforts of this pest are more vital than ever, as hemlock woolly adelgid is established in counties neighboring our PRISM boundaries, namely Schenectady and Otsego, and has been discovered in Lake George this past July. So bundle up and take a walk and keep your eyes peeled for these indicators:

· Hemlocks that display loss of or graying of needles
· Small black dots at needle bases from July– October.
· White woolly cotton-like filaments at the base of hemlock needles from Mid-October-June (more prominent in March when HWA lays its eggs).

Report observations at www.imapinvasives.org . For more information, contact megan.pistolese@tnc.org

Dormant HWA nymphs look like small black dots at needle base (July– Oct.).

HWA secrete white woolly masses at needle base (Oct.-June).

Left photo, HWA aestivating stage, photo credit: Ashley Lamb. Right photo, white masses of HWA, photo credit, Bruce Watt, both compliments of Bugwood.org.

Good News & Emerald Ash Borers

By: Paul Hetzler

It feels awkward to type the phrase "good news" in the same sentence as "emerald ash borer" (EAB). But there is a first time for everything.

Mike Jones, a PhD candidate at the SUNY College of Environmental Science and Forestry who works with Associate Professor Dr. Melissa Fierke, has found a bright spot in EAB biocontrol. Mike Jones was kind enough to present some of his research during Invasive Species Awareness Week at an event in Massena, NY this July. Briefly, the good news goes like this: One of the parasitic wasps imported from northern Asia is performing much better than expected in Jones's field trials in upstate NY. Since 2003, US researchers have been working with the Chinese Academy of Forestry to identify agents which help keep EAB under control in China. In 2007, several were approved for release in the US. Of the three studied by Jones, one in particular seemed well-matched in terms of phenology (when it emerges) and cold tolerance.

The perceived hero in this story is *Tetrastichus planipennisi*, a parasitoid wasp which lays eggs inside EAB larvae. As a result, up to 125 *T. planipennisi* larvae can develop inside a single EAB larvae, killing it. From 2013 through 2016, Jones studied the movement of these wasps along the Genesee Valley Greenway, an EAB-infested corridor with a high concentration of ash trees. After making several releases of *T. planipennisi,* he found that the wasps were keeping up with the southward spread of EAB.

(Tetrastichus planipennisi,) biocontrol agent for emerald ash borer. Photo Credit: D. Cappaert, Northern Research Station, Forest Service, www.nrs.fs.fed.us

More significantly, they actually jumped ahead of the EAB infestation by 2016, like they were preparing to ambush their prey.

Although Jones admits that *T. planipennisi* will not stem the tide of EAB any time soon, he feels confident about this biocontrol agent's ability to aid the survival of the ash tree species.

Upcoming Events

We encourage our partners to highlight their upcoming invasive species related events in each newsletter. Please contact Megan Pistolese to submit an event at 315-387-3600 ex.7724; megan.pistolese@tnc.org.

- **DEC Emerald Ash Borer Workshop for Forest Landowners:** Wednesday, November 1st from 5:45pm-8pm at the Cornell Cooperative Extension Learning Farm. Located at 2043 B State Highway 68, Canton, NY. **For more information contact Steve Sherwood, DEC forester at 315-274-3335 or email** information.R6@dec.ny.gov.

- **Adirondack Mountain Club Black River Chapter Annual Dinner :**Saturday, November 4th at 6pm located at the Tug Hill Vineyards 4051 Yancey Rd, Lowville, NY 13367. **Josh Payette, Park Manager for the Eastern Lake Ontario State Parks Complex, will be giving a presentation about drones as a new conservation tool**. To make a reservation please mail a check and reservation form to: Cindy Stewart 9922 Nohle Road Adams, NY 13605. **For more details visit:** https://www.facebook.com/pg/Black-River-Chapter-of-the-Adirondack-Mountain-Club-721031064592014/posts/

- **Forest Pests Workshop:** Saturday, November 11th starting at 10am at the Cornell Cooperative Extension of Madison County. Located at 100 Eaton Street, Morrisville, NY. **For more information and to register visit:** www.madisoncountycce.org/events

- **2017 Agriculture, Food & Environmental Systems In-Service Conference:** November 13th-15th at the ILR Conference Center in King-Shaw Hall at Cornell University. **For more information contact Sarah Degen Muzio at** sed52@cornell.edu. **To register visit:** http://cce.cornell.edu/page/inservice

Preventing the Spread of Aquatic Invasive Species One Boat at a Time!

By: Rob Williams, SLELO PRISM Coordinator

This year marks the second year of an effort to prevent the spread of harmful aquatic invasive species (AIS) by the partners of the SLELO PRISM.

Photo—clockwise from top left: Julia Stephens, Jacqueline Novak and Miranda Nelson. Not pictured: Katlyn Linerode.

Boat launch stewards, trained in aquatic invasive species identification & management, were placed at strategic high use boat launches along Eastern Lake Ontario for the summer to inspect watercrafts and conduct voluntary surveys. Stewards spent twelve weeks looking for and removing aquatic invasive species and educating boaters on how to prevent the spread of invasives between Lake Ontario and other waterbodies. In addition, boat launch stewards collected data about the vessels entering and exiting the lake along with their destinations. This helps to determine the potential spread of invasive species throughout the Eastern United States.

This year, SLELO Stewards inspected 626 watercrafts which was down about 40 percent from last year. This was likely due to historically high water levels and subsequent boat launch closures and boat speed restrictions. Of the 626-watercrafts inspected, 89 percent were motorboats followed by personal watercrafts, sailboats, kayaks and canoes.

Spread prevention literature was provided to 90 percent of all participants. People visiting Lake Ontario came from numerous areas to include: Florida, Texas and Alaska.

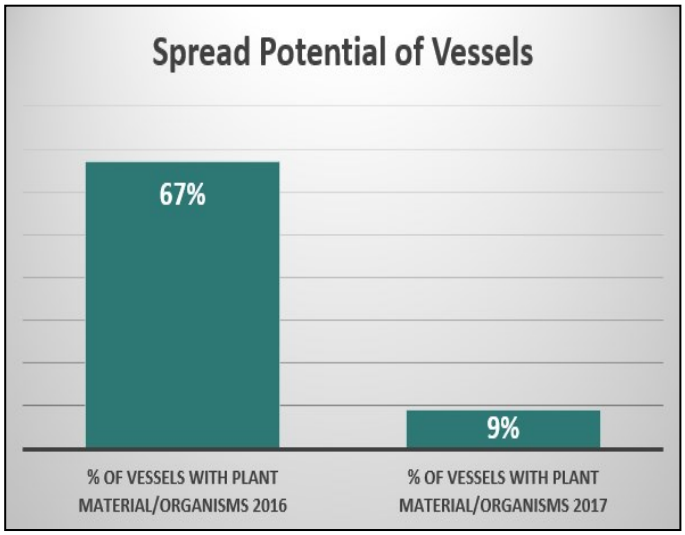
SLELO partners believe that having aquatic invasive species specialists strategically located at various boat launches is a great way to reduce the spread of aquatic invasive species and given the connectivity of New York's waterways, watercraft stewardship and inspections are a very high priority.

2017 Statistics

- 626 boaters engaged (2 year total = 1,657).
- 14% from out of state/country.
- Aquatic organisms found on 9% of boats in 2017 compared to 67% in 2016. Likely due to lake water levels.
- 89.6% of all participants received AIS "Clean-Drain-Dry" literature.
- Top 3 travel routes identified: Route 3, 81, and route 12-E.

Areas recently boated: Canada, Florida Keys, Alabama, Louisiana, Finger Lakes, Adirondack Lakes, Pennsylvania, New Jersey, Connecticut**, Texas, Hudson River, Ohio River, Alaska.**

In 2017 only 9% of all watercraft (launching or retrieving) had visible plant materials/organisms on them compared to 67% in 2016. This was likely due to higher lake water levels keeping propellers and keels above weed beds combined with an overall reduction in boat activity.



The 2017 decrease in visible plant material/organisms was likely due to higher lake water levels keeping propellers and keels above weed beds.

Partner Spotlight
Oswego County Soil & Water Conservation District

By: Joe Chairvolotti, Oswego County Soil & Water Conservation District

The Oswego County Soil and Water Conservation District (OCSWCD), one of the SLELO PRISM's At-Large partners, conducts control programs for three invasive species throughout Oswego County, including water chestnut (*Trapa natans)*, giant hogweed (*Heracleum mantegazzianum)* and glossy buckthorn (*Frangula alnus*). Invasive species, both aquatic and terrestrial, can out-compete native vegetation leading to negative ecological, recreational and economic impacts, and in some cases may present a threat to human health and safety. A summary of recent efforts and accomplishments conducted by the OCSWCD follows .

Water Chestnut Control:

In Oswego county, water chestnut is most abundant in the Oswego River, but there are also populations in the Oneida River and tributaries of Lake Ontario within the county boundaries. At one time, approximately 220 acres of water chestnut existed on the Oswego River alone. Chemical applications have been the primary means of control and success is evident after years of treatments. In fact, of the original acreage in the river, only 40 acres were dense enough to receive chemical treatment this year. Through a bid process, the District arranged for the chemical control of these areas along with an additional 60 acres in a tributary to the main river. The remaining acreage in the Oswego River consists of small, scattered populations of water chestnuts, which are not dense enough to consider chemical application.

Above: The OCSWCD Team. Left to right: Cindy Williams, Joe Chairvolotti, Erica Schreiner.

In 2016, the District launched a hand-pulling effort to address remnant populations in the Oswego River and small infestations in other waterbodies throughout the county. The District continued this effort in 2017 and hired five college interns for a ten-week period to physically remove water chestnut, called the Water Chestnut Assault Team (Water-CATs). The crew participated in the control of EWC populations in the Oswego River, Oneida Lake, Oneida River and several Lake Ontario Tributaries including Rice Creek, Little Salmon River, Sage Creek, Grindstone Creek and the Salmon River. As the plants were collected, they were bagged and composted at the Bristol Hill Landfill. This year's program was quite a success and a similar combination of control methods will be utilized in 2018..

Giant Hogweed Control:

Giant hogweed is considered a noxious weed in New York State and not only has an ecological impact, but also is a threat to human health. Oswego County has approximately 60 known sites that giant hogweed is present which are primarily located in the western portions of the county. Oswego County's control program is part of a continuing state-wide effort through a partnership with the New York State Department of Environmental Conservation (NYS DEC) and PRISMs. Initial control treatments were conducted on 40 sites between May and early June with some follow up applications in July. Foliar application was utilized prior to the plants developing seeds heads.

20 of the 60 sites OCSWCD monitors have been free of giant hogweed for 1-2 years, and were monitored again this year for presence of new growth; in some cases, plants were found at these locations and were treated rapidly. In addition, one new site was reported for the presence of giant hogweed this season. In this case, more than 50 giant hogweed plants were found and promptly treated at a residence with children. This situation is an example of how important it is to monitor and provide educational outreach for this highly noxious invasive plant. Control measures were successful at the sites that were treated this season, but due to the ability of giant hogweed seeds to retain their fertility for many years monitoring efforts will continue.

Glossy Buckthorn Control:

Glossy buckthorn is an invasive shrub which out-competes native vegetation and negatively impacts wildlife habitat and forest sustainability. As such, the District worked collaboratively with the NYS DEC to control this aggressive shrub on approximately 38 acres in the Sandy Creek State Forest. This property received a commercial harvest recently, in which both trees for lumber and pulp/firewood were cut with the intent of establishing regeneration. This goal was impeded by a dense influx of glossy buckthorn that was out-competing native and desirable vegetation. In order to control the dense growth of buckthorn, a certified applicator was selected through a bid process for herbicide treatment at this site. The appointed contractor used a combination of basal bark treatment and foliar spraying to apply the herbicides. The intention of this effort, including the harvest and chemical treatment, is to establish tree seedlings and other native vegetation to support continued sustainable forest management.

Funding for Control Efforts:

Successful control programs are not possible without securing the appropriate funding. Special thanks goes out to the SLELO PRISM, the Finger Lakes-Lake Ontario Watershed Protection Alliance and NYS Senator Patty Ritchie for providing the funding for water chestnut control in Oswego County and to the United States Forest Service for their support of giant hogweed and glossy buckthorn treatments.

COORDINATOR'S COLUMN

Two Overdue Thank Yous

I often marvel at the SLELO PRISM partnership, and continue to credit our partners with sharing their collective expertise, being strongly committed to invasive species management, and with the humble collaboration exhibited time and again. As always, I cannot speak highly enough about our partners.

Long overdue are two special acknowledgements I feel compelled to call out. The first is the New York State Department of Environmental Conservation (NYSDEC). Working with NYSDEC representatives at the regional and state levels has helped us achieve huge successes in our region. Not only for on-the-ground invasive species management, but for the guidance we as a PRISM receive from the State Invasive Species Coordination Unit. As the level of invasive species issues rise in importance, and as professional guidance becomes imperative, so does the collaboration and exchange of information that we receive from the folks working at NYSDEC at all levels. Thank you, New York State Department of Environmental Conservation!

Second is our PRISM's host organization, The Nature Conservancy CWNY. Many people don't realize how much support that administering a PRISM requires. Our host organization provides administrative, financial, legal, due diligence, and grant-writing support, and we could not do this without them! Wow. A huge thank-you to The Nature Conservancy CWNY!

So, let's fold things together. Start with a group of partners that form a robust coalition, add technical support from NYSDEC, and top it off with a host organization that provides the cartilage that binds us, and what do you get? Great outcomes—for which we cannot thank you all enough.

~Rob Williams

SLELO PRISM Partners

- NYS Department of Environmental Conservation
- The Nature Conservancy
- Cornell Cooperative Extension Offices
- NYS Office of Parks, Recreation & Historic Preservation
- NYS Department of Transportation
- NY Sea Grant
- Ducks Unlimited
- 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
- NY Power Authority
- CNY Regional Planning & Development Board
- US Coast Guard Auxiliary

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St. Lawrence - Eastern Lake Ontario SLELO PRISM Partnership For Regional Invasive Species Management

The Nature Conservancy
Protecting nature. Preserving life.

Our host organization
The Nature Conservancy, CWNY