



Department of
Environmental
Conservation

Strategic Recommendations for New York Invasive Species Education & Outreach: 2016-2021

Executive Summary



WHAT IS THE INVASIVE SPECIES EDUCATION AND OUTREACH STRATEGIC PLAN?

The Invasive Species Education and Outreach Strategic Plan was developed to guide statewide efforts undertaken by the Invasive Species Council, Advisory Committee, Partnerships for Regional Invasive Species Management (PRISMs), and their partner organizations over the next five years.

A 2015 Cornell University survey indicated that about 76% of New York’s residents are aware of the term “invasive species,” and about one third of New York residents “know something about” invasive species. Current and future generations and stewards of New York State’s natural resources need to understand the threat posed by invasive species and be actively engaged in preventing their spread.

WHAT IS THE GOAL OF THE PLAN?

The overarching goal of the five-year plan is to expand New York residents’ awareness of invasive species issues and willingness to adopt simple behaviors that prevent their spread. This goal encompasses six objectives and numerous strategic actions to be accomplished by the various components of New York’s comprehensive Invasive Species Program.

This goal aligns with the fourth recommendation from the Invasive Species Task Force’s 2005 report, which states that “New York should develop a comprehensive outreach and education program for invasive species. It should do so by coordinating existing effort but also exploiting opportunities to incorporate invasive species messages into the full variety of educational opportunities.”

HOW WILL WE MEET THE GOAL?

Based on an assessment of previous efforts, stakeholder input, and feedback from the PRISM coordinators, six objectives and associated strategic actions were identified to help New York in meeting the goal of educating New Yorkers about invasive species issues and motivating them to take action to prevent the spread.

OBJECTIVE #1: Develop messages for target user groups identified in stakeholder survey and Cornell three-phase study

Based on findings from the Cornell University three-phase attitudes and awareness study (Lauber et. al, 2015) as well as feedback from stakeholders, several target user groups have been identified as priorities for 2016-2021.

These groups include:

- ◆ Water gardeners
- ◆ Aquarium owners
- ◆ Agricultural community
- ◆ Municipalities (including highway and utility personnel)
- ◆ Elected officials
- ◆ Urban communities

Each of the aforementioned groups is unique not only in their membership but also in the ways that their activities may influence the spread of invasive species. Therefore, messages will need to be researched and tailored to fit the needs and communication styles of each group.



Water hyacinth is a popular plant for ornamental water gardens that causes ecological issues when introduced to natural environments. Photo: Ted D. Center, USDA-ARS.



Although spotted lanternfly has not yet been found in NY, it is of special concern to natural resource managers due to its negative impacts on fruit trees in neighboring PA. Photo: Pennsylvania Dept. of Agriculture.

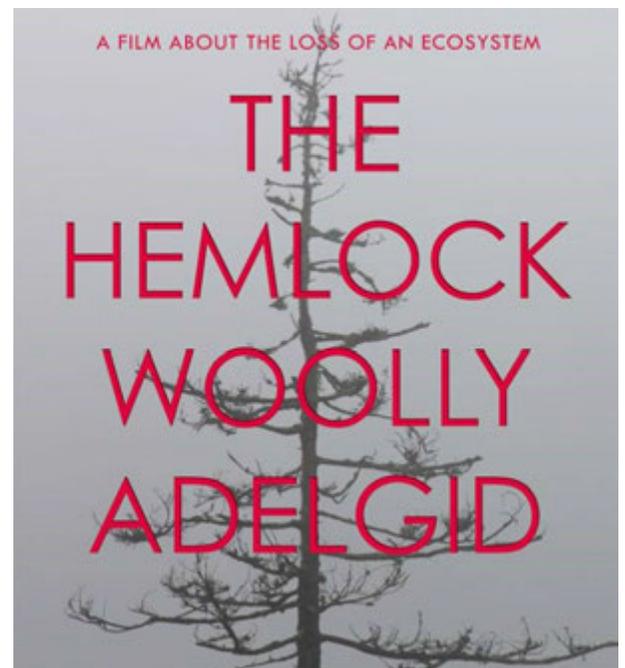
OBJECTIVE #2: Develop and provide consistent education and outreach products for statewide use

Once the messages have been developed and tailored to meet the target user groups, the next step is to determine the most effective means by which to deliver those messages. Some information is best conveyed through a print product, such as a brochure, fact sheet, infographic, or even a direct mailing. In other cases, social media, a podcast, documentary, or radio advertisement may be more appropriate.

Based on the 2015 study by Cornell University, we know that New Yorkers rely on the internet and television as their primary sources of obtaining new information. This fact illustrates the importance of revamping the Invasive Species Clearinghouse website with a mobile-friendly user interface, language accessibility for non-English speakers, and a re-organization of content that makes the site easier to navigate.



The New York Invasive Species Clearinghouse is a one stop shop for invasive species information. User feedback will be solicited and utilized to improve accessibility and make revisions to the current website (www.nyis.info). Watch for the user survey to become available in late spring 2017.



A documentary about hemlock woolly adelgid (HWA) by filmmaker Chris Foito helped to leverage support for HWA monitoring and biocontrol efforts in New York State. Documentaries can be powerful tools for sharing information and motivating the public to become involved with an issue.

OBJECTIVE #3: Develop & provide invasive species curriculum units aligned to New York's science learning standards

New P12 science learning standards for New York State will go into effect in summer 2017. A group of science education professors, teachers, biologists and curriculum development professionals are working together to develop a comprehensive invasive species curriculum that will build upon existing resources and programs, including the iMap Invasives online database and mapping tool and an environmental DNA early detection program developed by Cornell University. Professional development workshops and webinars will be available for educators who would like to utilize this new curriculum.



OBJECTIVE #4: Promote the integration of invasive species topics into college/university courses and research priorities

A need has been identified to establish a network of professors interested in including invasive species topics in their courses and research priorities. Engaging undergraduate and graduate students in invasive species research helps natural resource managers to address questions pertaining to best management practices, reproductive strategies, biological control, etc. The New York Invasive Species Program has existing opportunities for showcasing student research through the monthly PRISM webinars as well as the annual conference in Ithaca.

OBJECTIVE #5: Support the incorporation of invasive species concepts into citizen science and other informal education programs

Citizen scientists report thousands of invasive species observations to the state's online database and mapping tool, iMap Invasives, each year. A portion of these observations are for early detection species, or invasive plants, animals, and pathogens that are only found in a handful of locations in New York. Natural resource managers depend on these reports to mobilize a rapid response effort to eradicate, control, or contain an infestation. Incorporating invasive species information into citizen science program trainings creates more eyes on the ground looking for and reporting species.



Top left: The native common milkweed plant is required the endangered monarch butterfly to complete its life cycle, by Rob Routledge, Sault College.

Bottom left: Japanese barberry invades a forest's edge, by Leslie J Mehrhoff, University of Connecticut.

Top right: Mile-a-minute weed is an early detection species for the state. Catching an infestation early is key, because this plant can grow up to six inches per day. Photo by Leslie J Mehrhoff, University of Connecticut.

OBJECTIVE #6: Increase resources dedicated to the planning, implementation & evaluation of the annual Invasive Species Awareness Week campaign

New York hosts its Invasive Species Awareness Week each summer to engage residents in invasive species-related activities and events that not only enhance their knowledge of the issue, but also provide participants with the resources to combat the spread of invasive species in the places that they live, work, and recreate. During the 2016 campaign, partner organizations hosted 120 events across the state. In order to ensure that future campaigns are successful, data from feedback surveys must be collected, interpreted, and utilized to make improvements for subsequent years. Encouraging participation from agencies, academic institutions, not for profits, and other partners in each of New York's 62 counties will bolster statewide awareness levels and galvanize support for invasive species management projects.



Left: The Adirondack Park Invasive Plant Program (APIPP) hosted a training during ISAW 2016 to teach highway personnel how to identify invasive plants and prevent their spread during construction projects.

Right: Capital Mohawk PRISM leader Laurel Gailor (left) accepted the award for “most water chestnut observations reported” in her PRISM region during ISAW 2016. Meg Wilkinson (right) helped to coordinate the first year of the Water Chestnut Chasers program.



WHO WILL IMPLEMENT THE PLAN?

Successful implementation of the strategic plan can only be achieved through broad participation by the various components of the New York State Invasive Species Program and their myriad partners:

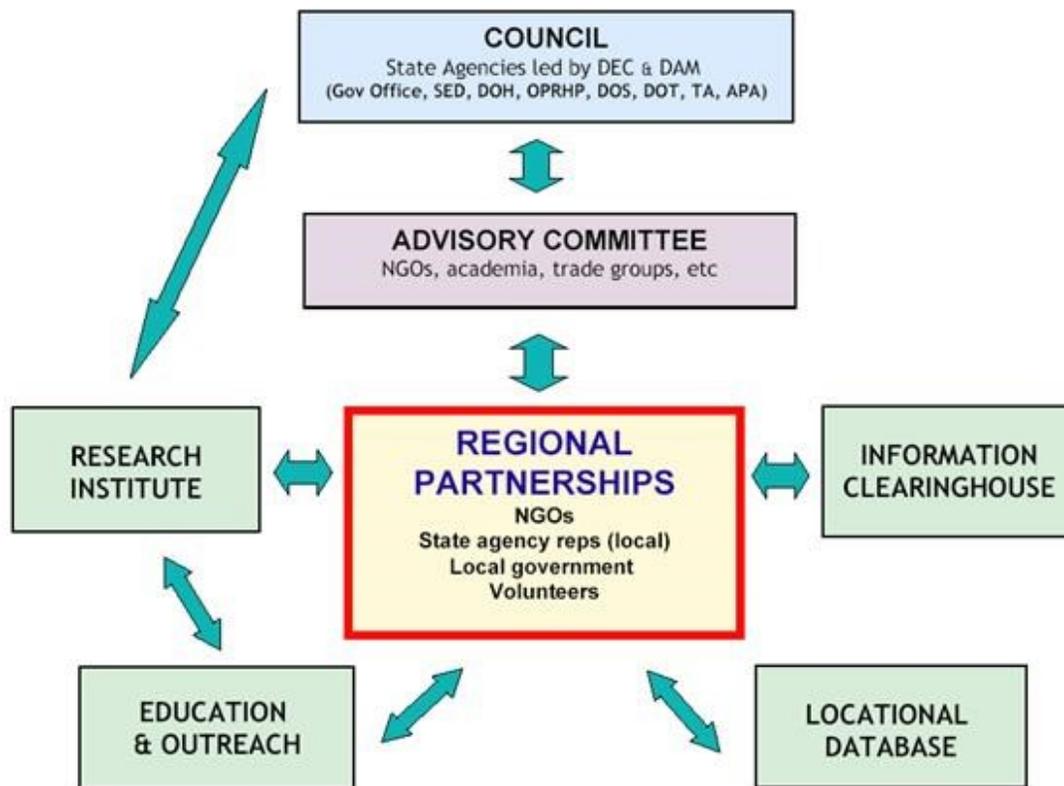


Photo: PRISM Coordinators, NY Invasive Species Research Institute, iMap Invasives, and DEC Invasive Species Coordination Unit staff meet at the Albany Pine Bush in April 2016.

HOW WILL WE GAUGE AND EVALUATE OUR PROGRESS?

DEC's Invasive Species Education & Outreach Coordinator (E&O Coordinator) will maintain records of strategic actions items undertaken and will provide annual updates to the Council, Advisory Committee, and PRISM coordinators. Halfway through the five-year period, the E&O Coordinator will confer with stakeholders and determine whether objectives and/or strategic actions need to be modified in light of new developments in research, policy, or program initiatives.

A follow-up study to the 2015 Cornell University three-phase effort will be undertaken in 2020. The purpose of the study will be to gauge whether education and outreach efforts between 2016 and 2020 have had a positive effect on public awareness and behavior change. To ensure that meaningful conclusions can be drawn from the follow-up survey, researchers should employ survey methods and design questions that are comparable to those used in the original survey.

HOW CAN I BE INVOLVED?

Each and every citizen of New York has an important role to play in minimizing the impacts of invasive species on our way of life. The best way to become involved at the local level is to engage with the local Partnership for Regional Invasive Species Management (PRISM). The state's eight PRISMs work to coordinate invasive species management functions including recruiting and training citizen volunteers, establishing early detection and monitoring networks, implementing on the ground control and eradication projects, delivering public education and outreach, and coordinating annual work plans with their diverse partner organizations. Contact information for each PRISM coordinator can be found in the Resources section of this report.

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Another way to join the conversation is to participate in events hosted during the state's annual Invasive Species Awareness Week campaign. In previous years events have included invasive species removal projects, documentary film screenings, workshops, public presentations, guided hikes or paddling events, and many others! Visit <http://www.dec.ny.gov/animals/105650.html> for updates and information about hosting or attending an event in your area.



Top left: APIPP utilized their new drone to take a group photograph at their October 2016 partner meeting in Ray Brook, NY.

Top right: The Finger Lakes PRISM worked with volunteers from Cornell's Humphrey Fellowship Program to pull water chestnut at Howland Island Wildlife Management Area in summer 2016. Photo by Hilary Mosher.

Bottom: WNY PRISM volunteers teamed up with the Western New York Land Conservancy to harvest honeysuckle at the Kenneglenn Nature Preserve during ISAW 2016. Photo by Andrea Locke.

RESOURCES

PARTNERSHIPS FOR REGIONAL INVASIVE SPECIES MANAGEMENT



Division of
Lands and
Forests

New York State PRISMs

Invasive species means a species that is nonnative to the ecosystem under consideration, and whose introduction causes or is likely to cause harm to the environment, the economy, or the health of humans.

What are PRISMs?

Partnerships for Regional Invasive Species Management (PRISMs), comprising diverse stakeholder groups, were created to address threats posed by invasive species across New York State. PRISMs are key to New York's integrated approach to invasive species management. Partners include federal and state agencies, resource managers, non-governmental organizations, industry, recreationists, and interested citizens. The New York State Department of Environmental Conservation provides financial support, via the Environmental Protection Fund, to the host organizations that coordinate each of the eight PRISMs, resulting in statewide coverage.

What Do PRISMs Do?

- Plan regional invasive species management activities
- Implement invasive species prevention programs
- Conduct surveillance and mapping of invasive species infestations
- Detect new infestations early and respond rapidly
- Implement control projects
- Implement habitat restoration and monitoring
- Educate stakeholders on invasive species and their impacts
- Coordinate PRISM partners
- Recruit and train volunteers
- Support research through citizen science in collaboration with the Invasive Species Research Institute <http://www.nyisri.org/>
- Report observations to iMapInvasives <http://www.nyimainvasives.org/>
- Act as regional communication hubs



If you are interested in helping NY “stop the invasion,” PRISMs are a great way to get involved by volunteering for monitoring, outreach, or management projects. All are welcome to participate in statewide PRISM monthly conference calls to receive updates, hear excellent presentations and learn about upcoming events. Contact a PRISM leader for more information, or visit WWW.NYIS.INFO

STOP THE INVASION – PROTECT NEW YORK FROM INVASIVE SPECIES

Regional PRISM Contacts			
PRISM	Host	Contact	Listserve & Websites
APIPP Adirondack Park Invasive Plant Program	The Nature Conservancy	Brendan Quirion 518-576-2082 bquirion@tnc.org	<ul style="list-style-type: none"> • cce-apipp-l-request@cornell.edu • http://adkinvasives.com/
Capital Mohawk	Cornell Cooperative Extension of Saratoga County	Laurel Gailor 518-885-8995 lrg6@cornell.edu	<ul style="list-style-type: none"> • cce-capitalprism-l-request@cornell.edu • http://www.capitalmohawkprism.org/
CRISP Catskill Regional Invasive Species Partnership	Catskill Center for Conservation and Development	John Thompson 845-586-2611 jthompson@catskillcenter.org	<ul style="list-style-type: none"> • cce-crisp-l-request@cornell.edu • http://catskillcenter.org/crisp/
Finger Lakes	Hobart and William Smith Colleges	Hilary Mosher 315-781-4385 mosher@hws.edu	<ul style="list-style-type: none"> • cce-flprism-l-request@cornell.edu • http://fingerlakesinvasives.org/
LIISMA Long Island Invasive Species Management Area	Long Island Native Plant Initiative	Joanne Klein 631-560-9945 liismaprism@gmail.com	<ul style="list-style-type: none"> • cce-liisma-l-request@cornell.edu • http://www.liisma.org/
Lower Hudson	New York - New Jersey Trail Conference	Linda Rohleder 201-512-9348 lrohleder@nynjtc.org	<ul style="list-style-type: none"> • cce-hudsonprism-l-request@cornell.edu • http://lhprism.org/
SLELO Saint Lawrence and Eastern Lake Ontario	The Nature Conservancy	Rob Williams 315-387-3600 rwilliams@tnc.org	<ul style="list-style-type: none"> • cce-slelo-l-request@cornell.edu • http://www.sleloinvasives.org/
Western New York	Buffalo State	Andrea Locke 716-878-4708 lockeas@buffalostate.edu	<ul style="list-style-type: none"> • cce-westernprism-l-request@cornell.edu • http://www.wnyprism.org/

How Do I Join a PRISM?

For more information on PRISM meetings and activities and how you can become involved, visit the website of the PRISM in which you are interested, or contact the coordinator listed above for the PRISM.

To improve communication within and among PRISMs, e-mail listserves, managed by the Cornell Cooperative Extension Invasive Species Program, have been established for each of the eight PRISMs. To subscribe to a PRISM listserve, e-mail the appropriate listserve address in the table above. In the subject line, type the single word “join” (without the quotes). Leave the body of the message blank; do not include a signature block or any other text in the body of the e-mail.

CONTACT INFORMATION

Invasive Species Coordination Unit

Division of Lands and Forests

New York State Department of Environmental Conservation

625 Broadway, Floor 5, Albany, New York 12233-4250
P: 518-402-9405 | F: 518-402-9028 | isinfo@dec.ny.gov
www.dec.ny.gov

New York State PRISM Region Boundaries

