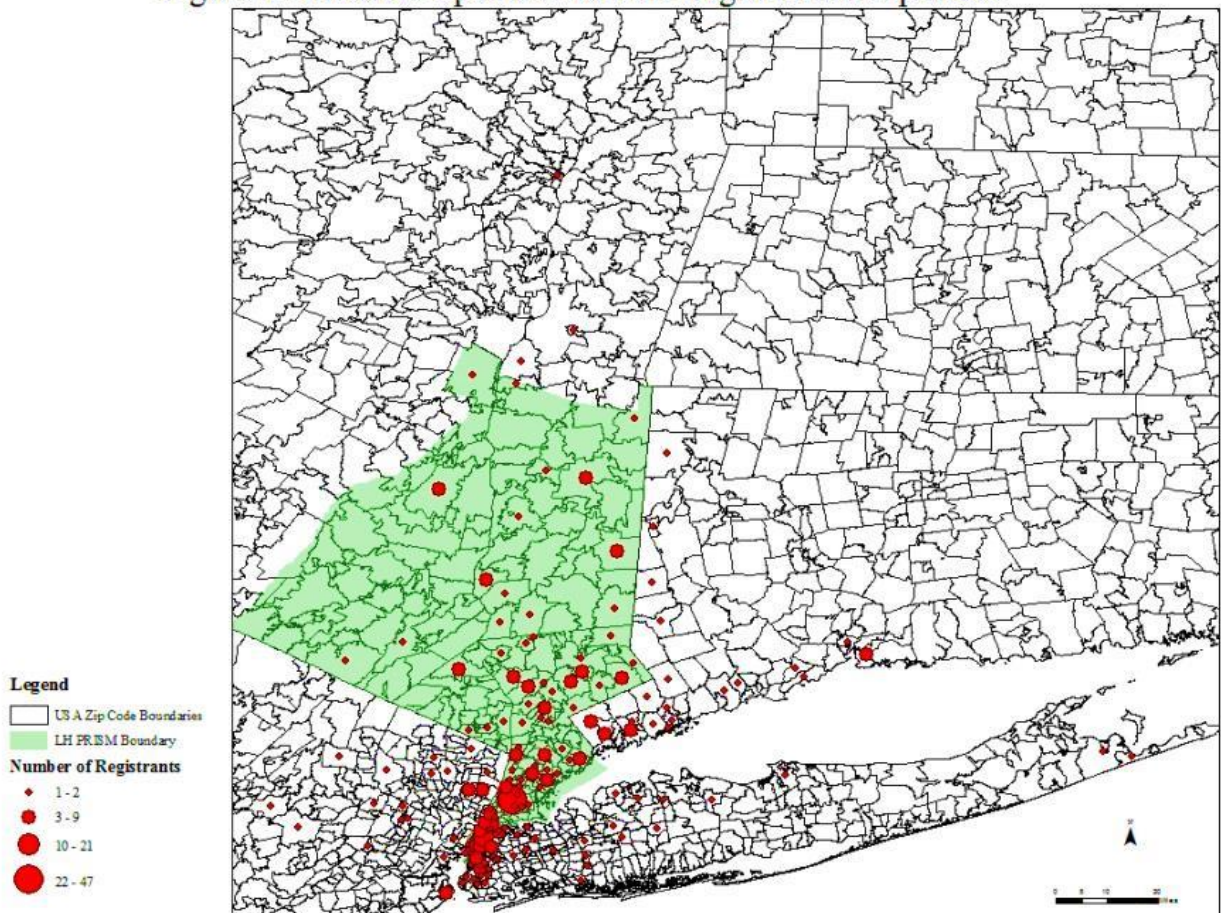


THE NEW YORK BOTANICAL GARDEN  
*Invasive Species Summit: Challenges, Strategies, and Perspectives*  
Final Report—December 2015

In April, 2015, the New York–New Jersey Trail Conference awarded The New York Botanical Garden (NYBG) funds to support the 2015 Lower Hudson PRISM Invasive Species Symposium. This report covers NYBG’s completion of the project. On November 6, 2015, NYBG hosted the *Invasive Species Summit: Challenges, Strategies, and Perspectives* to meet the goals of the 2015 Lower Hudson PRISM Action Plan, Objective 6.2 and Action 6.2.3, and three of the strategic goals of the Lower Hudson PRISM: Capacity Building, Education and Outreach, and Information Exchange. This program was extremely successful with over 400 registrants, exceeding the PRISM goal of 150 participants. The content of the program showcased the ongoing work within the Lower Hudson PRISM, highlighted the bigger picture of the issues of invasive species management, demonstrated how the work of the Lower Hudson PRISM fits into the overall landscape, and addressed conservation issues surrounding invasive species at large.

Education and Outreach was a main goal of the *Invasive Species Summit*. Of the registrants that identified themselves through the registration process, there were 26 PRISM partners, 119 NYBG Members, 172 NYBG Non Members, and 15 NYBG Volunteers. The largest number of registrants was neither part of the regular NYBG audience nor PRISM audience, proving success that the Lower Hudson PRISM achieved a Capacity Building goal of reaching new audiences through this program. The audience was largely composed of land managers, concerned citizens, garden club members, and students from the Lower Hudson PRISM region and surrounding New Jersey, Long Island, and Connecticut. (See Figure 1).

Figure 1. Invasive Species Summit Registration Zipcodes.



This report covers NYBG's progress in planning and implementing the Symposium over the last eight months, against the deliverables outlined in the contract for this time period.

### Deliverable 1. Organize

- a) Establish event date and venues (Deadline: February 2015; completed on April 15, 2015).

*The Symposium date was established as November 6, 2015, and the title of the event was confirmed as "Invasive Species Summit: Challenges, Strategies, and Perspectives." The morning session took place in the Arthur and Janet Ross Lecture Hall at NYBG. Afternoon concurrent sessions took place at NYBG in classroom spaces appropriate for the number of registered participants.*

- b) Recruit keynote speaker (Deadline: February 2015; completed on February 20, 2015).

*Daniel Simberloff, Ph.D., Professor, University of Tennessee, Department of Ecology and Evolutionary Biology, an expert on invasive species, was confirmed as the keynote speaker.*

- c) Recruit additional invited speakers (Deadline: March 2015; completed on May 4, 2015 and June 1, 2015).

*NYBG recruited two additional invited speakers, Chris Zimmerman, Conservation Ecologist, The Nature Conservancy, and Steven N. Handel, Ph.D., Professor of Ecology and Evolution at Rutgers University, for the Plenary Session.*

- d) Survey Lower Hudson PRISM Partners for subjects of afternoon workshop topics and title of the Symposium (Deadline: late March/early April 2015; completed on March 31, 2015).

*NYBG produced and sent a survey to Lower Hudson PRISM partners on March 31, 2015, through SurveyMonkey, requesting input on subjects for afternoon workshop topics and the title of the Symposium. This feedback was incorporated into the Symposium Program.*

- e) Solicit Lower Hudson PRISM partners for a call for proposals (Deadline: April 2015; completed on April 27, 2015).

*NYBG issued a call for proposals through GoogleDocs on April 27, 2015, requesting Lower Hudson PRISM partners, other PRISM participants, and regional colleagues to submit applications to present their work on four themes determined by Lower Hudson PRISM partners from the first survey for the afternoon sessions. The themes were: Conserving Biodiversity, Strategic Invasive Species Management and Restoration Practice, Current and Emerging Threats, and Education and Outreach. A total of 16 responses were received and all were included in the program for the Afternoon Sessions.*

### Deliverable 2. Market

- a) Include event in the Adult Education Print and Online Catalogue (Deadline: May-July

2015; online completed July 28, 2015, print completed August 1, 2015).

*The Fall and Winter 2015 Adult Education Catalog was printed and included the Invasive Species Summit as one of the offerings. In addition, the Adult Education website included an information page and registration portal. See: <http://www.nybg.org/science/invasive-species-summit.php>.*

b) Create Event Flier (Deadline: Summer 2015; completed July 24, 2015).

*An information card was produced on July 24, 2015 (Appendix 1). Approximately 1,000 cards were distributed at the PRISM partner meeting on September 30, 2015 to solicit participation from partner organization audiences.*

c) Electronic Marketing (Deadline: October/November 2015; completed November 6, 2015).

*From August to November, 2015, the NYBG Adult Education Department sent electronic informational messages including the Summit, ramping up communications in the five weeks before the event (Appendix 2). Lower Hudson PRISM Partners were sent electronic communication and encouraged to forward messages to their audiences and contacts.*

### Deliverable 3. Manage

a) Organize speakers (Deadline: May/June 2015; completed on November 6, 2015).

*NYBG staff discussed the program with all of the speakers; the speakers provided their talk titles, abstracts, bios, and headshots that were included in all marketing materials; and NYBG hosted the speakers at a dinner on November 5, 2015 to prepare for the event on November 6, 2015.*

b) Book invited speakers' travel (Deadline: Summer 2015; Completed November 6, 2015).

*All travel and accommodations were booked and successful at hosting the speakers for the entire event.*

c) Apply for professional continuing education credits (Deadline: June 2015; NYS-DEC completed August 12, 2015; LA-CES completed September 4, 2015; ISA completed October 6, 2015).

*NYBG applied for and received NYS-DEC recertification credits offering 1.5 credits for the morning plenary and 0.5 to 2.00 credits for the afternoon sessions in the following license categories: 2 (Forest Pest Control); 3a (Ornamentals, Shade Trees and Turf); 5a (Aquatic Vegetation Control); 9 (Regulatory Pest Control); and 10 (Demonstration and Research Pest Control).*

*On November 6, 2015, NYBG maintained a roster (provided by DEC) of attendees to each of the five sessions (plenary and four workshops) with name and NY applicator ID number for those seeking credits. And, within five days, NYBG mailed the completed rosters to the DEC.*

*NYBG also applied for and received landscape architecture (LA-CES) credits and International Society of Arboriculture credits (ISA CEUs), offering 2.5 credits for the morning plenary and 2.0 credits for each of the afternoon sessions from both organizations. The breakdown of participants who signed in for professional education credits can be viewed in Table 1.*

	<i>NYS DEC</i>	<i>LA-CES</i>	<i>ISA CEUs</i>
<i>Morning Plenary</i>	20	12	9
<i>Conserving Biodiversity</i>	3	0	0
<i>Current and Emerging Threats</i>	5	1	1
<i>Strategic Invasive Species Management</i>	5	7	11
<i>Education and Outreach</i>	0	0	1

**Table 1. Breakdown of Professional Credits Awarded to Invasive Species Summit Attendees.**

*NYBG recruited volunteers to collect signatures on the day of the event. After the event, NYBG submitted certificates of attendance for all those who attended the full sessions and reported attendance to the three organizations.*

d) Manage event registrations (Deadline: Fall 2015; completed on November 6, 2015).

*NYBG Adult Education staff successfully managed a total of 402 registrations for the entire event. The breakdown for each of the sessions can be found in Table 2.*

	<i>Registrations</i>
<i>Morning Plenary Only</i>	95
<i>Morning Plenary and Conserving Biodiversity</i>	35
<i>Morning Plenary and Current and Emerging Threats</i>	45
<i>Morning Plenary and Strategic Invasive Species Management</i>	203
<i>Morning Plenary and Education and Outreach</i>	24
<b><i>TOTAL</i></b>	<b>402</b>

**Table 2. Breakdown of Registrations Received per Invasive Species Summit Session.**

e) Organize keynote presentations (Deadline: October 29, 2015; completed on November 5, 2015).

*All presentations were received by November 5, 2015 and compiled into one presentation to streamline the presentations given on November 6, 2015. NYBG staff managed all session presentations and designed a theme slide that was used as the first slide and break slide*

*between all presentations (Appendix 3).*

#### Deliverable 4. Execute

- a) Host Event on November 6, 2015 (completed on November 6, 2015).

*The Invasive Species Summit: Challenges, Strategies, and Perspectives was successfully held on November 6, 2015 10 a.m. to 4 p.m. The program details (Appendix 4) are as follows:*

#### Morning Plenary

1. **Linda Rohleder**, Ph.D., Lower Hudson PRISM Coordinator and Director of Land Stewardship at the NY-NJ Trail Conference.

**Synopsis:** *Lower Hudson PRISM Overview.* What is PRISM? What are the key goals of the Lower Hudson PRISM? What are the accomplishments to date? The Lower Hudson Partnership for Regional Invasive Species Management is responsible for the following activities throughout the region: removal and controls invasive species; prioritizing and coordinating invasive species related activities; surveying and mapping invasive species and invasive species prevention zones; informing and teaching a diverse group of stakeholders; and protecting native species and habitats.

2. **Daniel Simberloff**, Ph.D. Professor, University of Tennessee, Department of Ecology and Evolutionary Biology.

**Synopsis:** *Biological invasions: What do they do, what can we do about them, and why are they controversial?* Modern invasion biology began only in the 1980s. Nevertheless, we now know of drastic ecological effects of hundreds of nonnative invaders. They eat native species, overgrow them, outcompete them, infect them, and have myriad other impacts. Impacts affecting entire ecosystems have been increasingly documented as ecological research on aboveground-belowground interactions has proliferated. Evolutionary research has become a prominent part of invasion biology, with many examples of invasive species hybridizing with native ones and changing their gene pools; some such hybrids are particularly invasive. The past few years have seen criticisms of invasion biology and management, including calls to end the entire enterprise. Critics charge that the field is infected with xenophobia, claim that damage caused by invasions is overblown, and argue that we can't do much about the phenomenon anyway in the face of globalization. Dr. Simberloff discussed the various arguments and their impacts on both science and policy regarding invasions.

3. **Chris Zimmerman**, Ecologist, The Nature Conservancy, New York.

**Synopsis:** *Developing effective strategies to mitigate invasive species impacts in eastern New York forests.* Forest pests and pathogens, coupled with an ever increasing abundance of invasive plants and high deer herbivory, threaten the benefits our forests provide to nature and people. The U.S. Forest Service's 2012 National Insect and Disease Risk Assessment predicts that at least 25% of tree basal area will die over

~437,000 acres in the next 15 years (2013 to 2027) in eastern New York due to insects and diseases. The resilience and long-term health of these forests is dependent upon adequate tree regeneration, yet ever expanding invasive plants will impact forest regeneration across this landscape. To address these compounding challenges, invasive plant management must be applied at multiple spatial scales using a range of strategies, including eradication, containment and suppression. Success will likely be dependent on a range of factors, which include key partner and landowner participation, effective control methods, spread prevention, and sustaining resources over the course of the project. The Nature Conservancy in New York has developed the online Invasive Plant Management Decision Analysis Tool to support land managers in a comprehensive and explicit decision making process and to focus resources on invasive species management projects with the greatest feasibility and return on investment. This presentation sought to help land managers, decision makers, and landowners be more effective and strategic with their invasive management actions.

4. **Steven Handel**, Ph.D., Professor, Rutgers University, Department of Ecology and Evolution.

**Synopsis:** *Restoration targets in a changing biotic landscape.* Native habitats in urban and other degraded areas supply “ecological services” to the public, and restoration ecology practice aims for landscapes that enhance these services. Invasive species and climate change are changing the biotic framework for this work. Species composition of New York’s vegetation has changed dramatically over the past century. Consequently, what are appropriate targets for our restoration efforts? His university has tested a series of plantings in large urban areas (parks, landfills) that attempt to restore ecological functions in urban settings. Projects on old urban landfills used woodland patches of various scales to test whether population growth and mutualisms, including seed dispersal and pollination, can occur under current conditions. Habitat work includes collaboration with design professionals, as has been done at the new Brooklyn Bridge Park and Jamaica Bay in New York and the Orange County Great Park in California. Ecological solutions must reflect current and projected conditions, not simply models from an idealized past.

### **Biographical Sketches of Presenters**

**Linda Rohleder** is Director of Land Stewardship and Coordinator of the Lower Hudson PRISM. In 2013, Linda received her Ph.D. in Ecology from Rutgers University, where she studied the effects of deer on forest understories. Linda built the Trail Conference’s Invasives Strike Force volunteer program. By 2014, the program had about 200 trained invasives-mapping volunteers who collectively had surveyed more than 870 miles of trail for invasive plants. She has organized invasives-removal workdays in parks across southern New York and northern New Jersey.

**Daniel Simberloff** is a Professor in the Department of Ecology and Evolutionary Biology at the University of Tennessee. His A.B. and Ph.D. degrees are from Harvard, and his research is mainly on invasion biology and community ecology. He is editor-in-chief of Biological Invasions, senior editor of the Encyclopedia of Biological Invasions (2011), and author of

Invasive Species. What Everyone Needs to Know (2013). He is a member of the U.S. National Academy of Sciences and the American Academy of Arts and Sciences and served on the U.S. National Science Board. His research projects are on insects, plants, fungi, birds, and mammals. He studies the large variety of effects invasive species can have on native populations, communities, and ecosystems, as well as management and policy options for dealing with invasions and with conservation of threatened populations and ecosystems. He has published several hundred papers on these and related subjects.

**Chris Zimmerman** has worked as a Conservation Ecologist with The Nature Conservancy (TNC) for over 12 years. He earned a Bachelor's Degree from Evergreen State College with a focus in forest ecology, and a Master of Science Degree from Wright State University. With TNC, he works on forest health issues, the recovery of endangered species in Eastern New York and the development and implementation of invasive species control strategies in forest and wetland ecosystems. In the Catskill Mountains, he designed and implemented a survey that assessed the distribution of invasive plants over 250,000 acres. He is also the lead author of the Invasive Plant Management Decision Analysis Tool to determine when and when not to implement invasive plant management actions and is the co-author of a recent report evaluating the status of forest regeneration across New York State. He is currently the project lead on a research project aimed at determining the feasibility of common reed (*Phragmites australis*) control and restoration in Hudson River tidal wetlands. He is interested in the intersection of conservation planning, strategy implementation, and measuring success.

**Steven N. Handel** studies the restoration ecology of urban and degraded habitats and how this can mesh with landscape architecture design. His research is on plant population dynamics and sustainable urban landscapes. He serves as Editor of the journal *Ecological Restoration* and is an Aldo Leopold Leadership Fellow of the Ecological Society of America. He received the Theodore Sperry Award in 2011 from the Society for Ecological Restoration, their highest research honor, for his work on urban habitat creation, and is an *Honorary Member* of the American Society of Landscape Architects. He received his B.A. from Columbia College and Ph.D. in ecology from Cornell University, and has also taught at Yale, Harvard, and Stockholm Universities.

### **Afternoon Session A: Conserving Biodiversity**

**Moderator:** Erik Kiviat, Ph.D., who has 45 years of research experience in the Hudson River wetlands and with nonnative weeds such as Phragmites, purple loosestrife, and water-chestnut. He is a co-founder (1981) and executive director of Hudsonia, a nonprofit institute for ecological research and education of professionals in land use and conservation.

**Synopsis:** The Lower Hudson PRISM protects the rich, native biodiversity of the Lower Hudson Valley by focusing on priority targets for conservation. This session consisted of short-talks on topics related to conserving biodiversity in the Lower Hudson Region followed by a panel discussion. Selected short talks were:

1. "Nonnative species threats to rare native plants in Hudson River tidal wetlands," Erik Kiviat, Hudsonia Ltd.

2. “How do predator-promoting invasive plants affect native communities?” Lauren M. Smith, Yale School of Forestry and Environmental Studies.
3. “Ash seed collection as an emerald ash borer management tool,” Molly Marquand, Mid-Atlantic Regional Seedbank.
4. “Assessing and preparing for plant invasion facilitation by pest insect invasions: results and management implications of studies of viburnum leaf beetle, hemlock woolly adelgid, and emerald ash borer,” Radka Wildova, Ecological Research Institute.

**Summary:** Ecological communities are complex and invasive species may trigger unexpected responses. Detailed research may reveal relationships that require management different from that which is intuitively appropriate.

### **Afternoon Session B: Current and Emerging Threats**

**Moderators:** Linda Rohleder, Director of Land Stewardship and Coordinator of the Lower Hudson PRISM and Daniel Atha, Conservation Program Manager at The New York Botanical Garden. In 2013, Linda received her Ph.D. in Ecology from Rutgers University, where she studied the effects of deer on forest understories. Linda built the Trail Conference’s Invasives Strike Force volunteer program. By 2014, the program had about 200 trained invasives-mapping volunteers who collectively had surveyed more than 870 miles of trail for invasive plants. She has organized invasives-removal workdays in parks across southern New York and northern New Jersey. Daniel has conducted botanical field work in all 50 states of the US as well as such far-flung places as Vietnam, Bolivia, Mexico, Belize and several states of the former Soviet Union. His work is focused on four main areas: floristics—what plants grow in a particular region; taxonomy—how to tell one plant from another, what to call it and what it is related to; applied botany—how plants are used for food, medicine, shelter and other useful purposes; and conservation—safeguarding plant species and the habitats that support them.

**Synopsis:** Preventing invasions is the most efficient method to managing invasive species and protecting the rich, native biodiversity of the Lower Hudson region. Through hands-on research and surveys, early detection and rapid response is possible. This session consisted of short-talks on topics related to current and emerging threats to the Lower Hudson Region followed by a panel discussion. Selected short talks were:

1. “Emerging Invasive Species in the Lower Hudson Region,” Linda Rohleder, New York New Jersey Trail Conference and Lower Hudson PRISM.
2. “Incised Fumewort (*Corydalis incisa*) invasive in North America,” Daniel Atha, The New York Botanical Garden.
3. “Distribution of *Nitellopsis obtusa* in New York, U.S.A.,” Robin Sleith, The New York Botanical Garden.
4. “Evidence for evolution in glyphosate tolerance, but not resistance, based on history of exposure to the herbicide in Japanese Knotweed (*Reynoutria japonica*) in New York,” Acer VanWallendael, Fordham University.

**Summary:** The presentations discussed eight plant species, one invertebrate, and two insect species currently threatening the region. The majority of the organisms were new to most participants; a history of invasion by Incised Fumewort (*Corydalis incisa*), a recent introduction



to the region and posing a significant threat to forests, wetlands and gardens from New York to Washington, D.C.; status of the Starry Stonewort (*Nitellopsis obtusa*) infestation throughout New York State including data from surveys of 390 water bodies from the St. Lawrence River to Buffalo and east to the tip of Long Island, testing for pH, temperature, conductivity, and several other parameters. These data were correlated with infestation to produce a predictive profile for the species; and the effects of glyphosate on Japanese Knotweed (*Reynoutria japonica*). The presentations were followed by a lively question and answer session.

### **Afternoon Session C: Strategic Invasive Species Management and Restoration Practice**

**Moderators:** Helen Forgione, the Natural Areas Conservancy's Senior Project Manager for Ecological Assessment, and Jessica A. Schuler, Director of the Thain Family Forest at The New York Botanical Garden. Helen has over 25 years of experience working in ecology in the New York metropolitan region for New York City DEP and NYC Parks Department's Natural Resources Group. She has an undergraduate degree in biology from the University of Connecticut and a Master's degree in ecology and evolutionary biology from Rutgers University. Jessica is responsible for the management of the 50 acre urban old-growth forest, including ecological restoration and the development of education and research programs. Jessica is an advocate for native plant conservation and ecological restoration through her work on the Steering Committee at the Native Plant Center and the board of the Bronx River Alliance.

**Synopsis:** The Lower Hudson PRISM supports and optimizes regional conservation through strategic invasive species management and promoting restoration practice. Data-driven management and restoring ecosystems that have been degraded, damaged, or destroyed are a part of the toolkit for successful invasive species management. This session consisted of short-talks on topics related to strategic invasive species management and restoration practice in the Lower Hudson Region followed by a panel discussion. Selected short talks were:

1. "Urban Forest Assessment: Providing a Framework for Regional Prioritization," Helen Forgione, Natural Areas Conservancy.
2. "Restoring a 50 acre, Urban Old growth Forest," Jessica A. Schuler, The New York Botanical Garden.
3. "Restoring maritime forest for songbirds in Jamaica Bay Wildlife Refuge," Lauren Alleman, The Nature Conservancy.
4. "Strategic management of plant invasions for ecosystem impacts: insights from a *Microstegium vimineum* invasion along a logged chronosequence," Noah Sokol, Yale School of Forestry and Environmental Studies.
5. "Collaborative mile-a-minute management: stories from the northern frontier," Nate Nardi-Cyrus, Scenic Hudson.

**Summary:** Strategic invasive species management requires baseline data to assist land managers in establishing priorities and determining management and/or restoration success. The potential collection of data is endless and should consider a whole ecosystem approach including both flora and fauna, such as birds, pollinators, plants, soil invertebrates, soil, carbon, and nitrogen. Invasions are associated with other landscape disturbances and there is a need for a better understanding of the impacts of invaders changing through time while interacting with other disturbances. There is the possibility that invasions can be prevented or minimized by managing

disturbances. There is a tremendous demand for additional information particularly on best management practices for specific species, inventory techniques, and volunteer/staff time management.

### **Afternoon Session D: Education and Outreach**

**Moderator:** Carol Capobianco, Director of The Native Plant Center. Carol is responsible for providing leadership in advancing the Center's work of advocating the use of native plants. Carol cultivated her interest in native plants and an understanding of their ecological significance through her work at nature-based organizations: The New York Botanical Garden, the National Audubon Society, and Groundwork Hudson Valley. In addition to her professional work, she is Chair of the Conservation Advisory Council for the City of Peekskill and is a past president of the Hudson River Audubon Society.

**Synopsis:** Engaging new audiences and delivering education that communicates the positive impacts of invasive species management on ecosystems and clear steps for action on personal and community levels is key for successful regional conservation and invasive species management. This session consisted of short-talks on topics related to education and outreach on invasive species and conservation in the Lower Hudson Region followed by a panel discussion. Selected short talks were:

1. "Invasive species & Grass-roots activism," Carolyn Sears, The Invasives Project-Pound Ridge.
2. "The Invaders Board Game," George Profous, New York State Department of Environmental Conservation.
3. "A New Guide to Restoring Forests," Jennifer Greenfeld, New York City Parks and Recreation.

**Summary:** The session focused on how PRISM reaches and teaches people about invasive species, successful forms of communication, and ways to expand the choir—how to engage others at the individual, organizational, and community-wide levels. As with any issue, there is a continuum or progression of learning and caring: first becoming aware of the issue, then growing in understanding, and then taking action to make a difference. The three speakers offered diverse approaches: a unique way an educator taught the broader issue of invasive species and their pathway into the country; a guidebook written to reach urban land managers, and efforts to get local people to act. The audience seemed interested in all three projects and several gave their names on a sign-up sheet to learn more information through PRISM.

### **Deliverable 5. Publish**

- a) Establish deadlines with all speakers and workshop organizers (Deadline: May/June 2015; completed on June 10, 2015).

*NYBG gave all speakers the deadline of October 29, 2015, to submit their presentations to allow for NYBG staff to streamline the audio/visual process the week before the event. These presentations were posted online after the event. NYBG scheduled Audio and Video recording of the morning session. A complete edition of the video has been made available.*

b) Collect PowerPoint Presentations from all participants (Deadline: October 29, 2015; completed on November 5, 2015).

*NYBG staff managed all session presentations and designed a theme slide that was used as the first slide and break slide between all presentations (Appendix 3).*

c) Post PowerPoint Presentations, Morning Plenary Session video, and Afternoon Workshop Summaries online (Deadline: December 2015; completed on December 7, 2015).

*NYBG produced a video of the Morning Plenary Session and posted it on YouTube (<https://www.youtube.com/watch?v=iPoiXyEbGus>). The YouTube link and all session presentations were uploaded to <http://lhprism.org>.*

### Budget Summary and Reimbursement

Attached please find expenses of \$13,882 for the 2015 Lower Hudson PRISM Invasive Species Symposium for reimbursement, with some minor variances from the original budget. As honoraria, travel for presenters, and the audio-visual fees were slightly lower than anticipated, NYBG allocated some additional funds to cover costs of staff time in organizing, marketing, and managing the event, which had exceeded what had been budgeted.

### Conclusion

*In addition to the deliverables in the original proposal, NYBG produced four products for the program: (1) Commissioned botanical artist, Bobbi Angel to create the artwork of the new invasive plant, *Corydalis incisa*, which was used as the theme for the entire Invasive Species Summit; (2) Produced an exhibition in NYBG's LuEsther T. Mertz Library "Early Detection, Rapid Response: Applying the Resources of The New York Botanical Garden to an Emerging Invasive Species," on view November 6, 2015, through January 2016 ([http://libguides.nybg.org/corydalis\\_incisa\\_display](http://libguides.nybg.org/corydalis_incisa_display)); (3) NYBG Mertz Library staff produced a LibGuide for Invasive Plants, (<http://libguides.nybg.org/invasiveplants>), providing a clearinghouse of information regarding invasive species and ecological restoration on NYBG's website; and (4) published a blurb about the Invasive Species Summit in Garden News, NYBG's Newsletter (Appendix 5). In addition, an article about the Summit, "Roots and Shoots: What's Lurking in Your Garden?" appeared in the Philipstown.info online newspaper on November 16 (Appendix 6).*

*Overall, the Invasive Species Summit was a tremendous success. In a Lower Hudson PRISM meeting after the event, the program was discussed in break-out groups and the feedback received was positive and constructive. Here is a list of the comments received:*

- *More descriptions for Afternoon Sessions*
- *Great speakers in the morning*
- *Good case studies, not enough practical information in afternoon after a very theoretical morning*
- *More successful management case studies with before-after and volunteer focus*
  - *How to use volunteers*

- *What to replant after removal*
- *Make sure all participants and partners of the Lower Hudson PRISM are reached in marketing efforts*
- *Cast a wider net to reach more groups, i.e., EDMaps was not reached*
- *More detailed presentations, the afternoon sessions were great*
- *Squeeze a PRISM meeting in at lunch break*
- *Themes to consider in the future: design and implementation case studies; successes and failures, i.e., Army Corps; management impacts including non-chemical, innovation, whole ecosystem approach, flora and fauna*
- *Provide more networking opportunities*
- *Great turnout!*
- *Was there crossover with the Native Plant Summit?*
- *Who were the attendees? Please provide metrics on where attendees came from, i.e., zipcodes. How many used CEU opportunities?*
- *Like panel discussion format in Afternoon Session*
- *Future themes to include invasive animals and success stories*
- *Strengthen education session*
- *Bring in social science perspective such as policy, philosophy, and regulations*
- *Larger spaces for breakout sessions*
- *More representation from other geographic regions*
- *Share compiled data on control to help determine Best Management Practices, such as biocontrol, chemical, mechanical*
- *Include speakers with different perspective on invasive species*
- *Afternoon program was appealing*
- *Great setting at NYBG*
- *Excellent staff, very helpful*
- *Good information sharing time*
- *Continuing Education Credits*
- *Lunch not included was a “Con”*
- *Inability to move between Afternoon Sessions between talks was a “Con”*
- *Include iMapInvasives in the future*
- *Provide more calendar time between similar events such as LH PRISM meetings and Cornell Invasive Species In-Service*
- *Include more extensive case studies*

*Thank you for the Lower Hudson PRISM's support for this effort and review of this report.*