

**NY-NJ Trail Conference/Lower Hudson PRISM**  
**PLANNING FOR EFFECTIVE INVASIVE SPECIES MANAGEMENT IN OUR REGION**

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**PLANNING WORKSHOP #1 - November 7, 2013**  
**Bear Mountain Inn, Bear Mountain State Park**

**KEY RESULTS & AGREEMENTS**

1. **PRISM PLANNING:** Workshop participants built a foundation of shared understanding regarding the PRISM's planning goals, schedule and decision-making. See PRISM Overview below.
  - a. A **PLANNING COMMITTEE** including both "veteran" and "new" PRISM partners was formed to work with the PRISM Coordinator and facilitator to plan to the next planning Workshop. This group will take a leadership role in guiding the planning process after the agreement with facilitator ends (after second workshop in December). Members of the Planning committee are: Linda Rohleder, Anne Gardon, Carrie Sears, Radka Wildova, Dan Sorensen, and Dan Atha.
  - b. **NEXT PLANNING WORKSHOP** will be held on December 5<sup>th</sup> at the Carriage House at Teatown Lake Reservation. This location was chosen by the participants as best candidate location for the most participants.

2. **ANALYSIS OF THE CURRENT SITUATION IN OUR REGION:** The group as a whole identified (and ranked) trends relevant to invasive species (IS) management in the Lower Hudson region. Building off of the "mind map," focus groups (defined as land-plants, land-plants& animals, water, and community education and outreach) further identified critical issues from their perspective, what they are currently doing and what they want to be doing in relation to them. See notes under "Current Situation in Our Region- Parts 1 & 2."

*Facilitator's note: Each of the small groups identified their critical issues (also referred to as "priority issues") which are noted on pp. 4-8, though the group as a whole stopped short of identifying these for the system as a whole. This is a potential starting place for the next workshop. At that time, we will also clarify the vocabulary aligned with the PRISM strategic plan framework outline previously circulated.*

- a. **CONTINUE TO BUILD SHARED INFORMATION BASE** – Information about invasiveness rankings of species (at NYIS.info) and prohibited/regulated species, ranking tools, and other background information will be circulated in advance of the next planning workshop.
3. **BUILDING THE LOWER HUDSON PRISM STRUCTURE & GOVERNANCE** - A working group was formed to develop a proposal regarding a proposed governance structure and partnership agreement for the Lower Hudson PRISM to be presented for consideration by the PRISM at the December meeting. The group's work will be informed, but not bound by, draft documents that were generated previously. This group will be chaired by the PRISM coordinator. This committee included both "veteran" and "new" PRISM partners. The members of this work group are: Linda Rohleder, Ed McGowan, David Emerson, David Decker, Bob O'Brien, and Meredith Taylor.

**DETAILED MEETING NOTES**

**PRISM OVERVIEW**

The meeting began with introductions by participants and an overview of the PRISM planning goals and process by Linda Rohleder. Participants had an opportunity to discuss the project in small groups and share questions and reactions (See Attachment A: Participant List). Key points covered:

- New NYS IS regulations go into effect in late 2014, proposed prohibited/regulated species lists published recently
- Funds become available to LH next year (ca 100K) and 175K each yr for following 3 years, but LH PRISM has to set priorities for use of funds
- Strive towards consensus decision-making
- Target to complete planning by March, for RFP process and decisions on proposals by May; facilitator is engaged for first two workshops (Nov-Dec)
- Research is fundable if it fits in priorities
- NYS working definition of “Invasive species” includes anything nonnative to an ecosystem in question e.g. black locust, although native to the US is considered invasive in New York

Overall, group’s reactions were positive and included these:

- See this as an opportunity to take a systems approach to invasive species management
- Welcome having a structure to support collaboration and Information sharing
- We have a better picture of what’s happening with IS now; This is facilitated in part by use of technology, i.e., iMapInvasives database, use of tablets, etc.
- Want to see innovation – e.g with respect to dealing with abundant species

Concerns expressed related to need to continue to build a complete picture of the evolving IS situation in the region, and need to include partners working on the Hudson River.

[Posted and subsequently reviewed with the group by Linda:]

“Charge” to the PRISMs by NYS

- Coordination among partners
- Facilitating info gathering and sharing
- Education, outreach
- Surveying, monitoring, mapping
- Early detection / rapid response
- Control
- Supporting research, including citizen science
- Communication with other PRISMS and DEC
- Recruiting volunteers
- Funding

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## **CURRENT SITUATION IN OUR REGION/Part 1: Key Trends**

### ***What are the trends impacting invasive species management in our region?***

With the goals of creating a shared base of information among participants, the group created a “mind map” of current and emerging trends in the region. [See photo in Attachment B.] Results of the whole-group brainstorming session generated the following list. After the brainstorming, participants were given seven dots to place at trends they felt were most important. The numbers in parenthesis are a count of these dots.

- **(20) Climate change** – increasing temperatures, decreasing diversity
  - Increasing openings for Invasive Species
  - Increased flooding degrading habitats, increasing IS threat
- **(17) More Invasive species are becoming fully established / naturalized**
  - Increased synergies that favor IS
  - Increased interactions between species
  - Examples of this include increased earthworms (and deer)
- **(17) Increased focus on ecosystem services**
  - Greater recognition that non-natives can provide beneficial services
  - Increased focus on ecosystem resilience as management
  - Increased look at hybrid ecosystems
- **(17) Increased numbers of rights-of-way with increasing need for management**
  - Increased pathways for IS
  - Greater attention paid to vectors
- **(16) Increased data collection and sharing (e.g. iMapInvasives)**
  - Increased citizen science programs
- **(14) Increasing deer population** with greater negative impact on native plants which, in turn increases the spread of IS. (Note: Deer also provide some IS control, e.g., purple loosestrife/mile-a-minute)
- **(14) Increased public attention to both IS and natives**
  - Increased attendance at outreach and programs
  - Increasing volunteer involvement
  - Locally Increasing knowledge
  - People know there's a problem
  - Increasing early education programs in schools
- **(13) Shifting attitudes – increasing view of IS as adversarial, IS fatigue (tired of hearing about**
  - Increasing interest in creating markets for IS (e.g. eat wild; Concern that some native species foraging practices are not sustainable)
  - Increasing demand for information / increasing need for scientific backing
  - Increasing gap between research and public knowledge
- (11) Increased forest disturbance
  - Forests are aging with no regeneration
  - More trees die creating gaps that are colonized by invasives
  - Hemlock wooly adelgid and emerald ash borer destroying trees
- (10) Increasing habitat fragmentation
  - Decreasing agricultural use, increasing urbanization
  - Decreasing size and number of forest tracts
  - More invasives at roads and parking lots
- (10) Increased monitoring of specific species (e.g. hydrilla)
  - Increased need for aquatic monitoring
- (10) Decreased numbers of native species
- (10) Continued availability and use of IS in nurseries and in municipal plantings
  - Increased signage and education about invasive potential of plants in nurseries
- (9) Decreased funding relative to need

- Increased control projects, but decreased follow-ups (e.g. DEC 3 year eradication projects)
- (9) Increased global trade
  - Increased risk of new and emerging IS
  - Decrease in border control inspections (e.g., < 2% plant material inspected)
- (5) Increasing risk of IS information overload, need strategic approach
- (3) Increasing government / federal regulations on imports, decreasing import of IS (e.g. NYS prohibited list/ US Leslie Act)
  - Increased regulation and education of nurseries @ federal regs
- (3) Decrease in common knowledge about biota (e.g. it's a wall of green)
  - Shifting baseline, lost knowledge and memory about biota
  - Increasing hikers from the city in the region
  - People spend less time outside
- (3) Increased biocontrol options (e.g. for mile-a-minute, HWA)
  - Increased pesticide availability and use by public
- (2) Increased releases of invasive aquatics
- (2) Invasive species is increasingly controversial (e.g. novel ecosystems)
- (1) Increasing number of small farms and farming (mid-Hudson)
  - Increasing native seed availability (for purchase) but decreasing genetic diversity of seed
- (1) Increased demographic diversity of land owners
- (0) Increased risk of aquatic spread of invasives with river dredging
- (0) Increasing advanced education institution programs relating to Invasive species

### ***SURPRISES? OBSERVATIONS? INSIGHTS?***

In the large group discussion that followed, the following points emerged:

- Came up with different list than typically would have if we'd written it alone
- Half of trends are about **pathways and vectors**
- Half about **education and outreach**
  - Research
  - Management goals
- Recognize that there are many **cross issues and inter-connections**, (e.g., role of nurseries and education) and ...
  - Between deer and everything else
  - Between impact of climate change on everything!
  - Between public opinion and attitudes (connect with landscapers)
- This list reflects our own shifting attitudes as specialists working in this area. For example, now we focus and talk more about **ecosystem services** than we did 5 years ago. This gives us a perspective of how our understanding of the issues evolve over time; we need to keep this in mind in planning.
- Surprised how big **climate change** is (surfaced as the #1 trend impacting IS management); We recognize that this will impact and shape our work enormously in the next five years, and in ways, that we can not imagine now.

### **CURRENT SITUATION IN OUR REGION/Part 2: Critical Issues and Implication for Planning**

***What do you see as the critical Issues? What are you doing now? What do you want to be doing?***

During a working lunch, participants met in “focus groups” defined by the area of IS management they work in (i.e., land, water, education). After lunch, small groups presented their critical issues, together with present and desired actions.

#### Focus Group: Community Education & Outreach

##### **Key Trends from our point of view:**

1. Recognition of importance of eco-services and resiliency
2. Pathways increasing
3. Gap between science and public, management, policy
4. Decrease of native species (except DEER)
5. Recognition of climate change

##### **What we are doing:**

- Providing outreach to public and stakeholders
- Educating about alternatives
- Educating about ecosystem services and resiliency
- Early childhood education
- Collecting data
- Providing tools for data collection
- Identifying plants for people

A lot of stuff!

##### **What we want to do**

- Reach more people (target marketing)
- Collaborating
- Strategic education (egg. Deer management, landscapers, social media)
- Citizen science (iMap)
- Acknowledge & celebrate success
- Educate government policy makers (esp. local)
- Empower & excite home and professional land managers
- Create more information centers
- Have a workshop on communicating science to the public
- More!

#### Focus Group: Plants #1

Lower Hudson PRISM as a funnel (the shape of anthropogenic impact).

Critical effort: get people outside, eliminate invasives & replant

##### **Critical issues**

1. Volunteer recruitment and retention
  - Lack of independent, trained volunteers
  - Expense of training
2. Lack of public understanding about the issues (education & outreach)

- How to reach general public; raise awareness about how the choices they make about landscaping impact the environment
  - Use of regulations to motivate land owners
  - Use of restoration to motivate public and volunteers (e.g., emphasizing 'planting' (v 'control', 'eliminating...') may be more positive way to engage folks)
3. Organizational capacity and challenges related to communication and politics
- Small organizations have limited capacity to address complex issues
  - Bureaucracy in government and large organizations make it hard to communicate and create change, (e.g., mowing in nesting season)
  - Often a big disconnect when one dept is responsible for both managing park land and a golf course

Issue: Volunteer recruitment & retention

**Want to:**

- Use ecosystems approach in planning (e.g., tidal wetlands: it's not a land or water issue, but instead, when thinking about strategic plan, view it at ecosystem level)
- Look to PRISM to develop shared volunteer resource; improve quality and impact of volunteers (eg., more involvement by college students)
- Develop rapid response team
- Use prioritization to see where we can make greatest impact with limited resources to engage volunteers
- Want to leverage PRISM as experts to impact municipalities and government agencies, (eg, park systems and land management, plantings, etc.

Focus Group: Plants #2

**\*CI = Critical Issue**

Increase Landowner outreach & responsiveness

**Capacity to work more effectively**

**Collaboration; techniques & strategies\***

**Audience building and effectiveness\***

Using grant programs & opportunities, technical assistance

Want to be able to implement more widely & effectively

**Venues that demonstrate best practices**

Publically accessible and land owner outreach

**Capacity to actively manage sites\***

**Knowledge base\***

Demonstration projects

Partnerships

Expand programs

Increase knowledge for research and greater awareness of ecoservices & forest integrity

Limited capacity to implement control programs

Deer management; protect old growth forest  
Make better choices regarding protection & management

**Increase active management of owned properties**

**Interdepartmental buy-in \***

Deer management  
More research & documentation of impacts

**Increase Field Research**

**Sparse funding\***

Dissemination of scientific information  
More study of relationships

**Increase synergistic cooperation**

**Increase focus of targeted projects\***

Management of projects & plans  
Want greater implementation and success measures

Focus Group: Plant & Animal Interactions

**\* Critical issue**

Trends/Issues:

**Pathways: how it got here\***

Climate change

**Assessment of impacts, management & control\***

Context of species

**Political complexity\* to deal with problem (pallets, ballast water)**

**Enforcement\***

Reactive v. Proactive

Doing

Pathways (APHIS Trace Back; NYS Parks camper registration & EAB)  
Early detection (EAB & Purple boxes)  
Firewood- EAB

Want To Do

Targeted Outreach: Mianus River Gorge  
Policy with teeth  
TNC Tool Kit  
Sharing strategies: Saw Mill Coalition  
Predictive strategies  
Assessment of impacts/ management options

Doing

Research on impact of invasive species (fresh water invasives, plants, earthworms, forest pests and pathogens, and emerging human diseases) and climate change on native ecosystems - Cary Institute

Ecological monitoring – Parks/Heritage

Mapping

Want To Do

More frequent monitoring

Process to assess, implement & monitor, then share

Implement Adaptive Management

Focus Group: Water

**Priority Issues**

Critical interconnection between land and water; though under-represented on the mind map, all issues on the map apply to water; Issues overlap

Early detection works best: requires expertise for identification

Climate change, flooding, storms, sea level rise – all have direct impacts on water

Water Uses/Issues

Recreation: boating, fishing, tourism, property values, quality of life

Water quality, public health

WATER

- Climate change: ecosystem adaptation & protection services
- Release of animals
- Need special expertise & access to private waters (knowing what's out there, how much impact)
- Restoring wetlands for climate change mitigation
- Recreational access opens new pathways, e.g. Boating

Doing

- Aquatic inventories
- Wetland restoration
- Boat launch stewards
- Using volunteers
- Citizen science
- Review of data, identify gaps

Want to Do More

- More surveys (specialists)
- Post monitoring-no incentive- did it work?
- Maintenance
- Sharing results
- Tracking maintenance
- Hard to detect invasives early
- Need more boat launch stewards- how much?
- Build on existing ed. Programs
- Share data

***LEARNINGS AND IMPLICATIONS FOR PLANNING?***

Themes to emerge from the presentations

- Role of Education and Outreach across all the groups
- Importance placed on ...
  - Cooperation
  - Early detection and rapid response
  - Sharing research results
  - IS Management and restoration

What are we learning?

- We're a diverse group in our approaches to IS
  - There's so much going on with the PRISM already
  - Ultimately, we need to balance interests of the PRISM as a whole with individual interests
- Regulation can be powerful
- Heard many possible solutions
- Unique PRISM by virtue of closeness to NYC – port and population
  - Access to NYC – opportunities for dollars and volunteers
- **Big ah-ha = It's not about invasives but healthy landscapes**
  - **Recognize “core issue” is that natives are in trouble**
    - **Natives are key to restoration**
    - **We're getting more realistic (can't get rid of all invasives)**
    - **Collectively learning how to adapt**

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#### **CLOSING REFLECTIONS** – sample comments

- Excited about the potential for a regional impact
- Happy to see this process underway. I see a lot of potential power and impact of partners working together.
- We can be much more strategic by aligning individual activities with larger strategy
- PRISM gives context to work we are already doing
- Great to see sustained level of interest- encouraging to see new faces
- Education and outreach will be key to addressing issues
- Nice to know that our efforts will be sustained with NYS funding
- Excited about thinking in terms of restoration of ecosystems
- Appreciated the holistic approach to thinking about the whole eco-system; we did not talk about prioritizing specific species (Point of information: NYS has already evaluated individual plant species' invasiveness; available at <http://www.nyis.info/index.php?action=israt>)
- This activity is prompting our organization to prioritize what's important; how we can leverage partnership and making a greater difference?
- Missing stakeholders – nurseries and transportation department and right of ways

[We wish to thank Carolynn Sears for typing up some of the flipchart notes, and Heidi Cunnick and Erik Kivait for sharing their meeting notes so that the above summary could be enhanced.]

## ATTACHMENTS

### Attachment A: List of the Workshop participants

Linda Rohleder	NY-NJ Trail Conference (PRISM Coordinator)
Anne Gardon	Strategies for Change Now (Facilitator)
Dan Sorensen	Scenic Hudson
Daniel Molinaro	Scenic Hudson
Chris Doyle	Allied Biological Inc.
Debbie Lester	Cornell Cooperative Extension – Orange Co.
Andy Thompson	
David Decker	Constitution Marsh Audubon Center
David Emerson	Westchester Land Trust
Jim Nordgren	Lewisboro Land Trust
Jessica Schuler	New York Botanical Garden, Torrey Botanical Society, Sawmill River Coalition
Robin Kriesburg	Bronx River Alliance
Tim Wenskus	NYC Parks
Tom Lewis	Trillium Invasive Species Management
Walt Daniels	NY-NJ Trail Conference, Yorktown Conservation Board
Steve Ricker	Westmorland Sanctuary
Sarah Hoskinson	Mianus River Gorge
Brendan Murphy	Watershed Agricultural Council
Carolynn Sears	The Invasives Project – Pound Ridge
George Profous	NYS DEC
Ethan Pierce	Mohonk Preserve
Marnie Miller-Keas	West Point US Military Academy
Meg Wilkinson	NY Natural Heritage Program – iMapInvasives
Rose Baglia	Cornell Cooperative Extension – Orange Co.
Barb Hammerstone	USDA-APHIS-PPQ
Matt Decker	Hudson Highlands Land Trust
Erik Kiviat	Hudsonia
Carol Capobianco	The Native Plant Center
Kali Bird	Cary Institute of Ecosystem Studies
Ed McGowan	Palisades Interstate Park Commission / OPRHP
Radka Wildova	Cary Institute of Ecosystem Studies
Chris Nagy	Mianus River Gorge
Martus Granirer	West Branch Conservation Association
Daniel Atha	New York Botanical Garden
Bob DeTorto	Bronx River Conservancy
Heidi Cunnick	Housatonic Valley Association
John Schwartz	NYC DEP
Brenda Bates	Westchester County Parks and Recreation
Sona Mason	NY-NJ Trail Conference

Attachment B: Photo of the mind-map (by D. Sorensen)

