CapMo PRISM
CAPITAL / MOHAWK
Partnership for Regional Invasive Species

2014 ANNUAL REPORT

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CapMo PRISM Annual Report

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# TABLE OF CONTENTS

1. Partnerships for Regional Invasive species Management ........................................3
2. Geographic Region ........................................................................................................4
3. Natural Resources .........................................................................................................5
4. Partner / Network Coordination & Cooperation ..........................................................6
5. Education and Outreach ...............................................................................................7
6. Invasive Species Awareness Week (ISAW) ..................................................................8
7. Citizen Science & Monitoring ......................................................................................9
8. Prevention ......................................................................................................................11
9. Early Detection & Rapid Response ...............................................................................12
10. Control Management & Restoration .........................................................................14
11. Research ....................................................................................................................15
12. Collaboration & Cooperation .....................................................................................16
Partnerships for Regional Invasive Species Management

Environmental Conservation Law (9-1703 (1) defines invasive species as non-native species that can cause harm to the environment or to human health. They are a form of biological pollution that comes from around the world. Their rate of invasion is growing due to increasing international trade and climate change. A wide variety of species negatively impact many sectors of our world: our ecosystems, including all natural systems and managed forests; our food supply, including agricultural products and harvested wildlife, fish and shellfish; our built environments, including landscaping, infrastructure, industry, gardens and pets; and our economy, recreation and human health.

Responding to this growing problem, New York State is implementing recommendations of the New York Invasive Species Task Force (ISTF) established under legislation passed in 2003. The ISTF’s 2005 report (available at [http://www.ny.gov/animals/6989.html](http://www.ny.gov/animals/6989.html)) led to a 2008 statute, known as Title 17 of ECL Article 9, which established the New York Invasive Species Council and Invasive Species Advisory Committee. The Council of nine state agencies is co-led by the New York State Departments of Environmental Conservation and Agriculture and Markets. Among the Council’s numerous statutory responsibilities is:

“support(ing) within available funds and encourage(ing) Partnerships for Regional Invasive Species Management [PRISMs] in their efforts to address invasive species through coordination, recruitment, and training of volunteers, education, early detection, rapid response, eradication, research, and planning”

![Map of New York State's Partnerships for Regional Invasive Species Management (PRISMs)](image_url)
Geographic Region

The Capital Mohawk PRISM encompasses the following counties: portions of Herkimer, Fulton, Saratoga, Warren, and Washington that falls south of the Adirondack Park “blue line” as well as Montgomery, Schenectady, Albany, Rensselaer, Columbia, and the eastern portion of Greene County.

The pathways of opportunities for invasive species in this region contains major highway corridors and interstate exchanges, including I-87, I-88, I-90, I-787, I-890, 4, 5, 9, 9W, 20, 29, 32, 67, 155, and 443; not to mention the extensive county and town highways throughout the region. In addition, the canal system (Erie, Champlain, and Feeder) also encompasses a major part of this region for invasives as additional pathways to be transported; along with the convergence of the Hudson and Mohawk Rivers and their various tributaries. Furthermore, north/south and east/west rail lines juncture in the Capital Mohawk PRISM area allowing for further opportunities of invasive species to be introduced and dispersed from shipments and freight. Lastly, the consideration of the Port of Albany, CSX Rail Yard, and the Albany International Airport as major hubs in the region. The major highways, railways, and shipyards bestow on the area as locations for distribution center hubs for major companies of all types of commodities. These warehouse centers are often great harboring and breeding grounds for many invasive species.

The regions geographic diversity ranges from very rural farm and woodlands to highly populated urban areas covering a total of 4,919 square miles or 3,148,326 acres. Woodland acres in the 11 county area are a total of 1,942,100 acres, and farmland comprises of 939,263 acres. Additionally throughout this region, over 166,000 acres encompass hydrologic areas – wetlands, and surface water bodies.
Natural Resources

The Capital Mohawk PRISM area is rich in natural resources. Within this area, a critical role is important in protecting and managing lands that are used for farms, forests, parks and preserves that encompasses over three million acres, including acreage of lands that are developed, roadways, or waterbodies. Forest and farmlands, managed properly, can provide diversified value for wildlife, improved water quality, clean air, stable soil, recreational opportunities, scenic landscapes, and an increase in healthier ecosystems, to sustain the future of natural resources within this region. The counties involved feature farmer/owners, absentee/owners and recreationists (boaters, hunters, anglers, and hikers), and many large businesses/industries. The landscape is becoming more and more fragmented; habitat is rapidly changing. Unmanaged farmlands and forestlands are opportune locations for the encroachment of invasive species. Even though many of the waterbodies and waterways within this eleven county area have been dealing with the management and control of aquatic invasive species for many years, the pathways are still opening for new ones to be introduced every day.

Many organizations including land trusts, conservation groups, land conservancies, and municipal entities in this region, oversee and manage natural areas that are already or have the potential of being compromised with invasive species outcompeting the native vegetation and ecosystems. The good news, several organizations have been inventorying and preparing for those invasive species that pose a threat to the environment, cause economic and human health harm. Fortunately, some organizations within the PRISM have reached the eradication and control phase and are in the important step of reclaiming areas back to native species.
Partner/ Network Coordination & Cooperation

Although not formally funded until the fall of 2013, the Capital / Mohawk PRISM Partners first came together in 2007, under the guidance and leadership of volunteer coordinator Peg Sauer. Though most of the representatives during that time had been primarily agencies and nongovernmental organizations (NGO’s), they met at least four to five times a year to keep up to date on the changes and impacts of invasive species throughout the state and region. During this time also, Cornell Cooperative Extension, primarily Warren and Saratoga Counties, had been instrumental in providing educational programs and opportunities for a wide array of audiences in increasing their awareness of invasive species for early detection; including the development of the Emerald Ash Borer Task Force for the Capital District area.

While acknowledging that not all of the partner organizations within the PRISM may prioritize terrestrial and aquatic invasive species the same, collectively though, the goals are common in the areas of education and early detection in order to prevent the ongoing spread and introduction of invasive species. Portions of the northern counties are included in the APIPP PRISM, and it will be important to collaborate with ongoing efforts with that PRISM as well as the CRISP and Lower Hudson PRISM for the Counties in the southern section of the Capital Mohawk region; as county boundaries are shared with each of those PRISMs. Knowing that the Cap/Mo PRISM covers all or parts of eleven counties; it is recognized that identifying the diversity of situations is needed to encourage a multi-faceted approach to develop a comprehensive implementation process toward invasive species management.

The Capital/ Mohawk PRISM is currently in the process of partners signing a memorandum of agreement as either a Principle Partner or a Cooperating Partner. As a Principle Partner, members will actively participate, as a member of the steering committee, in consultation with all partners, shall make recommendations on matters affecting the Capital / Mohawk PRISM. Additionally, the parties may not have the necessary resources to support all Capital/Mohawk PRISM activities from their own budgets. Therefore, in addition to internally identified funds, the parties will jointly and/or individually seek funding and/or other support from supplementary sources for Capital/Mohawk PRISM initiatives.

The Cooperating Partners, in support of the Capital/ Mohawk PRISM, will be kept informed and will support efforts as an independent party and not as an officer, agent, servant, or employee of any of the other parties mentioned. See Partners (Appendix A)
Education and Outreach

As 2014 was the first official year of the program, a major goal was to raise an awareness that such an entity as a PRISM existed, and along with that, the impacts of invasive species – those species that cause harm to ecosystems, economic, and human health.

Events/Workshops/Presentations/Programs (reaching over 41,300 individuals):

Sportsmen’s Education Workshop, Ballston Spa
BOCES – Environmental Conservation students - Saratoga Springs, Hudson Falls
NYFOA-SAC annual meeting, Glens Falls
Northeast Regional 4-H Shooting Sports Workshop, Milton
Master Gardener Volunteer Trainings – Ballston Spa, Voorheesville, Hudson
CCE Agriculture Program Committee, Ballston Spa
NYFOA-SAC Woodwalks – Johnsburg, Bakers Mills
Nursery & Landscape Recertification Day, Latham
Capital District Garden & Flower Show, Troy
iMapInvasive Training, Ballston Spa, Milton, Voorheesville
Outdoor Expo, Hoosick Falls
4-H Adirondack Guides, Warrensburg
New York Logger Training - Ballston Spa, Saratoga, Warrensburg
Planting Day @ Training Center, Milton
Environmental Field Days, Milton
Sundae on the Farm, Northumberland
Grafton Library Plant sale, Grafton
Board of Supervisors, Ballston Spa
New Baltimore Travel Plaza, Hannacroix
Saratoga County Fair, Ballston Spa
Empire Farm Days, Seneca Falls
Planning Board, Greenfield
Deer Exclosure project with NYFOA-SAC, Milton
Friends of Jenkins Park, Burnt Hills
Columbia County Fair, Chatham
Friends of Woodlawn Preserve, Schenectady
Upper Unadilla Valley Association, Clayville
Federation of Garden Clubs, Lake George
Ag and Food Systems Inservice at Cornell, Ithaca
Invasive Species Awareness Week (ISAW)

During the week of July 6-12, 2014 was proclaimed by Governor Cuomo as the first annual statewide ISAW program. This week was designated to promote knowledge and understanding of invasive species and to help stop their spread by engaging citizens in a wide range of activities and encouraging them to take action. Statewide over 100 various events and programs to place.

Locally, CapMo PRISM partners provided the following events:

- Weeding for the Birds, Voorheesville
- Water Chestnut Pull, Delmar
- Invasive Species Clean-up, Troy
- Garlic Mustard Pull & Pesto Party, Cropseyville
- iMapInvasive Training, Ballston Spa
- Invasive Species Educational Display Table, New Baltimore Travel Plaza
- Boat Inspection Demo, Round Lake
- Better Forest Health, Milton
- EAB biology & walk, Delmar
- Stop the Invasion talk, Rensselaerville
- How Invasive Pests & Plants Shape Our Forest & Environment, Rensselaerville
- Alien Invaders, Voorheesville

Huyck Preserve - ‘Stop the Invasion”
Leslie Surprenant, NYS DEC
The use of the New York iMapInvasives database has been a supportive tool in determining the areas that still need inventory or observations to give some baseline data of species that are within the CapMo PRISM region. In 2014 three separate trainings were conducted to help promote this vital tool in tracking all invasive species taxa. Two of the trainings were for Basic Data Entry—an introduction to the database system, how to report observations. The other training offered the Advanced Data Entry—building on the basic data entry including assessments, surveys, treatments, infestation management records, and setting up special projects.

To date, within the eleven county CapMo PRISM, 73 species have been confirmed from 65 users of the system, 36 organizations, and 21 projects. The observation data also gives an indication of the areas within the PRISM that may require more field collection time, and potentially having more trained volunteers in those locations.
Wasp Watcher Program

The Wasp Watcher program is a citizen science biosurveillance tool for locating Emerald Ash Borer infestation. This program monitors areas that are prime habitat locations for the *Cerceris fumipennis* wasp; a non-stinging solitary ground nesting wasp. Ideal nesting sites are generally hard packed sandy soil, areas of human disturbances (baseball fields, picnic areas, old sand pits, and trail/parking areas), with full sun, sparse vegetation and near wooded areas containing ash trees less than 200 yards away. Locally, Albany County 4-Hers have monitored six different sites since 2011 with over 50 nests at each site. However, of the six sites, only two showed activity in the summer of 2014. Unknown if the loss of this native predator was due to weather conditions or not. (Unfortunately, because it is in the wasp family, and because of its nesting locations, it is mistaken for a stinging wasp and they are treated with insecticides.) Each team involved in the monitoring program is given a backpack containing data collection forms, clipboard, marking pens, pencils, collection bags, “trap material” and an insect net. Sites are visited at least once a week during the summer months to record and track activity. If Emerald Ash Borer insects are found near or on the ‘trap’ cards, then the team notifies the Extension person working with the group.

Additionally, partner organizations have also had a productive year training volunteers for data collection, inventorying, and monitoring. Some of the training has been specie specific, for example the Albany Pine Bush Preserve Commission trained individuals for identification in bush honeysuckle (*Lonicera* sp.) for inventory and eradication; yet another project trained high school student in basic seed collection techniques and native species identification for a native seed collection day.

Other examples include training volunteers to monitor and report Hemlock Woolley Adelgid sites at the Huyck Preserve & Biological Research Station. While others have provided training to garden clubs, birders, and ‘Friends of’ groups.
**Prevention** - Although considered the first line of defense for invasive species moving into an area, often the best efforts and management practices will not stop invasive species from becoming established.

Through the various education/outreach efforts this year, the PRISM supported various partners with providing various printed materials to the various audiences; as well as providing updated information on the new legislation and regulations that have been a statewide effort.

The first was the amended regulation regarding *Eurasian Boar* (Section 180.12 of 6 NYCRR Part 180– Miscellaneous Regulations). Refer to the New York State Department of Environmental Conservation link: [http://www.dec.ny.gov/regulations/94848.html](http://www.dec.ny.gov/regulations/94848.html)

Secondly, the regulations for *Aquatic Invasive Species Control at State Boat Launching and Fishing Access Sites* (Section 59.4 and Part 190, Section 190.24 of 6 NYCRR Part 59) The purpose of this regulation is to restrict the transport of plants and animals to and from state boating and fishing access facilities in order to limit the spread of aquatic invasive species. Refer to the New York State Department of Environmental Conservation link: [http://www.dec.ny.gov/regulations/95111.html](http://www.dec.ny.gov/regulations/95111.html)

Lastly, in 2014 were the regulations regarding *Prohibited and Regulated Invasive Species* (6 NYCRR Part 575 required by ECL sections 9-1709 and 71-0703) for the purpose of restricting the sale, purchase, possession, propagation, introduction, importation, transport and disposal of specific invasive species in New York. Refer to the New York State Department of Environmental Conservation link: [http://www.dec.ny.gov/regulations/93848.html](http://www.dec.ny.gov/regulations/93848.html) and for the pdf that highlights each specie in a booklet at [http://ccesaratoga.org/environment/partnerships-for-regional-invasive-species-management-prisms](http://ccesaratoga.org/environment/partnerships-for-regional-invasive-species-management-prisms)
Emerald Ash Borer Task Force

The Capital District Emerald Ash Borer Task Force was initiated in late 2013 but developed in 2014 has worked to increase the awareness of this insect throughout the counties of Albany, Rensselaer, and Schenectady. As the spread of this insect has grown to currently include locations within 4 counties of the PRISM boundaries. Using the efforts and knowledge that has been gained in other regions and states, the PRISM has a myriad of resources to share with municipal officials, arborists, foresters, landscapers, and other interested stakeholders. The Task Force will work directly with municipalities in helping them develop a plan, conducting tree inventories, minimizing economic impact, identifying community resources and needs, finding potential funding sources, to name just a few areas of assistance.

On - the - Ground Efforts:

Several partner organizations have been working diligently on invasive species inventory, monitoring, and removal for many years. Highlighting the efforts of two organizations for this report, Saratoga National Historical Park (SNHP), in Stillwater containing about 3,400 acres, and the Albany Pine Bush Preserve Commission (APBP) managing the 3,200 acre National natural landmark of the Albany Pine Bush Preserve. Management of SNHP is focused around maintaining the historical resources and vistas of this historical site as they were featured during the Battle of Saratoga in 1777. This historical configuration is fundamental to the oversight of the park, and the influx of invasive species has added an extra consideration to management practices within the park. In 2014, early detection of Narrowleaf Bittercress (*Cardamine impatiens*) was discovered at the National Historical Park. This specie and location will be monitored throughout the park along with other prioritized invasive species located in over 500 acres of existing monitored plots.
On the Ground continued...

The Albany Pine Bush Preserve Commission surveyed approximately 175 acres during 2014 for priority invasive species within the Preserve area. This particular preserve is globally rare and is considered an inland pine barren, one of the largest of about twenty worldwide. Ecosystem restoration and management are critical components to protecting the biodiversity of such an unique area; especially given the location of the preserve. As with many ecosystems, the introduction of non-native vegetation can reduce the diversity of native species, creating an unhealthy environment. The Pine Barrens has additional challenges due to the fragmentation surrounding the area, urbanization, and the species composition of a pine barren site.

Additionally, several iMapInvasive trainings were given throughout the year that included soil and water conservation districts, master gardener volunteers, master forest owner volunteers, and preserve volunteers to have more assistance in collecting data and developing a priority list for the PRISM.
Control, Management and Restoration - three very important efforts in the reduction and impacts of an invasive specie.

An assessment of the impact invasive species have on a particular ecosystem is important to determining what management tools to effectively implement. Too often, invasive species are well established and too widespread over the landscape to focus resources on the ability to contain or eradicate them from a particular area. From a management standpoint various control methods not only provides a comparison of the effectiveness of treatment, but also develops a cadre of control methods for others to implement.

In 2014, Saratoga National Historical Park treated over 160 acres of land containing knapweed (brown & spotted), Multiflora rose, oriental bittersweet, phragmites, Thistle (Canada & Bull), bush honeysuckle, and Japanese Knotweed through the use of mowing, prescribed fire, and herbicide applications.

The Albany Pine Bush Preserve Commission during 2014 removed (control, suppression, eradication) invasive species on over 265 acres, including 47 acres of mature black locust. Species that were removed by way of hand pulling or chemical treatment were bush honeysuckles, oriental bittersweet, Tree-of-Heaven, Multiflora rose, barberry, burning bush, spotted knapweed, common reed, thistle (Canada & Russian), purple loosestrife, black bindweed, Japanese stiltgrass, reed canary grass, vetch (crown & cow), black swallowwort, soapwort, and Deptford pink. At this location, sites are periodically rechecked and if necessary, retreated.

The black locust site was also prepped for a restoration planting in a future growing season. Due to the soil type and the other attributes of the pine bush, black locust is genuinely an invasive specie in these growing conditions.
Deer Exclosure Demonstration Project

A cooperative project between New York Forest Owners Association—Southeastern Adirondack Chapter, Cornell Cooperative Extension, Saratoga County and Capital/Mohawk PRISM installed a deer exclosure at the 4-H Training Center in Milton, NY.

The project, a Restore New York Woodlands (RNYW) initiative in 2014, to demonstrate the impact of deer on woodlands and native plant communities. Funds were provided to each NYFOA chapter to purchase the materials, and an additional mini grant was provided by American Wildlife Conservation Foundation (AWCF) for signage. The exclosure area consist of 1,000 square feet and directly next to it is a control plot of the same dimensions. The project will continue for 3-5 years, with inventories of plant species annually to monitor deer browse verses the lack of browse.

Studies have shown that managing for native species will best be accomplished by managing deer densities and controlling invasive species. White-tailed deer prefer native vegetation for food rather than browsing any of the introduced invasive species. On the average, deer consume 6-8 pounds of plant material per day.
The success of a program definitely lies in the collaborative effort of its’ partners. The PRISM network, not just locally but statewide, offers an opportunity for sharing expertise, research, and successes.

With 2014 being the first official year that the CapMo PRISM was in full swing, some highlights noted throughout the year:

- Two college interns working together, but separately on independent projects; one regarding Agriculture invasives and the impacts on productive farmlands. In particular, knapweeds (spotted, brown, and meadow), and the insects that these plants might have preying on them. The insect component is critical as identifying the plant in beginning to establish potential biocontrol methods. The second project was a deer exclosure demonstration plot to measure deer browse impact on native species and to observe and monitor the potential increase of invasive species. This project will be an ongoing assessment over the next 3-5 years. Combined, the interns inventoried high potential area (trail heads, parking areas, boat launches, and high use recreation areas.). This data that was collected help to develop a baseline of areas to prioritize locations for managing in the future.

- Education and outreach activities by many partner organizations throughout the region promoted the PRISM as whole. Sharing educational information regarding invasive species - identifying, controlling, managing, and eradicating for the consumer to understand the impact of invasive species.

- Partners working together to develop over a dozen programs and activities during the first statewide Invasive Species Awareness Week. Including water chestnut pulls, iMap Training, and various displays and lectures.

- The commitment from the steering committee partners in developing the annual work plan for the PRISM!
**Information Management** - *bring everything together education/outreach, early detection/rapid response, prevention, management & control, and restoration to advance the collaborative efforts of the PRISM.*

- Use of iMapInvasive database for collecting online information as well as a location to review collective species observations, project surveys, and treatment data. This system is also designed to provide email alerts for early detection and rapid response efforts. A valuable tool that is accessible and straightforward to use.

- CapMo PRISM webpage was developed within the host organization website. It can be found at http://ccesaratoga.org/CapMoPRISM. Additionally, the PRISM is linked through the nyis.info website.

- PRISM partner listserv is a means of informing partners of timely information, such as funding opportunities, upcoming seminars or workshops, and new species to be on the lookout for in the area.

- PRISM partner meetings offer an opportunity to network and share projects, current research, and species impacting areas.

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*A special thank you for to the Capital / Mohawk PRISM dedicated volunteer coordinator, Peg Sauer for guiding the PRISM from 2005 – 2013!*
**Coordination** - Expenses and activities related to administering the program and program coordinator.

**Prevention/ Education & Outreach (E&O)** - Expenses and activities related to project including portion of intern stipend, supplies, materials, and displays.

**Early Detection** - Expenses and projects related to early detection activities. A portion of intern stipend, supplies.

**Rapid Response (RR), Management** - Expenses and activities related to project(s) and any subcontracts or partner proposals

**General Support** - Expenses related to communications, travel, etc.

Total: 100%