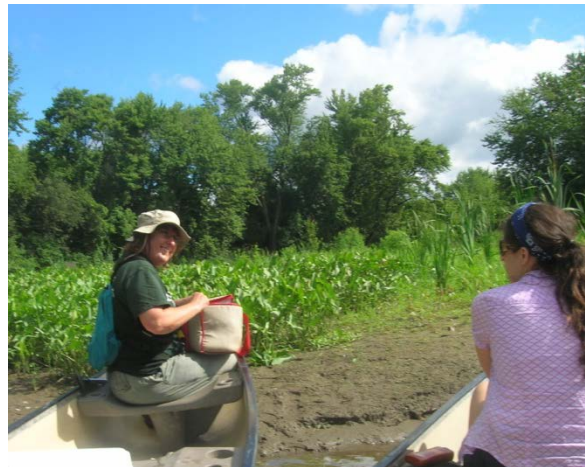




2011 Annual Report

Prepared by Meredith Taylor
CRISP Coordinator

CRISP is the Catskill Partnership for Regional Invasive Species Management (PRISM) and is hosted by The Catskill Center for Conservation and Development, Arkville, NY



Mission

To promote education, prevention, early detection and control of invasive species to limit their impact on the ecosystems and economies of the Catskills.

Background

Building on several years of work by willing partners to form this collaborative group and the efforts that were undertaken last year to establish the second funded Partnership for Regional Invasive Species Management (PRISM) in the state, the Catskill Regional Invasive Species Partnership (CRISP) has made a serious impact in 2011. Several key projects were completed including inventories of both water bodies and recently disturbed areas, an Asian longhorned beetle (ALB) public awareness campaign, and emerald ash borer community support. Additionally, outreach and education efforts and control projects by CRISP staff and partners continued and expanded.

The emerald ash borer (EAB) and its impacts on communities remained a top concern of the Partnership this year as new detections were made in Orange and Albany counties. Several giant hogweed populations were discovered in Ulster and Sullivan counties spurring CRISP to take on a leadership role in ensuring the elimination of these populations in cooperation with New York State Department of Environmental Conservation's Giant Hogweed Control Program. The damaging floods of Tropical Storm Irene presented a new set of challenges for CRISP as invasive species like Japanese knotweed were likely spread broadly along flooded streams and in floodplains.

Many of the efforts begun in 2011 will be continuing into 2012 and several new initiatives will be starting as well. CRISP continues to find new partners and ways to work on a variety of invasive species issues. As we look to the future we can expect to begin to see the impacts of our actions in an increased awareness among our citizenry, a greater level of protection from new introductions, a decrease in spread of existing species, and more management of problem populations.

CRISP Partners

<i>Affiliate Organizations and Agencies</i>	<i>CRISP Executive Committee Members</i>
<p>SUNY College at Oneonta</p> <p>SUNY ESF</p> <p>New York Forest Owner Association</p> <p>Trout Unlimited</p> <p>NYS Department of Parks and Recreation</p> <p>Catskills Native Plant Nursery</p> <p>Mountain Top Arboretum</p> <p>Upper Delaware Council</p> <p>Society of American Foresters</p> <p>Hartwick College</p> <p>Frost Valley YMCA</p> <p>New York New Jersey Trail Conference</p> <p>Catskill Mountain Club</p> <p>Farm Bureau</p> <p>Institute of Ecosystem Studies</p> <p>Olive Natural Heritage Society</p> <p>NRCS County Staff</p> <p>Delaware River Basin Commission</p> <p>Friends of the Beaverkill</p> <p>Sullivan County Master Gardeners</p> <p>Delaware Highlands Conservancy</p> <p>Callicoon Creek Park Committee</p> <p>Upper Susquehanna Coalition</p> <p>Otsego Lake Association</p> <p>Catskill Watershed Corporation</p> <p>USGS</p> <p>US Forest Service</p> <p>USDA APHIS, ARS</p> <p>Catskill Landowners Association</p> <p>Ulster County Department of the Environment</p> <p>Delaware County Planning Department</p> <p>Catskill Clean Water Fund</p> <p>Mine Kill State Park</p> <p>Ashokan Stream Management Program</p>	<p>2010 -2011</p> <p>Ethan Angell New York State Department of Agriculture and Markets</p> <p>Barbara Dibeler New York City Department of Environmental Protection</p> <p>Kris Gilbert New York State Department of Transportation</p> <p>Jamie Myers <i>Member At-Large</i> National Park Service</p> <p>Tom Pavlesich Watershed Agricultural Council</p> <p>Ryan Trapani Catskill Forest Association</p> <p>Laura Weyeneth <i>Member At-Large</i> Greene County Soil and Water Conservation District</p> <p>Alan White The Catskill Center for Conservation and Development</p> <p>Jeff Wiegert New York State Department of Environmental Conservation</p> <p>Marilyn Wyman Cornell Cooperative Extension of Greene County</p> <p>Chris Zimmerman The Nature Conservancy</p>
	<i>CRISP Staff</i>
	<p>Meredith Taylor CRISP Coordinator</p> <p>Elizabeth D'Auria Catskill Invasive Species Assistant (SCA/AmeriCorps)</p>

Accomplishments

Prevention

Asian Longhorned Beetle Public Outreach Campaign

Vibrant Creative, inc. was contracted to design a comprehensive public outreach campaign for the Catskill region to raise awareness of the Asian longhorned beetle (ALB) and its signs and symptoms. They developed a poster, three different postcards and a single-fold brochure to be distributed throughout the region as well as an online/social-media campaign consisting of a website, facebook page, twitter account, blogspot, flickr and YouTube all with consistent branding. They also wrote a radio PSA that has been aired on WIOX radio.



Early Detection / Rapid Response

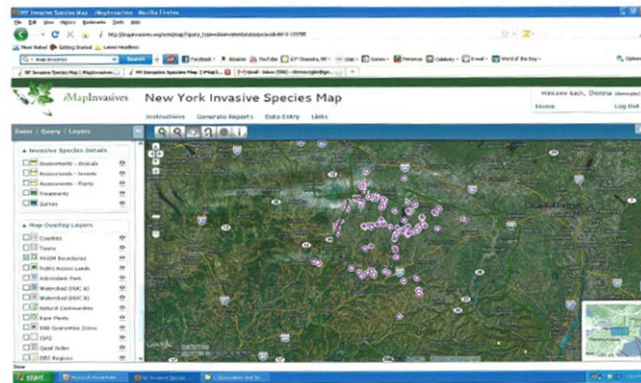
Aquatic Invasive Species Inventory

SUNY College at Oneonta Biological Field Station was contracted in late 2010 to conduct an inventory of aquatic invasive species in 10 water bodies throughout the CRISP region. This inventory was completed in 2011.

Final Report is available at: <http://catskillinvasives.com/index.php/accomplishments/>

Invaders of Disturbed Wetlands in Central New York

SUNY College at Oneonta was contracted to investigate the extent of marsh thistle (*Cirsium palustre*) infestations, an early detection species with very limited distribution in the CRISP region. This plant is found in roadside ditches and wet pastures in parts of Otsego County. Additionally, other invasive species found during the delimitation efforts were mapped using iMapinvasives. Populations of marsh thistle that could easily be controlled were targeted using four different types of mechanical control techniques, providing an opportunity to assess the effectiveness of each. An information sheet was developed and distributed to landowners who had marsh thistle on their property explaining the control techniques and encouraging them to manage it.

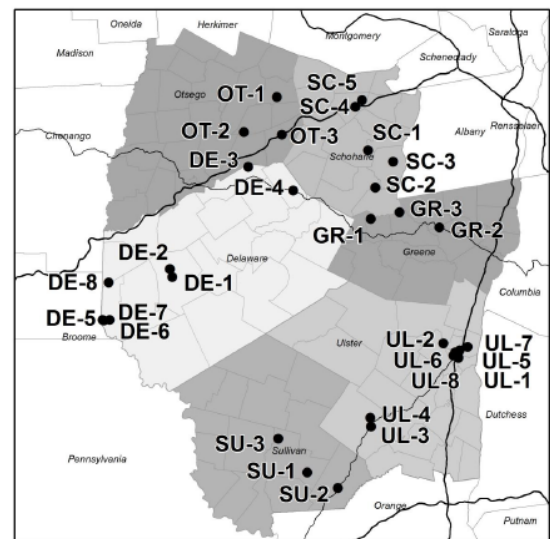


Final Report is available at: <http://catskillinvasives.com/index.php/marsh-thistle-early-detection/>

Survey of human-disturbed sites for early detection of nonnative plants

Hudsonia, Ltd. was contracted to inventory high-priority potential early detection species present at 30 disturbed sites throughout the Catskills. Disturbance was a result of development, forestry activities, gas drilling, mining, stream restoration, and road construction. The priority species identified were:

- 1) Spiny plumeless thistle, *Carduus acanthoides*
- 2) Short-fringed knapweed, *Centaurea nigrescens*
- 3) Marsh thistle, *Cirsium palustre*
- 4) Cut-leaved teasel, *Dispacus laciniatus*
- 5) Globe-thistle, *Echinops sphaerocephalus*
- 6) Cherry Silverberry, *Elaeagnus multiflora*
- 7) Queen-of-the-meadow, *Filipendula ulmaria*
- 8) Amur honeysuckle, *Lonicera maackii*
- 9) Eulalia grass, *Miscanthus sinensis*
- 10) White poplar, *Populus alba*
- 11) Bradford pear, *Pyrus calleryana*
- 12) Chinese elm, *Ulmus parvifolia*
- 13) Chinese Wisteria, *Wisteria sinensis*

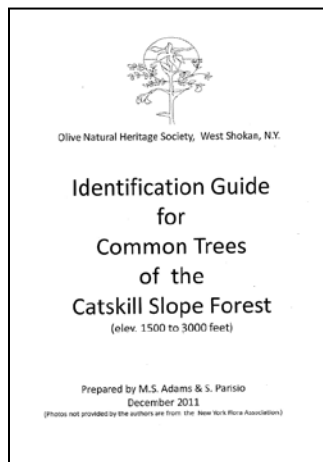
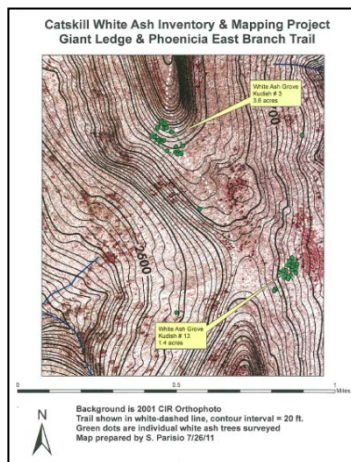


Map of the 30 sites surveyed

Final Report is available at: <http://catskillinvasives.com/index.php/isolated-ash-grove-monitoring/invasiders-of-distributed-area/>

Catskill White Ash Mapping and Inventory Project

The Olive Natural Heritage Society was contracted to develop and coordinate a citizen science project to monitor high elevation, relatively isolated ash groves in the Catskills. They first identified the areas that had ash stands and then determined the abundance, distribution and degree of isolation of each. For volunteer monitors, they developed a datasheet, protocol, ID guide and information sheet. They also recruited volunteers to adopt each stand and agree to survey for emerald ash borer each year for five years.



Final Report is available at: <http://catskillinvasives.com/index.php/isolated-ash-grove-monitoring/>

Susquehanna River Assessment

The Otsego County Conservation Association was contracted to conduct a 5 day paddle (July 25 - 29) to survey a 52 mile stretch of the Susquehanna River from Otsego Lake to Sidney, NY for water chestnut, zebra mussel, Japanese knotweed, marsh thistle, didymo and giant hogweed. Water chestnut is known to be present in Goodyear Lake, downstream of Otsego Lake and zebra mussel has recently been found in Otsego Lake. Japanese knotweed is known to be present in the lower part of the Susquehanna. By doing this full river assessment the full extent of the known invasives was documented and early detection work for the marsh thistle, didymo and giant hogweed was conducted.

Water chestnut was only found around Goodyear Lake and Japanese knotweed was only found in the lower portion of the river. Zebra mussel shells were only found sporadically in a small section. No giant hogweed, marsh thistle or didymo were observed.



Education and Outreach

Community Ash Inventory Project

CRISP worked with communities across the region to begin preparing for the emerald ash borer by taking stock of their ash resource. Coordinated by an SCA Hudson Valley AmeriCorps member, Elizabeth D' Auria under contract with CRISP, trained volunteers inventoried ash trees in the public right of way along streets with the highest volume of pedestrian activity in select communities. The results of the inventory, including tree locations, condition and distance to the street were compiled into a report with suggestions for further action and a map and presented to each municipal board.

For each community a training session was held after weeks of volunteer recruitment. The day of the inventory, volunteers inventoried selected sections of streets while CRISP stayed at a central location conducting outreach to passersby and coordinating volunteer activities. Each inventory resulted in at least one news article highlighting the issue.



Community	# Volunteers at Training Session	# Volunteers @ Inventory
Woodstock	6	12
Tannersville	4	3
Stone Ridge	9	4
Margaretville	5	5
Catskill	12	12
Ellenville	4	7
Saugerties	5	11
Shandaken	6	7

*Additional inventories were canceled due to flooding or lack of street trees

Reports and maps are available at: <http://catskillinvasives.com/index.php/catskill-community-ash-tree-street-inventory-project/>

Integrating CRISP Objectives in ARC's Education & Outreach Programs

Cornell Cooperative Extension of Greene County's Agroforestry Resource Center (ARC) was contracted to develop a multi-faceted program to raise invasive species awareness through their education and outreach programs and spread this information throughout the Extension system in the CRISP region.

These programs included:

- 1) Master Forest Owner (MFO) Site Visits
 - Trained volunteers (MFOs) visit forest owners to provide counseling on forest management, 8 were trained on invasive species issues and given resources to distribute on their site visits.
- 2) "You and Your Forest" letter on invasive species
 - As part of a letter series, an 8 page letter on invasive species was distributed to ~50 participants
- 3) Master Gardener Invasive Species Training
 - A training module on invasive species was developed for the Master Gardener Program Coordinators in Greene, Schoharie, Ulster, Otsego and Orange Counties (this program is not active in Delaware or Sullivan).
- 4) Wasp-Watchers Citizen Science Program
 - The Cornell-based program that uses youth to locate and monitor smoky-winged beetle bandit wasp nests to see if they are feeding on emerald ash borer was implemented by CCE of Greene County working with their 4-H program.
- 5) Invasive Species Radio Show
 - A One hour radio show was recorded to be aired on local radio stations. The topic is emerald ash borer and other invasive species impacting the region.

Community Preparedness for Emerald Ash Borer

Cornell Cooperative Extension of Greene County was given a contract addendum to provide follow-up support to communities that were inventoried as part of the Community Ash Inventory Project. Audrey Kropp was brought on as Community Support Coordinator and worked with CRISP on final presentations to several communities, reaching out to offer one-on-one support in developing EAB Preparedness Plans.

Additionally, county-wide EAB Task Forces were developed for Ulster and Greene counties. Kick-off meetings were held, bringing together state, county, and local representatives as well as industry professionals to discuss the latest details of the local infestation, existing efforts, needs, and how best to share resources. This contract was extended into early 2012 to facilitate follow-

up meetings for each task force and additional work to raise awareness of EAB and the task force to important cooperators.



Development of Education and Outreach Materials

CRISP maintains a resource library of materials for distribution by partners. Additional materials developed/printed in 2011 include:



- New CRISP display panel for use at festivals (5 copies distributed to partners)
- A Community Ash Inventory display panel
- A 2-sided half-page CRISP handout with the Top Ten Priority Plants and EAB/ALB
 - Updated to a tri-fold brochure by Vibrant Creative's design team
- 15,000 ALB postcards, 10,000 ALB Brochures and 1,000 ALB posters printed
- 10,000 USDA Giant Hogweed Brochures printed

Information Table for Festival/Event

- 3/12 Margaretville Ice on Main Festival in Margaretville, NY
- 5/20 Margaretville Central Wellness Fair in Margaretville, NY
- 6/2 – 6/5 Mountain Jam festival in Hunter, NY
- 6/18 Platte Clove Preserve Community Day, in Elka Park, NY
- 7/14 – 7/15 ReLeaf Conference in New Paltz, NY
- 7/30 The Catskill Forest Festival in Margaretville, NY
- 8/6 Bataviakill Stream Celebration, in Ashland, NY
- 8/27 Shandaken Day in Phoenicia, NY
- 10/8 – 10/9 Taste of the Catskills in Delhi, NY



Workshops



- CRISP participated in a workshop hosted by NYSDEC on the EAB on February 15th for local and out of state professionals
- CRISP hosted an EAB Preparedness Workshop for 15 people on February 19th at Sullivan County Cornell Cooperative Extension
 - Participation from Catskill Forest Association, NYSDEC, and CCE
- CRISP hosted an EAB Preparedness Workshop for 29 people on March 5th at SUNY College at Oneonta
 - Participation from NYSDEC, Catskill Forest Association, CCE, and NYS Dept. of Ag and Markets
- CRISP hosted a Train-the-Trainer EAB/ALB Workshop on March 15th for 22 people at The Catskill Center in Arkville
 - Participation from NYSDEC and USDA ARS

Training Sessions



- CRISP participated in a training hosted by NYSDEC for regional ecologists and naturalists on emerald ash borer on March 9th
- CRISP provided an iMap Invasives and invasive species ID training for 22 members of the SCA Hudson Valley AmeriCorps Program on April 1st
- CRISP provided an EAB/ALB training for ~30 members of NYSDOT Greene County Maintenance Residency on April 22nd in their office in Cairo
 - Other residencies in DOT Region 1 were trained by NYSDEC
- CRISP hosted an iMap Invasives training on June 8th for 15 people
- SUNY College at Oneonta held training sessions on iMap Invasives on June 29th and July 12th for 12 volunteers through a CRISP contract
- CRISP provided a training on invasive species identification and surveying for ~30 boy scouts as part of a 120 mile trek from the Catskills to New York City on August 20th

Presentations

- **3/30 Ulster County EMC meeting** – presented on emerald ash borer and community preparedness to ~ 15 municipal environmental commission members in Stone Ridge
- **4/30 Upper Delaware Scenic Byway's Japanese Knotweed Seminar** – presented on Japanese knotweed and CRISP for ~ 30 landowners in Narrowsburg
- **7/8 New York State Invasive Species Council** – presented on CRISP initiatives for ~ 10 council members
- **7/20 Trout Unlimited Trout Waters Youth Camp** – introduction to invasive species for ~ 15 youth
- **7/23 Morgan Outdoors** – overview of CRISP top ten invasives ~ 4 landowners
- **8/27 Catskill Landowners Association Annual Meeting** – presented on CRISP initiatives for ~ 50 members and large landowners in the Catskills

- 9/10 **Delhi Landowners Association Annual Meeting** – presented on emerald ash borer preparedness for ~25 large landowners in the Delhi area
- 11/2 **Roxbury Central School Career Night** – presented on CRISP and invasive species for ~20 youth and parents
- 11/16 **Cornell Cooperative Extension In-Service** in Ithaca – presented on Community Ash Inventories, EAB Community Support and CRISP initiatives for ~ 40 people
- 12/20 **EAB and ALB Training Session** provided by NYSDEC in Walton – presented on CRISP efforts on forest pests particularly Community Preparedness Project for ~50 Delaware County planning, recreation and highway department staff

Other

- Ash Tree Tagging Event was held at Neahwa and Wilbur Parks in Oneonta NY on May 26th as part of EAB Awareness Week
 - Participation from Otsego County Conservation Association and NYSDEC

Control

Giant Hogweed

New detections of giant hogweed were made in the CRISP region in 2011. This is the first year sites were reported in Ulster County and new sites were found in Sullivan County. In the CRISP region there is also a known population in Otsego County. CRISP worked cooperatively with the NYSDEC Giant Hogweed Control Program to control sites in Ulster and Sullivan and raised awareness of the issue with a press release and radio interview.



Marsh Thistle

SUNY College at Oneonta worked on controlling early detection populations of marsh thistle as part of their contract. It was determined that clipping flowering heads or mowing before seed set are the most efficient and effective control techniques for small populations. All necessary permits were obtained for work done in wetlands.

Organizational

- CRISP adopted a Communications Plan (See Appendix) to ensure consistent messaging among partners.
- CRISP continued to develop the Strategic Plan. A complete final version is expected in early 2012.
- CRISP developed a Cooperative Agreement and expects a signed and executed version by late February 2012.
- CRISP contracted with the SCA program to host another 10-month SCA Hudson Valley AmeriCorps intern in 2012 and two 3-month conservation interns to help with media and outreach for spring-summer 2012.

Looking Forward

Prevention

- The Asian longhorned beetle public outreach campaign will fully launch in late spring to reach as broad an audience as possible in the Catskills. Timing is based on the emergence of adults for flight season. The combination of radio PSAs, mailings and poster placement should ensure that awareness will increase on this issue.
- A new initiative to start a coordinated boat steward program in the Catskills in 2012 should prove to increase the ability to raise awareness of aquatic species transport and help prevent the spread of many aquatic hitchhikers.

Early Detection and Rapid Response

- A coordinated early detection network will be established in 2012 to ensure that all reports of new species detections coming in from each county are verified and reported in the proper way.
- An early detection plan for mile-a-minute vine will be developed to ensure that a protocol is in place to find encroaching populations as early as possible to increase the chances of exclusion from the region.

Education and Outreach

- With the added support of two 3-month interns to assist with media outreach and festival attendance, direct outreach efforts by CRISP in 2012 are likely to increase greatly. Planned projects include interactive displays using iPad technology, surveys of festival attendees' knowledge, invasive plant ID videos and more.
- The Community Ash Inventory Project and the Emerald Ash Borer Community Support Project will continue in 2012 reaching even more communities. Whitney Hill will be

taking over the coordination of inventories targeting communities in Delaware, Sullivan, Otsego and Schoharie counties and Audrey Kropp will continue her work as Community Support Coordinator.

- CRISP will be working with other PRISMs and partners on raising awareness of problems associated with feral swine.

Control and Monitoring

- Giant hogweed will be a greater priority in 2012 due to the increased number of sites known in the region. A giant hogweed management plan will be developed to coordinate efforts for all partners working on this plant.
- Plans are in place for four demonstration projects that will show best management techniques for controlling invasives and restoring sites in a riparian, upland forested, aquatic, and landscaped environment.

Organizational

- The CRISP Strategic Plan, which outlines objectives and strategies for the next five years has undergone a series of revisions and will be finalized in early 2012.
- The CRISP Cooperative Agreement, which outlines the expectations of the partnering groups, was finalized in 2011 but still requires several signatures to be executed .
- Plans are in place to complete a forestry management plan in 2012.

Appendix

Communications Plan for CRISP 2011

Vision

CRISP is well recognized throughout the region and is the go-to place for regional invasive species information and action.

Mission

To increase CRISP visibility throughout the region and effectively promote CRISP programs

Goals and Objectives

Goal 1: Establish a base of aware and engaged citizens (volunteers) to participate in invasive species management.

Goal 2: Deliver specific and effective messages to target audiences in order to meet CRISP's priority objective: prevention.

Objective a: Gain buy-in from all CRISP partners by the end of June 2011.

Objective b: Maintain continuity in messaging among partners for all outreach efforts in 2011.

Goal 3: Increase awareness of CRISP priority species among a number of audiences and knowledge of their locations within the region to promote early detection and rapid response.

Objective a: All partners promote awareness of Asian longhorned beetle as the 2011 priority pest species to target audiences as well as the emerald ash borer.

Objective b: All partners promote awareness of the 10 priority plant species through their outreach to target audiences in 2011.

Objective c: All partners promote iMap invasives to target audiences

Opportunities and Challenges

CRISP has a powerful network of dedicated partners that are already delivering these messages. Outreach is done through education programs, festivals and workshops. Many of our

audiences are very receptive to the information on invasive species that we provide and are already engaged.

Some audiences are more difficult to reach, especially across the broad geographic area covered by CRISP (Otsego, Schoharie, Delaware, Sullivan, Ulster NW of Route 209, Greene within the Catskill Park, and Orange W of 209). Coordination among partners is also difficult to maintain with partner's busy schedules often not permitting much time to meet.

Messages

Goal 1 *Establish a base of aware and engaged citizens (volunteers) to participate in invasive species management.*

Value Message: Invasive species cause a host of ecological, economic and human health problems. Citizens have the responsibility to become educated, make choices and take actions to mitigate these problems.

Landscape with native plant species.

Target Audiences: Landowners, landscapers, nurseries, greenhouses

Tools:

- Workshops showing alternatives to IS (Greene Cty. CCE is planning one for July 2011)
- Literature – Mistaken Identities, other handouts
- Webpage with links – To Be Developed
- Powerpoint Presentations – To Be Developed
- Native Plant Nurseries
- Demonstration gardens – To Be Developed

Become a Citizen Scientist!

Target Audiences: Youth groups, garden clubs, retirees, teachers, Master Forest Owners, Master Gardeners, unemployed

Tools:

- Education programs – advertise existing opportunities through existing programs
- Webpage – To Be Developed
- Handouts
- MFO/MG networks

- Festival outreach

Goal 2 *Deliver specific and effective messages to target audiences in order to meet CRISP priority objective: Prevention.*

Value Message: The best way to deal with invasive species is to prevent them from even entering an area. Helping to prevent introductions by stopping the primary vectors of some serious known invaders will allow the Catskills to remain safe longer.

Don't move firewood (Alt. Burn it where you buy it)

Target Audiences: Wood cutters, firewood dealers, recreationists, woodstove dealers, second homeowners, campgrounds, homeowners, chimney sweeps (woodstove maintainers), loggers, foresters, youth camps

Tools:

- TNC's Don't Move Firewood campaign materials
- USDA's Burn it where you buy it campaign materials
- DEC's firewood regulations
- Lawn signs – CCCD can supply
- Festival outreach
- TNC/CRISP Campground outreach
- DEC campground outreach
- Reserve America website
- Information packets for woodstove dealers and maintainers – To Be Developed
- Workshops – Forest pest workshops by partners

Clean Gear, Clean Water (Alt. Stop aquatic hitchhikers)

Target Audiences: Boaters, lake associations, anglers, pond owners, bait shops, campgrounds/CONY, academic institutions, youth camps

Tools:

- Rack Cards from Trout Unlimited
- Boat Launch Stewards – To Be Developed
- Webpage – To Be Developed
- Aquatic Species Inventory – Underway by Bill Harman

Goal 3 *Increase awareness of CRISP priority species among a number of audiences and knowledge of their locations within the region to promote early detection and rapid response.*

Value Message: Identifying our priority invasive species early will give us the best chance to take appropriate actions to respond to the infestation. By having members of the public who are able to identify the priority species, we are much more likely to find them early.

Know how to identify the Priority Plants and Priority Pests of CRISP!

Target Audiences: Master Forest Owners and Master Gardeners, youth groups, students, volunteers, interested citizens

Tools:

- Ash tree ID sheet
- Master Forest Owner projects
- Top 10 Invasive Plants list
- Powerpoint presentation
- CRISP Brochure – To Be Developed
- Festival displays
- Training workshops – can be tied in with iMap trainings
- Fact sheets – To Be Developed
- Webpages - To Be Developed
- Outreach materials on EAB/ALB – We’ve got lots!!!

If you see it, report it!

Target Audiences: Master Forest Owners and Master Gardeners, youth groups, students, volunteers, interested citizens

Tools:

- iMap Invasives
- BeetleDetectives.com
- DEC’s ash report form
- CCE Early Detection Network
- Giant Hogweed Hotline
- EAB Hotline
- ALB Hotline
- CRISP coordinator