

Purple loosestrife

NLN & RIVER FRIENDLY WORKSHOP

Search and Destroy Tactics for Invasive Plants

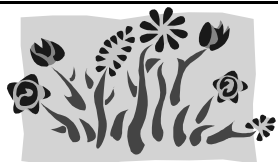
September 22
9:30-11:30

at the
Stony Brook Reserve
31 Titus Mill R
Pennington NJ 08534

Ken Thoman, from the Monmouth County Park System

Ken will present helpful control tips, techniques and costs for residents, local land trust organization, open space committees and municipal public works officials.

Register with
Chris Altomari at
609-737-3735
Caltomari@thewatershed.org



Invasive Plants - a Spreading Menace

Are local forests and meadows in your community healthy?

Does multi-floral rose, autumn olive trees, phragmites, garlic mustard, or purple loosestrife

dominate the landscape?

Is Japanese barberry or stilt grass plants carpeting the floors of local woods?

Dr. Michael Van Clef, from the Nature Conservancy spoke at the July 13th workshop describing the relentless and pervasive *battle of survival* against non-native invasive plants throughout New Jersey's landscapes.

The program helped residents to recognize various invasive plants; understand their impacts to ecosystems; and provided ideas to improve backyard practices to address these concerns.

Invasive plants are introduced to an area outside of their natural range and grow densely over large areas and out-compete other native species. Some invasive plants were introduced accidentally while others were purposefully introduced for commercial reasons.

Invasive plants are successful due to:

- *Greater growth* rates for roots, stems, trunks and leaves;
- *Greater reproductive capacities* to generate and disperse significant seed volumes;
- *Greater tolerance* of environmental conditions; and a
- *Lack of natural predators* who do not prefer them as a food source.

Backyard tips to control invasive plants are provided on page 3.

Damages From Invasive Plants

Invasive plants can significantly alter a native ecosystem. Fragile native plants like sedges can not compete for critical space, sunlight or nutrients, and can be overrun by the dominant purple loosestrife. These sedges are important sources of food, shelter and nesting areas. Their loss in turn reduces the viability of turtles, ducks or other wildlife that depend on them.

In time, invasive plants can dominate a parcel resulting in a monoculture or less diverse ecological setting. For example, several species of vines can overwhelm tree canopies, killing the tree and other understory, and stopping the normal growth of successive plants.

Disturbances Promote Invasive Plants

A quick tour of the Stony Brook reserve demonstrated how pervasive these invasive plants can be. Edge areas, along the boundaries of forests or meadows are prime targets for multi-floral rose and stilt grass to take root and spread. More of these "edge areas" are created each time a wooded area is disturbed or fragmented by development. Tree clearing and soil grading can increase the availability of sunlight, change drainage conditions, and provide fertile areas for invasive plants to germinate. Over-grazing of native plants by deer, geese or rodents can also promote invasive plants to spread.

Human activity is the prime action that spreads invasive plants. Therefore, public education is key to address this concern. Stony Brook would like to thank The Nature Conservancy, The Whole Earth Center and the Small World Café who helped sponsor this workshop.



The AmeriCorps Watershed Ambassadors

The Ambassador work schedule can include:

1. Biological monitoring and visual stream assessments to identify impaired areas and potential sources;
2. Conducting Environmental Educational and Training programs for local schools, scouts, garden clubs and other civic associations;
3. Assisting in tree plantings, stream bank restorations, and trail clearing, and cleanups; and
4. Partnering with towns on special projects.

To learn more about this program please contact Christine Hirt, Program Manager at 609-292-2113 or christine.hirt@dep.state.nj.us

Visit the web at www.nj.gov/dep/watershedmgt/ambassadors_index.htm



AmeriCorps Ambassadors Serving Our Communities

Each fall new AmeriCorps Watershed Ambassadors are assigned by NJDEP to study the streams and watersheds in our communities.

This program is federally funded and coordinated by the NJDEP—Division of Watershed Management. The Ambassadors help assess water quality, and organize local events to raise awareness about water issues and improve stream corridors. The following examples illustrate how their efforts can help.

Over a pot luck BBQ, Jeff Gray informed the Lawrence Township Environmental Committee about his Americorp work in the Assunpink Watershed. Using maps, aerial photography, and data tables Jeff addressed these questions:

1. *What are the trends in water quality over the years?*
2. *Were problem areas of erosion, sources of litter, or non-point pollution source (NPS) identified during the Stream Corridor Assessments?*
3. *What issues should be addressed by the town and the next Ambassador?*

The Environmental Commission may incorporate this data in the new Municipal Stormwater Management Plan, that is required under the Stormwater Rules.

Adam Hale just completed his term as the AmeriCorps Ambassador assigned to the Stony Brook-Millstone Watershed (WMA 10). The big highlight of the year for Adam was a cleanup along the Delaware & Raritan Canal. Adam organized the event with Franklin Township officials, and over 120 volunteers came out and 160 bags of trash were removed.

Next Steps

This Fall you may want to invite the new Watershed Ambassador to a township meeting to discuss their work:

- Review the existing data collected for your community.
- Understand their responsibilities for the upcoming year.
- Identify projects where you can work together and use the data they collect.

For more information contact Christine Hirt at christine.hirt@dep.state.nj.us

Helping You Preserve Local Resources

Bountiful farmlands, scenic streams and diverse woodlands will disappear to development unless local conservation strategies are instituted.

Important tools in this battle to maintain and minimize impacts to your local resources include a well written Master Plan, Conservation Plan and Environmental Ordinances.

Stony Brook hosted workshops this spring on the importance of updating the ERI and the Conservation Element of your Master Plan. Based on the recommendations from our highly respected panel of speakers, Stony Brook has developed a guide entitled, *Preserve Local Resources with a Conservation Plan.*

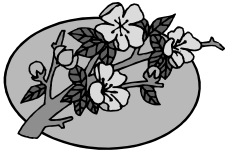
This Conservation Plan guide can help you understand:

1. How to get started on the Plan update.
2. What information can be included in the Conservation Plan.
3. How a Conservation Plan can guide appropriate development.
4. How this Plan can support ordinances that protect local resources.

Visit our website and share the guide with your municipal leaders.

www.thewatershed.org/WSM/library.html#guide

Helping Native Plants Hold Their Ground



Controlling invasive plants will help you become better stewards of important open space lands and habitats.

Maintaining a diverse habitat of native plants increases the viability of wildlife that relies on these plants.

Backyard Suggestions

Residents are encouraged to maintain meadows, forests and no mow areas on their properties, especially along stream corridors. These areas provide critical wildlife habitat and help reduce runoff and pollutants from entering local streams. However, if invasive plants are widespread they should be controlled. But, before you start cutting, you should:

- Identify what you want to protect, such as native plants or the wildlife that depends on them, like butterflies.
- Prioritize what invasive plants you want to control. The task is labor intensive and can be costly.

Controlling invasive plants can require mechanical removal, chemical spraying and biological techniques, such as introducing beetles. Sometimes its best to combine these techniques to achieve results.

Barberry Removal Case Study

Removing invasive plants can be difficult, costly and back-breaking work. For example, The Nature Conservancy spent 85 man-hours to clear barberry shrubs from a one-acre wooded plot. This was equivalent to \$1,200. Using a three-man team, one person raked back the plant; one cut the stem, and third applied round-up herbicide to successfully remove the plant.

This technique might also work to control multi-floral rose.



Restoration Concerns

Once you have cleared invasives, it is important to realize that these cleared lands can provide good germination sites for invasive plants to return. It is often necessary to restore native plants, trees and shrubs to these cleared parcels.

Restoration of native plants should also include measures to protect these new young plants from over grazing by deer, geese and rodents.

Stony Brook's River-Friendly Resident Program

Stony Brook offers a program that can help! The River Friendly Resident program provides one-on-one assistance to local residents to maintain responsible, healthy, and beautiful yards for their families, and to preserve natural resources in our watershed. Participating residents receive a site visit, free guidance and a certificate.

The River Friendly program provides information on environmentally friendly practices in landscaping using native trees and shrubs, and information that highlights environmental impacts associated with typical day-to-day activities.

By joining the River-Friendly Program you can help:

- ◆ Create a healthier living and playing environment and reduce family and pet exposure to pesticides and other chemicals.
- ◆ Produce a beautiful and environmentally responsible yard.
- ◆ Protect surface and ground water drinking sources.
- ◆ Reduce the amount of chemicals entering our environment.
- ◆ Protect natural resources and native landscapes.

For more information view our website at www.thewatershed.org/WSM/riverfriendly.html

Or contact Amy Weaver at 609-737-3735

Useful Resources for Invasive Plants

Stony Brook-Millstone Watershed Association
www.thewatershed.org

The Nature Conservancy
<http://nature.org/initiatives/invasivespecies/about/index.html> and <http://tnc-ecomangement.org/Weeds/>

Invasive and Exotic Species of North America
www.invasive.org/

The St. Louis Declaration On Invasive Plant Species
www.centerforplantconservation.org/invasives/codesN.html

NJ Conservation Foundation
<http://njconservation.org/>

National Invasive Species Council
www.invasivespecies.gov

Federal Grants & Funding for Invasive Species Mgmt
www.invasivespecies.gov/toolkit/grants.shtml

NJDEP An Overview of Non-indigenous Plant Species in NJ
www.nj.gov/dep/parksandforests/natural/heritage/InvasiveReport.pdf

NJ Division of Fish and Wildlife
www.nj.gov/dep/fgw/

Rutgers University Cooperative Extension
www.rce.rutgers.edu/njriparianforestbuffers/nativeALL.htm

U.S. Department of Interior-Aquatic Nuisance
<http://anstaskforce.gov/>

U.S. Fish and Wildlife
<http://invasives.fws.gov/>



J. Seward Johnson, Sr.
Environmental Center
31 Titus Mill Road
Pennington, NJ 08534

Watershed Watch
For Members of the Natural Lands
Network and Concerned Citizens

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**Natural Lands Network Members
Getting Involved !**

Below are several workshops and events that we hope you will attend.



- Aug 14 Butterfly Day and Volunteer Appreciation Day**
Sat 11-3 pm Come and enjoy hikes, crafts and fun activities on our trails and in the Butterfly House. \$5 per car.
 - Aug 26 River Friendly Schools**—Join our workshop for educators and learn to empower students to become resource stewards at your school facility. The workshop provides hands on activities; sets design goals; and explains how to enlist support from the administration and community. Registration \$25.
 - Sep 22 Controlling Invasive Plants** -Free Stony Brook workshop Wed 9:30-11:30 am. Ken Thoman of the Monmouth County Parks will discuss strategies and cost to manage large open space tracts. Register with Chris at 609-737-3735.
 - Oct 2 Annual Watershed Fest**
Mark your calendars to ensure you don't miss this exciting evening dinner and auction. We are also looking for volunteers to help with decorations, donation items, and promotions. Call Candy at 609-737-3735 to help.
- The State Plan Cross Acceptance Meetings** are being held throughout the summer. Contact your County and participate in these discussions. Comments can be submitted to DCA until mid September.

Join the NLN Listserve:
NaturalLandsNetworksubscribe@yahogroups.com