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# ACROSS THE WATERSHED

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Summer 2006

The Great Swamp Watershed Association

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## DEP Accepts Stream Team Data

by Kelley Curran, GSWA Stream Steward

Since 1998, the Watershed Association Stream Team volunteers, in conjunction with the Ten Towns Great Swamp Watershed Management Committee, have been monitoring the water quality and quantity of the five main tributaries of the Great Swamp: the Black, Loantaka, Great, and Primrose Brooks, and the Upper Passaic River. The primary goal of the Stream Monitoring program is to measure the volume of water, nutrients (phosphorus, nitrogen, nitrites and nitrates) and sediments flowing into the Great Swamp National Wildlife Refuge. The program is performed under the guidance of Princeton Hydro, LLC in Ringoes, NJ



The Stream Team's work formed the basis for the development of the first-ever water quality standards for the Great Swamp watershed, released in June 2002 as the *Great Swamp Watershed Water Quality Monitoring Report*. These water quality standards will help scientists, policy makers, and local officials protect the high quality streams from further degradation, as well as prioritize the more degraded streams for restoration efforts. The long-term goal is to improve the overall water quality that sustains the flora and fauna of the Great Swamp National Wildlife Refuge and the Passaic River, which serves as a source of drinking water for 1.2 million New Jersey residents.

This seven years of data (all of it collected by volunteers) was submitted to NJDEP in July 2005. In addition, quarterly testing of Loantaka Brook was also instituted, using the same parameters, plus alkalinity, chloride, sulfate, calcium, magnesium, sodium and potassium. (Loantaka Brook is the most impaired of the streams in the watershed.) This data was submitted to the DEP in February 2006. Also submitted was a Quality Assurance Project Plan for the stream monitoring activities.

Since the DEP does not have the budget or manpower to monitor NJ streams in-house, reliable, accurate monitoring programs by third parties allow them to gather data that can be used to identify problems and justify changes in policy. Data may be used to confirm an existing stream impairment; refine the extent of an existing impairment; list a new impairment; or, remove a stream from the impaired list.

*In both cases we have received notice from the DEP that our data has been accepted as **reliable** and **accurate**. This is a major validation of the Stream Monitoring program and our years of effort. Congratulations to all our Stream Team volunteers and many thanks!*

## Preparations Continue For 25th Anniversary Event

Keep your calendars free for the evening of November 17th, 2006. That night is the date of the GSWA 25th Anniversary Event, "A Salute To Silver."

The keynote speaker will be former Governor Thomas Kean. Other dignitaries are being added to the list as this issue goes to press.

The celebration will take place at the Brooklake Country Club in Florham Park. Heading the Event effort for GSWA is Board of Trustees Secretary and Development Committee Chair Ann Essner of Morris Township. Honorary Co-Chairs are Nelson and Nancy Schaenen of Madison and Bill and Nancy Conger, formerly of Millington.

More details on this exciting event will be released over the next several months. For more information, contact our staff coordinator for the event, Patsy Clew, at 973.538.3500 x21.



**25 Years of Protecting  
Water & Land In Your Town!**

## New Lease On Life

The Watershed Association has formalized its relationship with the National Park Service in the form of a long-term lease on the Reynolds House. Look for a sign at the entrance to the driveway any day now!

# Goldman Sachs Digs In at the Great Swamp's Conservation Area

By Stephanie Bursset

It seems an odd picture: twenty-five Goldman Sachs employees, ankle-deep in mud, soaking wet, and carrying shovels, planks of wood, and potted plants into the woods. After all, these employees work in the Manhattan offices of one of the world's premier investment banking firms; agricultural labor most likely isn't their specialty.

However, the volunteers from Goldman Sachs gladly took up their tools and eagerly accepted the challenge of helping to preserve a six-acre area within the Great Swamp Watershed Association's Conservation Management Area (CMA) in Harding Township. Their day of service is part of the company's Community TeamWorks program. The investment bank makes it part of its mission to give back to the community through various projects and organizations such as Habitat for Humanity, local soup kitchens, and state and city park restoration in New York and New Jersey.

Despite the pouring rain, the volunteers enthusiastically learned about ecologically significant work such as invasive species removal and installation of beneficial native species, including witch hazel, highbush blueberry, Virginia sweetspire, and pussy willow. There was also maintenance work to be done: rebuilding and installing boardwalks for visitors and deer fencing, the latter designed to keep out the ever-present and destructive white-tailed deer.

The importance of upkeep of the area stems from the fact that it serves as an educational tool to inform local residents about the need for, and importance of, ecological restoration on land throughout the watershed. Invasive species, both plant and animal, disrupt the watershed's delicate ecosystem. For example, according to the National Park Service, both tartarian honeysuckle and multiflora rose are aggressive species with few natural enemies in this area. They are able to out-compete native species, eventually edging them out and destroying diversity in the Swamp.

Nothing could dampen the spirits of the people who volunteered their time to help maintain the CMA. At one point, a lost BlackBerry device was discovered in the mud, and the owner good-naturedly accepted the teasing of his fellow co-workers. Another

volunteer announced that he was "fired up" to use one of the big, orange plant wrenches helpful in removing larger invasive plants.

Volunteer Linda Martino, who assisted with the planting of native species, has had previous experience as a volunteer at Prospect Park in Brooklyn, New York, and a food bank in northern New Jersey. However, she had never done any kind of conservation work, but said that she felt that this experience was particularly worthwhile for her. As a resident of Bernardsville, she chose to

work at the Great Swamp project because the watershed is local, and therefore an important part of her life. Martino said the Conservation Area is "ten minutes away... it's part of my community."

John Cembrook, who worked on boardwalk maintenance, also found the day to be rewarding. During the lunch break, in which the crew huddled under a tarp and attempted to dry out, Mr. Cembrook said, "I think folks learned some things" about the Great Swamp Watershed. He was impressed with the organization of the workday, and glad that "you could see your progress" as the day went on.

Over 6,000 hours of community service have gone into restoring and preserving this conservation area since 1998. The Goldman Sachs volunteers worked hard during the day in terrible conditions, but the overall attitude was overwhelmingly positive. As the group left the site to return home to hot showers and steaming cups of tea, the volunteers could be heard to say that they wanted to return to the conservation area to see if their native plants were thriving or to introduce their children to the Great Swamp watershed.

Hazel England, director of Outreach and Education for the GSWA, had this to say about the benefits of the workday: "When, as with Goldman Sachs, [a company] comes with 25 volunteers and with financial support, you can see why we feel that they bring so much to the CMA. The corporations get a day of teambuilding, give back to their local community and do some corporate philanthropy, so it is an arrangement that offers a lot for both sides."

*Stephanie Bursset is a summer intern at GSWA. This fall she will be entering her sophomore year at Princeton University. Her brother Christian was an intern here in 2005.*



*Neither rain nor... more rain keeps these people indoors. A dedicated crew of volunteers from Goldman Sachs works in a downpour to lay boardwalks at the CMA, then gather under a tent for a lunch break and a brief respite from the weather.*



## From the Desk of the Executive Director

*Across the Watershed* is a quarterly publication of the Great Swamp Watershed Association. The Watershed Association is a membership-based non-profit that protects drinking water, and preserves land to maintain the natural beauty and enhance the livability of *your* town.

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### Across the Watershed

**Editing & Layout:** John Malay

#### Contributors:

Stephanie Burset  
Patsy Clew  
Gene Fox

With Julia Somers' recent departure from the Watershed Association, we thought it would be an excellent time to review where we are as an organization and where we are headed.

We achieve an important milestone in 2006: *25 years of protecting water and land in your town!* We are very proud of our past heritage and our recent accomplishments. In 2005, the board and staff developed a 5-year strategic plan and reached agreement on our mission and vision, and our goals and objectives. This work brought clarity and helped us to focus our efforts on what we do best--protecting and preserving our water and land and fostering environmental awareness and education for all ages.

In 2005 we partnered with other agencies to save the 72-acre Kirby property. We provided critical testimony before the NJDEP regarding the Abbey Woods at Delbarton's request to build a Continuing Care Retirement Community on environmentally significant land. This issue is a critical test of all New Jersey's land use planning strategies. If this land -- with its documented and significant historical and environmental sensitivity -- cannot be saved, no land in New Jersey can be saved.

We're continuing to implement the restoration and management plan for our 50-acre conservation management area in Harding Township. In 2005 we received a \$27,000 grant from the US Fish & Wildlife Service to create the largest deer enclosure in the area, and with this grant and the help of our corporate partners, we have made amazing progress in the ongoing restoration of the property. All of this work will have a direct impact on the quality of the water in the area.

Our stream-monitoring work -- done by our "stream team" of volunteers -- continues to play a major role in protecting the quality of your water. Seven years of our monitoring data was submitted to the DEP and has been accepted under their very stringent guidelines and will be used by the DEP for evaluating the health of our watershed streams. (See related article on page 1.)

We've expanded our environmental education, and we are focusing on leveraging our educational reach by teaching the teachers. Thanks to your support, we have reached hundreds of teachers and thousands of students to foster environmental awareness and educate the next generation. *This year alone, we will train over 250 teachers.*

For the third consecutive year we have received the highest rating from Charity Navigator, the largest independent evaluator of charities -- which indicates that we have managed the organization in an efficient and effective manner.

However, we know that we cannot afford to rest on our past achievements. Development pressures are intense and open space is disappearing at an alarming rate in our watershed. We need to continue, and even expand, our work to make sure that the things we love about our region are preserved today and for future generations.

We will continue to strive to be recognized as the "go to" organization when issues of land use and environmental impact arise. We will continue to build on our strong scientific and technological presence to be the most recognized and credible environmental agency in the area concerning water safety and land preservation.

In order to continue the important work that we are doing, we know we need to increase funding. We are focused on broadening community stewardship and increasing membership. We are working hard to increase funding from our corporate council and from foundations. But like most non-profits, most of our funding comes from people like you.

We are very grateful for your belief in our organization's mission and for your continued support, which allows us to continue and expand our programs. One of our primary goals is to make sure that you are kept abreast of what we are doing and we in turn understand what concerns and issues you have.

In the months and years ahead I hope you will continue to help the Great Swamp Watershed Association to realize its vision. Our promise to you is that we will continue to work hard to earn your support.

*Ruth Kerkeslager*

Acting Executive Director

# Event Calendar

## What's Happening In the Great Swamp Watershed

Following is a highly selective listing of events and activities offered to the public by private and county agencies that have facilities within and near the Great Swamp watershed. Many of these organizations offer far more activities than those listed, including day and weekend trips to other areas. Call the numbers listed for complete information.

In addition to programs and activities, many of the agencies are also staffed by naturalists and maintain extensive hiking trails, nature-center displays and exhibits, and book sales. For many listings, advance registration is required; for all, it is advised. To register, to receive additional information, or for directions, call the telephone numbers given below.

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### GSWA Events

Cost \$8 per member \$10 per non-member, children under 5 free. All children welcome.

Register at [www.greatswamp.org](http://www.greatswamp.org) or contact Hazel at [hazele@greatswamp.org](mailto:hazele@greatswamp.org) for more info.

#### Moonlight Hike

Although we don't guarantee the moonlight, there will be plenty of nature to learn about on a night hike around the watershed. We may hear owls, Crickets or other night noises, perhaps even coyotes calling! Play some games to learn more about night senses, and revel in being out after dark without a flashlight!

*Friday, October 6, 6 - pm, Cross Estate, Morristown National Historical Park*

*Monday, December 4, 6 - 8 pm, Environmental Education Center, Basking Ridge*

#### Fall Wildflower Hunt

Fall flowers allow great looks at late insects and allow a chance to learn some floral geography! Join us for a leisurely walk to spot late blooms. We will concentrate on learning how to identify these wildflowers by their characteristics as well as folk and wildlife uses. Leave with a knowledge of at least ten of the common Fall bloomers.

## GSWA Thanks Congressman Frelinghuysen

On behalf of the Great Swamp Watershed Association, the Board of Trustees and Staff would like to express our deep appreciation to the Honorable Rodney Frelinghuysen for the inclusion of an appropriation of \$1 million for the Great Swamp National Wildlife Refuge (NWR) in the FY 2007 Interior Appropriations Bill that was recently approved by the House.

Great Swamp NWR and northern New Jersey is fortunate to have a champion in Congress. Appropriations secured in recent years for the refuge have been used to acquire lands to improve visitor access and enhance protection of wetlands, habitat, and other critical natural resources. The final six acres of land of a 50-acre tract in Harding Township was acquired earlier this year for a new visitors center at the refuge.

Thank you once again, Congressman Frelinghuysen, for your successful and continuous work in support of Great Swamp NWR.

*Sunday, September 24, 10am-12 noon at the GSWA Conservation Management Area, Harding.*

### Fall Nature Detectives Hike



Fall is a great time to observe animals as they go about their search for food and live their daily lives. It is often easier to look for signs of wildlife than to see the animals themselves. Celebrate the fall by playing Nature Detective as we search for tracks and scats, nibbles and nests of some of the denizens of the swamp. Event will take place rain or shine.

*Saturday, October 21, 10 am - 12 noon. Meet at Pleasant Plains Road, Great Swamp National Wildlife Refuge.*

# Corporate Good Neighbors Help Support the Watershed Association

by John Malay

As the Great Swamp Watershed Association moves onward into its second quarter century we should recognize some of the partnerships that have enabled our success. Prominent among these are our relations with local and regional corporations. These companies are “Good Neighbors” to the Watershed in which they are located and where many of their employees live and raise their families.

Morris and Somerset Counties are home to some of the most prosperous and successful companies in the world, running the gamut from telecommunications to pharmaceuticals, home products, food, media, energy, shipping, financial and insurance services, and so forth.

The Watershed has nine of these companies as members of our Corporate Council: **Honeywell, Integrated Communications Corporation, Kings Super Markets, Maersk, Peapack Gladstone Bank, Pfizer, PSEG, Schering-Plough** and **Wyeth**. In addition to providing funding for critical programs, these Corporate partners provide employee volunteers and in-kind support to the Watershed Association.

**Schering-Plough** employees from Summit and Springfield observed National Volunteering Week by hosting a visit from GSWA staff as well as other local non-profits. They learned about our programs and volunteer opportunities and had the chance to sign up as members.

**PSEG** held an annual Earth Month Environmental Fair at their corporate headquarters in Newark. Once again the Watershed Association staff took that opportunity to promote our programs, goals and mission, as well as educate PSEG employees about the Watershed and what it has to offer.

**Maersk** used its annual “National Bring Your Child To Work Day” to provide an opportunity for environmental education. GSWA staff came and ran hands-on activities for learning about clean water to more than 60 children.

Other corporations help out too, often with employee volunteers and special events. A number of groups have lent their time and muscle to our 50-acre Conservation Management Area (CMA) in

Harding Township. For example, **Goldman Sachs Community TeamWorks** volunteered 45 employees last May and June and did so again with two similar groups. (See related article on page 2.) Their labor and financial support help the CMA restoration and management plan become a reality, including the creation of a 23-acre deer exclusion area for the re-introduction of native plant species.

Other work groups at the CMA included **Starbucks, National Starch, Sanofi-Aventis, Smith-Kline Beecham, Parkway Insurance** and **Somerset County Young Professionals**.

**Whole Foods** market in Madison sponsored a “5% Day.” Whole

Foods is a company committed to the environment, and on Wednesday, April 19th, 5% of all proceeds went to the Watershed Association. Whole Foods employees also trekked out to the CMA for a day of clearing, trimming and removal of invasive plant species.

One of the newest and most exciting projects being undertaken by the Watershed Association is the long-term restoration of Loantaka Brook. Severely impacted by development and a sewage treatment plant, Loantaka is still a significant feeder stream into the Passaic River, a major source of drinking water for people throughout the northern portion of the state. With corporate support and government grants GSWA can begin the task of

improving the quality of this critical component to our water supply. In addition, we are working to organize a “Bio-Blitz” on this stream in 2007 to record just what plants and animals call Loantaka Brook “home”.

Education and outreach, water quality monitoring, habitat restoration: all of these Watershed Association activities benefit from the generous support of our corporate neighbors. Without it, our efforts would be severely curtailed.

For information on how your company can become a “Good Neighbor” to the watershed and the Watershed Association, contact GSWA Development Director Ruth Kerkeslager at 973-538-3500, ext. 18 or at [ruthk@greatswamp.org](mailto:ruthk@greatswamp.org).

## Our Corporate Council

**Honeywell**

**Integrated Communications Corporation**

**Kings Super Markets**

**Maersk Inc.**

**Peapack Gladstone Bank**

**Pfizer**

**PSEG**

**Schering-Plough**

**Wyeth**

# Watershed Watch--Environmental Hot Spots

## Bernards Township

### “Green” Ordinances

Reflecting a new “green” philosophy, the Bernards Township Committee has now passed three environmentally motivated ordinances that change the method of calculating lot potential of new subdivisions, apply state stormwater management rules to a wider spectrum of home construction work, and provide some zoning relief to most homeowners of undersized lots while not exempting new construction or “bash-and-build” projects on undersized lots from full review. Next, the committee will be working to improve the existing stream buffer ordinance.

### Oversize House Rejected Twice

The Zoning Board of Adjustment rejected for a second time an application for what neighbors consider an oversized house on an undersized vacant lot located within the watershed, in one of the oldest subdivisions in the township, Homestead Village. In opposing the project, which would have been twice as large as many of the existing homes in the neighborhood, neighbors cited the township's 2003 Master Plan goal of neighborhood preservation.

The original application, for a 3,273 square-foot house, was rejected by the board in 2005 and the applicant, Boulder Construction, filed suit. As part of a settlement of that suit, the board agreed to a public hearing of a slightly down-sized proposal for a 3,006 square foot house. In June the board, facing continued strong neighborhood objections, again rejected the proposal, leaving the settlement in disarray.

Development in the watershed continues in Bernards, with several subdivision projects moving forward near the Passaic River along South Maple Avenue, which will substantially complete the transformation of that early township road. In May a two-lot subdivision, carved out of an environmentally constrained property along North Maple Avenue, was approved, largely due to the fact that small tributaries, such as Penns Brook, which feed into the Passaic from the west do not carry the Category One designation that similar tributaries have to the east of the river.

However, the new changes to the zoning ordinances (see above) did lessen the impact on neighboring homes and resulted in an improved lot layout and better protection for the conservation easement on the property.

*Ann Parsekian*

## Chatham Township

### Stream and Wetland Areas Eyed by Developers

Developers are testing NJ Department of Environmental Protection (NJDEP) wetlands protection rules on two properties with Category One streams in Chatham Township.

This past March, builder Ronald Gunn applied to the DEP for a general permit to fill wetlands at 446 Green Village Rd., a 5 1/2 acre lot. He proposes to clear trees and vegetation, create new impervious surfaces, and expand existing structures on a floodplain. The existing house lies within a Category One, 300 foot stream buffer, and the proposed expansion would be into a floodplain within 150 feet of the stream. The parcel is bounded on two sides by Morris County parkland and is suitable habitat for wood turtle, blue-spotted salamander & barred owl according to the NJDEP Landscape Project.

Also in March, commercial real estate development corporation Reckson applied to the DEP for a Letter of Interpretation to establish wetlands boundaries at its 114 acre property on Woodland Road adjacent to St. Hubert's. The property contains wetlands, and is potential wood turtle and barred owl habitat. Some trees are suitable for Indiana bats. There is a Category One stream requiring a 300 ft. buffer flowing through the southwest corner.

### Shunpike Park Environmental Report

The Chatham Township Committee commissioned an environmental report on the Shunpike woodlands property, before they went ahead and tried to build athletic fields on the site.

The results indicate that the location of wetlands and sensitive streams preclude the sort of development necessary for athletic facilities or active recreation. The area drains into the Black Brook subwatershed of the Great Swamp Watershed. Black Brook is already heavily impacted by development and non-pointsource runoff from Fairmount Country Club as well as residential yards.

The property will still offer plenty of opportunities for passive recreation and relaxation, and can remain as attractive greenspace in a community rapidly filling up with residential development.

*Kathy Abbott & John Malay*

## Morris Township

### Abbey Woods at Delbarton

In a significant milestone to our fight against this project, the NJ DEP accepted a Wastewater Management Plan (WMP) for Morris Township (years overdue) but insisted that the Plan *not* contain the provision for a sewer line to the property in dispute.

This means that the DEP is going to make a separate determination as to whether or not Morris Township should run sewers into the project area.

By bifurcating the issue, the DEP may be sending a message that while they agree with the remainder of the WMP, they do not agree with the sewer line to Delbarton.

Without sewerage, the Abbey Woods project cannot be built as planned, if it can be built at all. (See *To Sewer or Not To Sewer* in the Winter 2006 newsletter.) In addition to wastewater problems, the project also creates a number of stormwater issues, destroys a number of potential habitats for threatened and endangered animal species and would result in the elimination of steeply sloped areas and numerous acres of forested uplands. It is adjacent to the Jockey Hollow section of the Morristown National Historical Park.

A decision by the DEP on the Abbey Woods sewer line is expected at some point within the next several weeks.

*John Malay*

## Long Hill Township

### Township Committee Favors the Environment

The Long Hill Township Committee passed a resolution in support of the U.S. Conference of Mayors Climate Control Agreement that urges individual towns and cities to adopt practices that meet the Kyoto Protocol for reducing greenhouse emissions. Additional information about this program may be found at: <http://www.ci.seattlewa.us/mayor/climate/>

The Committee also presented an award to the PNC Bank (Valley Road & Plainfield Avenue) for its green construction practices that included a permeable asphalt parking lot, recycling stormwater from the roof, energy saving utilities, and use of local and environmentally friendly materials for construction and decorating.

*Len Hamilton*

## Bernardsville

### Weichert Office Project

Weichert Realtors has filed an office building application before the borough Zoning Board of Adjustment. The property is located on Morristown Road (Rt. 202) directly west of the Kings shopping center. The building would be two-stories high with an associated parking lot, lights and signs.

The project would require no less than 8 zoning variances - for proposed use, driveway set-back, building height, parking spaces, building set-backs and three steep slope areas -- as well as exceptions for exterior lighting, parking lot landscaping and loading area. In addition they want a waiver exempting them from compliance with required tree replacement to offset tree removal.

The plan calls for parking to spread out into the adjacent residential zone (occupied by Bernards High School). This necessitates the use variance.

Environmental concerns include traffic into an already congested stretch of State Highway 202 (a proposed Starbucks on a nearby property was recently rejected by the Board for reasons of traffic), steep slopes on the property, large-scale tree removal, lot coverage, as well as increased stormwater drainage into Penns Brook, a Great Swamp watershed tributary. Finally, they are proposing extending parking areas into a residential zone that includes Bernards High School.

In general the proposed plan reflects a building and a use that is much too large and intensive for the property.

### Brookside Lots Targeted For Development

A pair of small lots on Brookside Road are coming before the Board of Adjustment for merger and a single family home. Both lots are severely impacted by wetlands as well as a stream with steep embankments.

The stream is Penns Brook, a Category 2 stream that flows into the Passaic River after entering Bernards Township and passing through Somerset County's Lord Stirling Park.

*John Malay*

# Composting for Fun and Profit, or The Sinful Pleasures of Composting

by Gene Fox, Trustee & Member of the Science & Technology Committee

It's no longer a shocking revelation to mention that the high population density in New Jersey has profoundly altered our state's natural environment. In particular, Nature's seasonal recycling processes have become seriously interrupted. In days past, fallen leaves and dried vegetation would simply add onsite to the soil, and donate nutrients for the next growing season, but recent human trends have disrupted this traditional process by our frequently carting away that natural fertilizer. It is then later replaced on lawns and other open spaces with expensive chemical fertilizers, pesticides, and herbicide. Unfortunately, these are frequently applied in excessive amounts, degrading the quality of the local water supply through the run-off of undesirable quantities of nitrogen, phosphorus, as well as toxic chemicals. The degraded quality of many of New Jersey's lakes and streams is a very noticeable outcome. Given these circumstances it is sensible to seek a partial return to Nature's way through composting.

Simply defined, composting is the decomposition of plant remains and other once-living materials to make a dark, crumbly substance that is excellent for adding to houseplant or for enriching garden soil. Composting is an expression of love for your garden and the earth. If you do your own yard work it is a self-rewarding family activity every fall and you see its effects in the abundance and beauty of flowers in your garden the next spring or summer. You are composting if you mow your own lawn and don't bag the clippings or pay someone else to do it. (Most lawn mowers today can be fitted with a mulching blade and baffle.) All summer you can count your savings and still have a great lawn. You can also compost your autumnal leaf harvest, protect your shrubs and ensure having a great garden in the spring.

Many local towns, including those in the Great Swamp watershed, annually carry out leaf composting at their municipal recycling centers. This is driven by the need to clean up streets in the fall, and prevent, or at least lessen, the clogging of storm drains. The resulting composted material is available to town residents for garden use and some may be used as needed on municipal property, however, each town has the job of cleaning out their composting sites for use the following year. Typically this involves inviting gardening or other agricultural supply companies to pick up and cart away the older material, which the profit motive keeps them happy to do.

Individual homeowners have a valuable role to play as well. For those who receive falling foliage from a large number of mature trees, the initial compost pile can be quite bulky. In this circumstance the most straightforward strategy may simply be to surround a pile on the ground with chicken wire fencing or the equivalent to prevent wind drift of the leaves. The composting process initiates most quickly if the leaves are collected and piled when they are slightly moist, which also minimizes pile volume.

Composting, however, is something that can be done on an even smaller scale. Simply composting your "greens and browns" qualifies. This can include veggies that stayed too long in the crisper, the salad you didn't finish, fruit peels and even your coffee grounds. In addition one can legitimately include modest amounts of vacuum cleaner fluff, paper napkins and dryer lint. Various micro-organisms will take over and generate a valuable product.

I have found that the easiest way to recycle these items is to buy a compost bin from a reputable supplier. I have two, both of them found simply by searching for "compost bins" on the Internet. Assembling a bin when it arrives is an easy task. All you then have to do is put it on a piece of level ground and in full sun. Garden weeds and old faded flowers are excellent additions. Just start dumping; nature will do the rest. Aeration is good, but that can be done simply by stabbing and twisting your "broth" with a pitchfork once a week. Nature will soon reward you with a product better than the best potting soil, and it is much cheaper too!

Beyond offering homeowners substantial savings on hired lawn care expense, the act of composting can be a first-hand educational experience for kids. They can directly observe the remarkable temperature rise that occurs a few days after a pile is first formed in the yard or bin as a result of bacterial and fungus growth within. Later, large numbers of earthworms and other invertebrates discover that a compost pile resting on the ground is a wonderful "resort hotel", and they can be easily observed by the biologically curious.

A vast amount of information about composting methods, materials, and supplies is available on the Internet. Interested readers might themselves try feeding a search engine the terms "composting" or "compost bins", but expect to experience a bit of data overload!

## Rutgers University Resources on Composting

- *New Jersey's Manual on Composting Leaves and Management of Other Yard Trimmings*  
(<http://www.state.nj.us/dep/dshw/trtp/compost/front.htm>)
- *Using Mulch to Assist Your Plants in Drought Conditions* (on-line video) Somerset County Ag agent Nick Polanin demonstrates how to reduce water usage with the use of mulches.  
([http://www.ifplantscouldtalk.rutgers.edu/video/choose\\_player\\_broad.asp?key=MulchDrought](http://www.ifplantscouldtalk.rutgers.edu/video/choose_player_broad.asp?key=MulchDrought))
- *Backyard Leaf Composting*  
<http://www.rcrc.rutgers.edu/pubs/publication.asp?pid=FS074>

# Tree Killers!

By Edward G. Kirby, PhD., Rutgers University, Trustee

In a world that changes rapidly, but not always for the better, physical symbols of stability and historical continuity can become highly valued. In the Great Swamp watershed, as elsewhere, mature native trees often serve as such symbols. They are prized for their intrinsic beauty and for their contributions to general ecological health, and to the beauty, richness, and diversity of our landscape. Even so, it is easy to take trees and their role in our daily lives for granted. An unfortunate fact is that our trees and the ecological stability they represent are at significant risk from several directions, both human and non-human.

The past offers some disturbing examples of such risks. One particularly notable case is the chestnut blight which has essentially eliminated the American chestnut. A magnificent hardwood that inhabited much of North America, the American chestnut was prized not only for its aesthetic beauty, but also as a source of lumber, edible nuts, and tannery products. Chestnut blight was first observed in trees growing at the Bronx Zoo in the early 1900's. This disease of the stems and leaves is caused by a fungus thought to have been introduced to North America from Asia. Virtually all that remains today of the American chestnuts are a few isolated stumps that courageously sprout, only to be attacked and killed above ground by the still-prevalent air-borne fungus. Old photographs help to remind us of the American chestnut's majestic appearance before the blight began its devastation. And of course there's a famous poem by Henry Wadsworth Longfellow from the pre-blight era that begins "Under the spreading chestnut tree the village smithy stands."

A more recent and familiar example of a devastating tree disease is Dutch elm disease. Like the chestnut blight, Dutch elm disease is a fungal infection. It is spread both by elm bark beetles and is transmitted by root contact between trees. The disease was first reported in Western Europe, likely in Holland (hence the name), then it spread to North America during World War II. Because of their graceful contour, shade characteristics, and tolerance of city environments, American elms were a favorite tree for street-side plantings in many communities in the Northeast and Midwest. Watching the slow demise of these beautiful trees has saddened many residents who have grown up in their presence. Fortunately, management practices, including the use of insecticides and fungicides, are now available to control this scourge. Recently, university researchers have developed new hybrid elms that are resistant to the disease.

Recently, a new and potentially devastating threat has emerged in the Great Swamp watershed: the Asian longhorned beetle. This large and distinctive insect is an invasive species accidentally introduced from China. It has only recently been observed in New Jersey and this invader constitutes a clear and present danger to our own watershed communities. The Asian longhorned beetle's favored hosts are our native maple trees, in particular the red (swamp) maples and sugar maples that are prominent in the Great Swamp watershed, as well as horse chestnut trees, willows, birches, and poplars. The beetle larvae tunnel into the stems and branches of the trees interrupting the flow of water and nutrients. Repeated attacks by these insects lead to dieback of the tree crown and, eventually, the death of the tree. The only effective defense against the spread of this devastating pest is to destroy the infected trees. While cutting down mature trees is a tragedy, it is preferable to permitting this new menace to spread.

***...it is easy to take trees and their role in our daily lives for granted. An unfortunate fact is that our trees and the ecological stability they represent are at significant risk from several directions, both human and non-human.***

Should you notice an infestation, you can do your part to limit the spread of this tree killer by contacting the New Jersey Forest Service Regional Office in Andover. For more detailed information about this

threat to our watershed, visit the U.S. Forest Service website: <http://www.na.fs.fed.us/fhp/alb/>.

Here in the Great Swamp watershed we are faced with threats from other tree killers. Oak trees are in jeopardy from bacterial leaf scorch. Beech bark disease is another problem that apparently was inadvertently imported to the U.S. from Europe. Dogwood anthracnose has reduced native populations of this beautiful flowering tree. Hemlocks in New Jersey have suffered a major decline since 1980 due to infestation by the sap-sucking insect, the woolly adelgid. And, to top it all off, problems of increasing air and water pollution, including acid rain, only make the situation worse by putting extra stresses on trees, thus rendering them even more susceptible to insects and diseases.

You can help by making sure your municipality has in place ordinances that reduce the human impact on trees during construction and development. The Great Swamp Watershed Association, ANJEC and other groups have model tree protection ordinances that can be adapted to any community.

There are a number of challenges to the quality of our environment in the Great Swamp watershed, including suburban sprawl, water and air pollution, tree killing insects and diseases, and even global warming. It is through knowledge, education, and responsible environmental stewardship that citizens can take appropriate steps to protect, preserve the natural beauty, and enhance the livability of our extraordinary watershed.

## Outreach & Education

The Watershed Partnership for New Jersey and the New Jersey Department of Environmental Protection held its third annual two-day interactive conference for educators. Sessions explored New Jersey's dynamic watersheds and connected educators with regional resources, curriculum materials and more. Field trips on the second day allowed people to discover the beauty and complexities of their watershed and more ways to teach future leaders about earth's most precious resource - water. Professional development credits were available.



*Participants create a paper 3D model of a watershed with washable markers and tape, then watch what happens when they make it "rain".*



*Participants in the workshop discuss the various options available to clean "polluted" water.*

Photos below are from the "Take It Outside" Workshop given by GSWA Outreach & Education Director Hazel England at the "Making The Watershed Connection" conference for educators at Hackensack Meadowlands on June 27th.

The workshop presented educators with activities to teach various water quality issues using simple materials and the outdoors.



*"Before". The cocoa, baking soda and sand-laden "polluted water". Attendees were asked to clean it with simple materials provided.*



*"After". A participant shows how well her homemade filter has cleaned "polluted" water.*

# Annual Picnic Recognizes Dedicated Volunteers

by Patsy Clew

Saying thank you to those individuals or organizations that make our lives better is something that most people don't tend to do often enough in our daily lives! With only twenty-four hours in the day, many people are so focused on their "to do" list that they either forget or fail to recognize the ways others make a difference.

At the Great Swamp Watershed Association, we take time out at least once a year say thank you to those volunteers who give their time and expertise selflessly to our organization. With six part-time staff, the Association could not exist without our dedicated volunteers. Whether it's a new or different idea, time spent manning a table at a community event, collecting a stream sample, or renewing a membership, volunteers directly impact our ability to protect the water and land in many New Jersey communities.

This year the Watershed Association held its annual Volunteer Dinner on Friday, June 2nd. With over 60 people in attendance, a good time was had by all. This year three volunteers were recognized as "Volunteers of the Year" by the Association and the Abigail Fair Good Government Award was presented to **Senator Robert Martin**.

**Roger Edwards**, a long time member of the Association and resident of Long Hill Township, was honored for his contributions to the organization in the areas of stream monitoring and development. Roger really helped out the Association this year when Stream Monitoring Specialist, Kelley Curran, went out on maternity leave to have her second daughter, Rory Elizabeth. Roger coordinated the activities of the stream team in Kelley's absence and also completed a project that summarized the results of 10 years of stream monitoring data (entitled *Water Quality in Loantaka Brook Headwaters*). Roger has also been a long time member of the Development Committee where he has helped write numerous grants and participated in other fundraising initiatives.

**Blaine Rothhauser**, a naturalist and environmental consultant, was also honored for his continuing contributions to the organization. Since 1996, Blaine has contributed his talents as a photographer and naturalist to the organization many times over. Whether its supervising corporate volunteers at the Association's conservation management area, providing input into the direction of our habitat restoration project, leading a tour for members, or allowing the Association to make use of his incredible photographs, Blaine has been

a steadfast volunteer who has helped make the Association what it is today.

The third volunteer to be honored at this year's Dinner was **Ellen Drury**. Ellen came to us in 2005 with some time on her hands and a desire to contribute meaningfully to our organization. With her experience in the media industry, she quickly became an invaluable resource as she spearheaded the organization's publicity of the Jockey Hollow Challenge Professional Bike Race. Ellen also spent countless hours stuffing envelopes for mailings, contacting lapsed members and researching other projects. However, her favorite volunteer activity at the Association was stream monitoring. Ellen quickly became a dedicated member of the Stream Team, taking water quality samples and updating the Association's water quality information. Unfortunately for us, Ellen discovered that she truly missed working in the media industry and decided to return to her roots in April of 2006 where she became the Senior Vice President and Director of local TV and radio investments for Publicis Groupe's Optimedia. We wish Ellen continued success in her new position and want her to know that there will always be a place for her at the Great Swamp Watershed Association!

Senator Robert Martin received the Abigail Fair Good Government Award and was honored for his on-going support of environmental causes, most importantly his support of the Highlands Act. In an era of increasing concern about water resources, Senator Martin also sponsored the "New Jersey Clean Water, Drought Mitigation and Water Resource Security Trust Fund Act", a funding mechanism for future water resource issues. He is a Professor of Law & Director of the Center of State and Local Government Law at Seton Hall Law School.

The evening would not have been complete without an opportunity for the staff and volunteers of the Great Swamp Watershed Association to say goodbye to long time Executive Director, Julia Somers. Vice Chairman David Budd had many kind things to say about Julia and her many contributions to the organization during her 14 years. She will be greatly missed but always fondly remembered! She was presented with a metal sculpture of the Association's symbol, a heron, in appreciation of her work at the Great Swamp Watershed Association. We wish Julia success in her new role as the Executive Director of the Highlands Coalition.



*Senator Robert Martin accepts the Abigail Fair Good Government Award from its namesake, Abbie Fair of Chatham Township.*



*Julia Somers looks on as Board Vice-Chairman David Budd thanks her for her 14 years of service to the Watershed Association.*

## News from The Top of the Hill

With former Executive Director **Julia Somers** moving on to the NJ Highlands Coalition, **Ruth Kerkeslager**, our Director of Development, has volunteered to step in and be Acting Executive Director until a permanent replacement is found. Thanks, Ruth!

GSWA welcomes its summer interns, **Stephanie Bursset** and **Angela Cai**. Both attend Princeton University and will be sophomores in the fall. Stephanie lives in Bernardsville and Angela in Basking Ridge. (Once again we are indebted to the Princeton University Class of 1969 Foundation, which provides funding for this internship program.)

Welcome back our Stream Steward **Kelley Curran**, who returns from maternity leave. Kelley gave birth to her second daughter, Rory Elizabeth, who joins dad Bob and older sister, Rachel. Congratulations to the entire Curran family.

If you have questions or issues with your membership, changes of address, payments, and so on, you may have spoken to our newest employee, Membership Associate **Lisa Testa**. Lisa is working with Patsy Clew on keeping our databases up to date and working on ways to serve our members better.

## Donations

Mr. & Mrs. Alvin Turner, in honor of Dixon Grose

Mr. & Mrs. Hilda Drubeck, in memory of the following:

- Mr. Joseph Walter McCullough III
- Mr. Geoffrey Chapman
- Mr. Donald R. McEntee Sr.
- Mrs. Rosalie Gollinott



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## In This Issue

DEP Stream Data p.1  
Corporate Good Neighbors p.5  
Tree Killers! p.9  
Volunteer Bash p.11

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