



NEW JERSEY NATURAL LANDS TRUST

2009 Annual Report



Preserving New Jersey's Natural Diversity

Statement of Purpose

The New Jersey Natural Lands Trust was created by the Legislature in 1968 as an independent agency with the mission to preserve land in its natural state for enjoyment by the public and to protect natural diversity through the acquisition of open space. The Trust preserves land primarily by donations of open space through acquisition of title in fee simple or of conservation easements, and manages its properties to conserve endangered species habitat, rare natural features, and significant ecosystems. The Trust invites passive use by the public for recreational or educational purposes wherever such use will not adversely affect ecological communities and biological diversity.

The Trust also recognizes that ownership and management alone are not enough to achieve its mission. Public education is an integral function of protecting natural diversity. The Trust distributes information designed to convey a conservation ethic for the protection of open space and its natural values.

New Jersey Natural Lands Trust contact information:

New Jersey Natural Lands Trust
P.O. Box 404
Trenton, NJ 08625-0404
Phone: 609-984-1339
Fax: 609-984-1427
Email: NatLands@dep.state.nj.us
www.njnlt.org

Cover Photo: View of Philadelphia skyline from the shoreline at Petty's Island

Index of Preserves Referenced Within the 2009 Annual Report

Atlantic County

Clarks Landing Preserve ~ Page 1
Hamilton Preserve ~ Page 1
Thompsontown Preserve ~ Page 1

Burlington County

Bear Swamp at Red Lion Preserve ~ Page 1
Moorestown Preserve ~ Page 1

Camden County

Petty's Island Preserve ~ Pages 1, 2, 3, 4

Cumberland County

Panther Branch Preserve ~ Page 1

Essex County

Great Piece Meadows Preserve ~ Page 1

Hunterdon County

Gravel Hill Preserve ~ Pages 1 and 7
Sweet Hollow Preserve ~ Pages 1 and 10

Morris County

Great Piece Meadows Preserve ~ Page 1

Sussex County

First Time Fen Preserve ~ Pages 1 and 5
Papakating Creek Preserve ~ Pages 1 and 6
Quarryville Brook Preserve ~ Page 1

Warren County

Buttermilk Bridge Preserve ~ Page 1
Mt. Rascal Preserve ~ Pages 1, 8, 9





Thomsontown Preserve

In 2009. . .

The New Jersey Natural Lands Trust brought approximately 1,500 new acres under Trust stewardship, making the Trust responsible for over 26,000 acres managed as a system of more than 120 preserves throughout the state.

Four of the Trust's new holdings totaling approximately 560 acres were donated at no cost to the Trust, while the others were purchased by the Trust or transferred to the Trust for management through the State's Green Acres Program.

Three new Trust preserves were established: **First Time Fen Preserve** in Green Township, Sussex County, **Mt. Rascal Preserve** in Independence Township, Warren County, and **Petty's Island Preserve** in Pennsauken Township, Camden County. The remaining acquisitions represented additions to the **Bear Swamp at Red Lion, Buttermilk Bridge, Clarks Landing, Gravel Hill, Great Piece Meadows, Hamilton, Moorestown, Panther Branch, Papakating Creek, Quarryville Brook, Sweet Hollow and Thompsontown preserves.**



Board member Theresa Lettman evaluating natural resources at the Clarks Landing Preserve

Petty's Island-An Urban Oasis

As Tom Petty sings, “Redemption comes to those who wait...” And he was right. After many years and many failed development plans, the path was finally cleared in 2009 for the Trust to accept the donation by CITGO Petroleum Corporation of a conservation easement on Petty’s Island, ensuring its perpetual preservation.

Over 500 acres in total, the more than 350-acre island is surrounded by some 150 acres of ecologically important tidal flats. Given its location in a heavily industrialized area, surprisingly the island provides breeding, foraging or resting habitat for a dazzling array of wildlife. In addition to a pair of American bald eagles that currently use Petty’s Island as part of its foraging territory, hawks, falcons and waterfowl such as osprey, Northern harrier, Cooper’s hawk, red-shoul-



Field of spring ladies' tresses on Petty's Island



Botanist David Snyder looking for rare plants along Petty's Island mud flats

dered hawk, American kestrel, peregrine falcon and American black duck as well as songbirds, such as Savannah sparrow, that migrate along the river corridor have been observed within the island’s woods and wetlands.

Plant life abounds on Petty’s Island. In just one visit Natural Heritage Program botanist David Snyder found many rare plants including the awl leaf arrowhead, American waterwort, bouquet mud plaitain and water-marigold, which is a globally rare plant documented only from the Delaware River in New Jersey, Pennsylvania and Delaware, the Hudson River in New York and the Chesapeake Bay in Maryland. In the shadow of oil storage tanks, Mr. Snyder found a field blanketed with spring ladies' tresses. Although this plant is not rare, it was a surprising find given that this species is more typical of wetlands along the New Jersey coast from Monmouth to Cape May counties. Mr. Snyder noted that not only is it “unusual to find this species inland and in populations of this size; it may be the largest extant population currently documented in the state.”

Delaware Riverkeeper Maya van Rossum noted that “Petty’s Island is a natural resource jewel with bald eagles in the heart of the Delaware River estuary that will become a magnet for eco-tourism and environmental education.” And this is based upon what we know of today. With a grant from the William Penn Foundation, the New Jersey Conserve Wildlife Foundation is currently undertaking a biodiversity inventory on the island on behalf of the Trust to be completed in 2010.

In addition to its many natural attributes, Petty’s Island conjures up many fascinating stories and legends: the story of Quaker Elizabeth Kinsey making a deal to buy the island from Lenni-Lenape Indian Chiefs around 1678 that included her allowing them to continue hunting and fishing on the island--provided they agreed not to kill her hogs or set fire to her hayfields; the story of Quaker William Penn’s ownership of the island; the legend of pirates such as Blackbeard docking at the island; the legend that Benjamin Franklin spent a night on the island; the story of an Irishman, Ralston Laird, who after being a farm manager on Petty's Island for more than 50 years was named its king. As well as many, many more stories and legends of gambling, dueling and slave trading.

Once fully restored, Petty’s Island will provide amazing opportunities to learn about its natural diversity and fascinating history. Its restoration will provide local residents with access to spectacular views of the river and the City of Philadelphia that



CITGO oil tank sitting in a detention area that may succeed to wetlands habitat

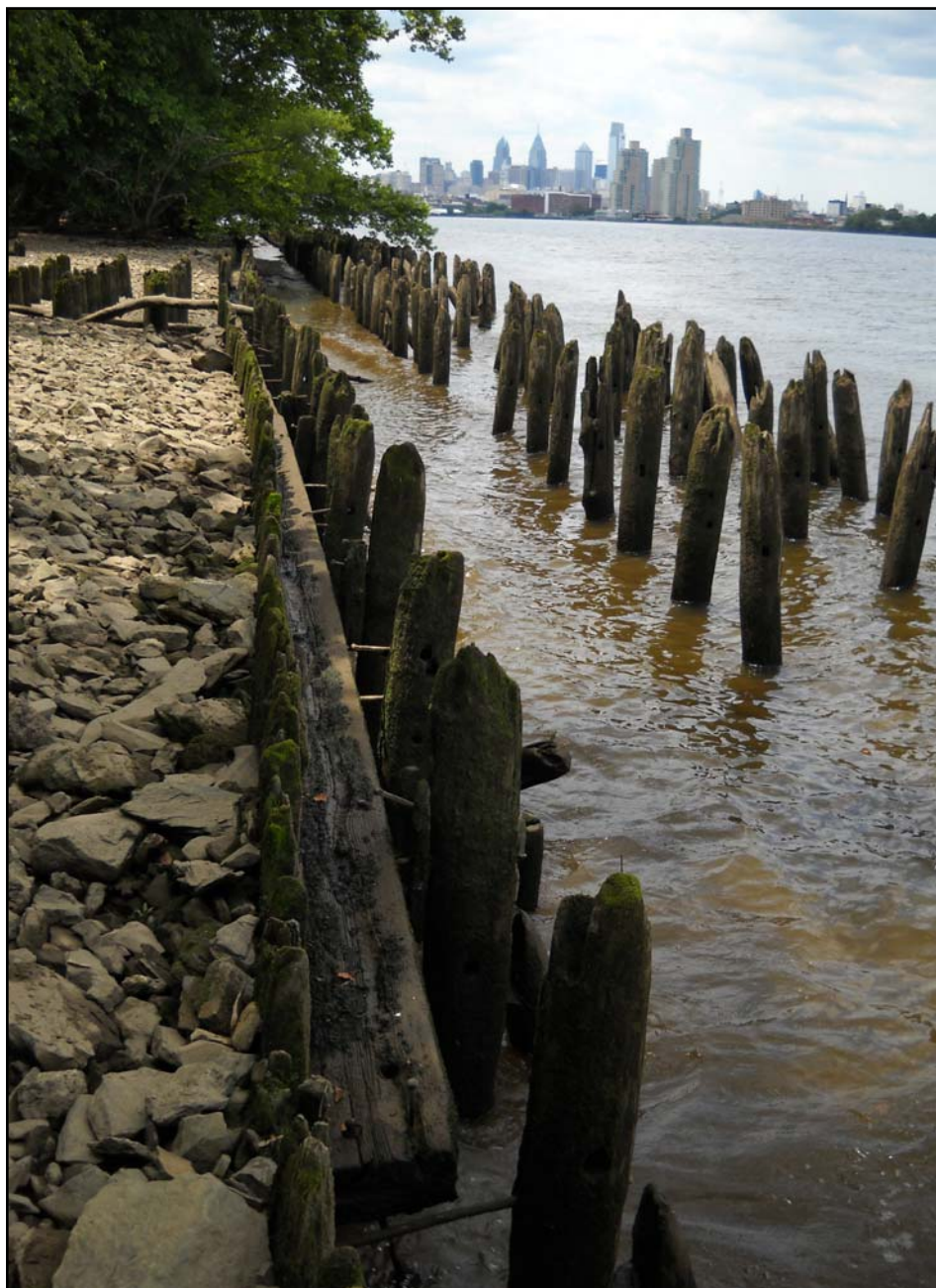
have been off-limits to them for far too long. To facilitate future educational and public access opportunities, CITGO has committed to a \$2 million stewardship fund to be used to provide, among other things, education programming and another \$1 million fund to assist the Trust in establishing a cultural and education center.

Although the Trust holds a conservation easement for the entire island, it assumes no liability for cleanup of past pollution on the island. CITGO is fully responsible for removing all structures associated with former petroleum operations and completely clean up any contamination. Before CITGO can turn actual title to the island over to the Trust, the DEP must certify that contamination has been addressed according to state standards. The cleanup terms are covered under a separate agreement with the DEP known as an administrative consent order. Some industrial operations will continue on the island until the end of 2017 when a lease that CITGO has with a shipping terminal will finally expire and CITGO can complete its restoration of the island.

Both CITGO and the DEP have committed to working with the Trust to ensure that the cleanup and restoration are done in a way that results in minimal disruption to existing plant and animal habitat. For example, some of the oil storage tanks to be removed sit in detention areas that have already succeeded, or have started to succeed, to wetlands habitat. Provided these detention areas are deemed clean by DEP, the Trust plans to retain the impoundments and restore them as micro-habitats for wildlife such as waterfowl and herptiles, thereby providing ideal habitat for such critters as well as excellent educational opportunities.

The conservation easement rules out most active recreational activities on the island by prohibiting development such as marinas, golf courses, restaurants and ball fields. But there are still many passive recreational options left to consider, including the cultural and education center and hiking trails in addition to educational programming. The Trust plans to bring its many ideas for restoration, public access and educational programming to the public beginning in 2010. Although many of the Trust's ideas cannot come to fruition until the island is fully cleaned up, it wants to consider the thoughts and ideas of its many stakeholders early in the planning process.

The preservation of Petty's Island is especially satisfying for the Trust's Board whose majority had voted in 2004 to preserve the island when defeat was snatched from the jaws of victory on a statutory technicality requiring that at least one official state member vote in favor the action. As noted by Trust Chairman Michael Catania, "The preservation of Petty's Island represents a once-in-a-lifetime opportunity to restore and manage a spectacular natural area in the midst of one of the most urbanized areas of New Jersey for the benefit of our children and future generations. I'd like to convey our heartfelt appreciation to CITGO for its vision and commitment to making this dream a reality." It may have been a long wait, but the Trust finally did it!



View of Philadelphia skyline from an old bulkhead at Petty's Island

First Acquisition at First Time Fen Preserve

The Trust has a new preserve in Green Township, Sussex County--First Time Fen Preserve. While the Trust hopes that its new preserve will eventually extend over a 350-acre area that includes the entire First Time Fen Natural Heritage Priority Site, it is thrilled to start the ball rolling with the preservation in September 2009 of a 54-acre property. The First Time Fen Natural Heritage Priority Site was named by Natural Heritage Program botanist David Snyder because he decided to investigate the property for the "first time" by any botanist after sensing that its geological location might provide interesting habitat. Mr. Snyder was shocked to discover the "first time" he went to the site that it included a marl pond and calcareous fen community providing habitat for at least two state-endangered plants--the rush aster and the cyperus-like sedge--as well as other rare plants such as the yellow water buttercup. He also discovered an adjacent calcareous swamp and upland forest providing a buffer to the marl pond. Based on his discovery, Mr. Snyder advocated for creation of a Natural Heritage Priority Site that included the marl pond and associated buffer lands.

This first-preserved property within First Time Fen was acquired by Green Township, with the assistance of The Land Conservancy of New Jersey, on behalf of the State of New Jersey and the Trust. Preserving this property is also the first step in Green Township's planned greenway to link the Whittingham Wildlife Management Area to the Pequest River. The property consists of an upland mixed hardwood forest with many areas of steep dolomite rock outcrops as well as an area of low-lying forested swamp edged in part with small groves of northern hemlock along the slopes and ravine. The yellow water buttercup occurs on this property. The property also provides important habitat for animals including wood turtle, black bear, turkey and songbirds. A maze of old logging roads zigzag across the property providing access for hiking, although dense areas of the prickly invasive plant Japanese barberry pose a challenge. The Trust, The Land Conservancy and Green Township hope to partner on habitat stewardship projects to tackle this and other invasive species.



First Time Fen Preserve

Armstrong Bog ~ A Success Story

Last year we reported on the Trust's long-term attempts to preserve important habitat for the state-endangered bog turtle in Frankford Township, Sussex County known as Armstrong Bog. For the past decade it seemed that the property was destined for at least some development. But then the Trust, along with the Trust for Public Land, used the recent downturn in real estate values and the availability of federal grant money as an opportunity to renew negotiations with the property owners. The Trust is happy to report that the critical 166-acre bog area of Armstrong Bog, located north of Route 565, has finally been protected. And the remaining 158 acres of the property, located south of Route 565, is expected to be preserved in 2010.

Through a partnership between the Trust, the New Jersey Green Acres Program, the U.S. Fish & Wildlife Service, Frankford Township and the Trust for Public Land (TPL), the 166-acre bog area was preserved in December 2009. The \$1.1 million purchase price was amassed from many sources. The Trust received a \$500,000 federal grant from the U.S. Fish & Wildlife Service under the Recovery Land Acquisition Program, which funds protection of habitat for endangered species such as the bog turtle. This grant was matched with \$500,000 from the New Jersey Green Acres Program. Frankford Township contributed more than \$87,000 from its Open Space Trust Fund, and TPL, through a grant from the Doris Duke Charitable Foundation, contributed more than \$70,000.

Armstrong Bog will become part of the Trust's Papakating Creek Preserve but may be managed by the US Fish and Wildlife Service through its Wallkill River Refuge under a management agreement with the Trust in accordance with the Wallkill River National Wildlife Refuge Comprehensive Conservation Plan, available at:

<http://www.fws.gov/northeast/planning/Wallkill%20River/finalccp.html>

Even if the Service provides day-to-day management at Armstrong Bog, both fed-

eral and state fish and wildlife agencies will be monitoring and managing the bog turtle population on the property, including threats to bog turtle habitat. Emergent wetlands, important to bog turtles, have become degraded by invasive plant species such as purple loosestrife, reed canary grass and common reed. Furthermore, once extensive emergent wetlands of sedges, sphagnum and cattail have succeeded into shrub/shrub wetlands, which are considered less suitable for bog turtles. Management techniques to control invasive plant species and restore the emergent wetland habitat should greatly enhance bog and wood turtle habitat.



Armstrong Bog Preserve

Gravel Hill Continues to Grow

That seed which falls on the gravelly land does sometimes grow. With some proper care and nurturing it can grow quite well. The seed represents the wonderful growth of the Trust's Gravel Hill Preserve which overlooks the Delaware River in Holland Township, Hunterdon County. A unique and aptly-named mountain, the thin soils of Gravel Hill have for millennia supported an intact, mixed hardwood forest of white oak, red oak, black birch and black cherry. The fist-size chunks of whitish quartz-like rock are easily seen where fallen leaves have rotted or blown away.



Waterfall at Gravel Hill Preserve

This year the Trust added another wonderful property at Gravel Hill Preserve. "This new 88-acre parcel adds so much to the features of the preserve," said Martin Rapp, Land Manager for the Trust. It includes an intriguing steep-sided, deep gorge carved by a shaded stream reaching towards the Delaware River below.

It also features expansive open grassland adding to the mix of habitats on site. These fields have great potential for grassland songbirds, such as bobolink or eastern meadowlark. These birds prefer large open clusters of fields as habitat. Fields like these could quickly grow into unsuitable tangles of non-native shrubby brush, such as autumn olive and multiflora rose, if not maintained through mowing. The Trust will continue to mow these fields annually to maintain the grassy conditions. During the spring and summer months when many other farmers are cutting their hay fields, the grassland birds at Gravel Hill can feed, forage and nest safely in the high grass. By delaying mowing, the Trust provides time enough for the birds to hatch a clutch of eggs and have the fledgling birds catch the abundant insects and wild seeds needed for quick growth. Then in late summer, when birds are strong and independent, the fields are mowed and the hay is used for mulch.

Many of the parcels at Gravel Hill are "landlocked" and unavailable for public access. This new parcel helps add important road frontage to the preserve, ensuring future access by the public to hike along a system of old woods roads that follow the contours of the steep mountain slopes. Steve Kaufman and his wife Phyllis, the former property owners, had contacted the Green Acres Program about selling a portion of their land to the state for preservation. They knew and appreciated the special qualities of this property. They took the thoughtful and important step to its lasting protection as an addition to Gravel Hill Preserve. Steve is a professor of archeology at Raritan Valley Community College near Somerville, New Jersey. His wife Phyllis owns and operates a travel agency that specializes in vacations to remote and sometimes wild places around the globe. After each day at work the couple return to the home they built hidden on Gravel Hill knowing the wild place they call home will forever remain so. The Trust will do its part to nurture the next seed that may fall upon Gravel Hill Preserve.

Nothing Rascally about Mt. Rascal Preserve

The twists and turns of the rural Warren County road is descriptive of its namesake, Mt. Rascal Road, although no known map identifies such a place or hilltop called Mt. Rascal. The new 241-acre preserve was acquired through the work of the New Jersey Green Acres Program with management responsibilities assigned to the Trust. Although purchased from two separate land sellers, the final sales closings were completed within a month of each other, according to Martin Rapp, Land Manager for the Trust. This was important because the combination of these two neighboring tracts was important for conservation, providing more woods for wildlife, more trails to hike, more protection to the sensitive wetlands.

The forest of hardwoods, including sugar maple, northern red oak, black birch and black cherry, provides habitat need-

ed for interior forest nesting birds such as the black and white warbler and redstarts. Areas of wetland seeps or fens show promise for rare plants, amphibians and reptiles too. During an early inspection of the site at least three rare plants--highbush cranberry, swamp lousewort and hairy willow herb, were discovered as well as a very large population of fringed gentian in an abandoned farm field. With more inspections to come this spring, new finds of plants and animals are likely.

Since pre-colonial settlement, Mt. Rascal has seen much change in the landscape. Early maps of Independence Township, dating back to 1874, identify this site as the Morris H. Weise property. The old single-story stone structure reveals architectural clues to its possible first German settlers. In recent decades, the DiMaio family lived and was raised in this small stone house. In the 1930s the family,



Mt. Rascal Preserve

masons by trade, built themselves a new larger stone house next to the old home. The small farmstead proved to be a challenge to farm. Steep slopes and wet springs meant that crop farming would not work well. The family put the land to work by raising milk goats and also brought cows into the Hackettstown Livestock Auction for extra cash. A fine garden supplied tomatoes, peppers and corn for the family and neighbors. After a time the family moved off the farm, leaving the homes vacant for many years. The homes and buildings are now gone.

Now living in nearby Hackettstown, two members of the DiMaio family, brothers Jerry and Al, continue to visit the old farm. They have helped to post the property and work with the Trust to see that it is kept clean of garbage and trash. "It's a nice place to return to, to watch nature and enjoy a nice fall day," said Al DiMaio. The Trust has established a small parking area at the old homesite where visitors can set out on explorations, although formal trails are not yet established at this time. Hikers can travel beside ruins of old stone walls that line many of the unmarked woods roads.



Swamp lousewort at Mt. Rascal Preserve

Record Number of Registered Hunters

During the 2009-2010 hunting season over 4,125 hunters registered to hunt at Trust preserves via its website: www.njnlt.org. The Trust allows deer hunting at many of its preserves to protect biodiversity. The deer population in New Jersey is far greater than the ecosystem can sustain. Over-browsing by deer deplete native vegetation resulting in various threats to animal and plant habitat such as decreased food sources and increased invasive plants. The Trust does not allow hunting for waterfowl or game other than deer at its preserves, as it believes that at this point only deer over-browsing poses a threat to biodiversity. In order to hunt at selected Trust preserves, the user

can access, print and electronically submit a hunter registration letter directly to the Trust, and also print a map of the Trust preserve which must accompany the registration letter. The Trust works to regularly update information on its website, including new preserve profiles, maps and management projects. The heart of the website is the Preserves and Public Uses page, containing a map of the Trust's preserves. For selected preserves, maps and additional information--including locations, features of interest, size, access, directions, and permitted passive recreational activities--is provided by clicking on the preserve location on the map.

Sweet Hollow Preserve is 150 acres Sweeter

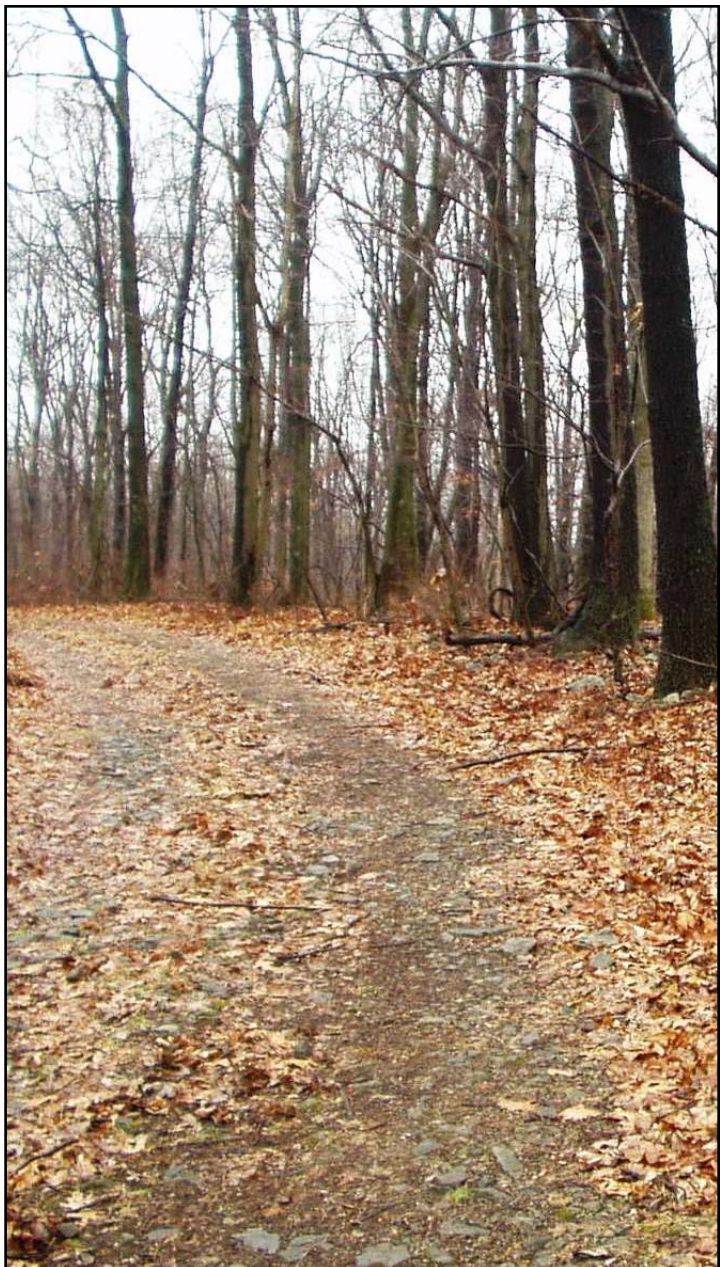
The large tulip trees grow tall and straight on the rocky hillside. The forest lands surrounding Sweet Hollow have helped maintain the clean cool waters of the Hakhokake Creek as it tumbles and swirls around rocks and boulders strewn along its course toward the Delaware River. The focus of the Trust's Sweet Hollow Preserve has been to protect water quality within the headwaters of the Hakhokake watershed. The acquisition of some key open space properties along the stream protects a functioning natural community that will ensure clean water resources into the future. The forested headwaters of northern red oak, white oak, tulip, ash, beech and hickory highlight a few of the more common canopy trees which absorb heavy rains and release this naturally filtered water into the creek flowing through the narrow valley. Understory trees such as American hornbeam, flowering dogwood and sassafras provide a good source of seeds and nuts for wildlife, ideal nesting and cover for songbirds, and cool shade from the summer sun.

The Trust's most recent additions to the Sweet Hollow Preserve include a key 147-acre mature forest property on the rim of the watershed as well as an adjacent three-acre property. Positioned at the top of the steep hill above the Sweet Hollow of the Hakhokake Creek, these somewhat more level lands were once open grassy pastures divided by heaps of stones and boulders gathered from the fields they outlined. The sheep left those stone walled pastures over a century ago. Now one can imagine that this forest looks much like it would have before the early settlers arrived.

Much could have been different within the watershed--subdivisions with associated streets curbs and storm drains, new houses with yards demanding excess fertilizer and other threats--had development come to the forest. The forest owners, the Potter family, were developers and builders well aware of the property's potential development value. But they also saw the value of the land left natural. Generations of the Potter family visited the woods each fall and winter for a tradition of deer hunting. These outings instilled a strong bond to property and helped convince the Potters of the lasting benefits of open space preservation. Family and friends had managed the forest and closely followed a Woodland Management Plan prepared by a forester for harvesting forest products. Using the plan, their active-

ly managed forest yielded forest products while continuing to provide excellent habitat for wild turkey, gray fox as well as the occasional black bear or bobcat.

With frontage on one of the few remaining rural gravel roads in Hunterdon County, the Potter parcel links other Green Acres acquisitions. This new parcel will enhance public access for hikers and others who cherish the outdoors. With some simple planning old forest lanes can become new trails for a bird watch or a morning snowshoe trek. The Sweet Hollow Preserve will provide the public with places to hike, hunt, snowshoe and enjoy the wonders of nature.



Potter property addition to Sweet Hollow Preserve.



"Peregrine Falcon"



"Gentian"

Sale of Stefan Martin Prints Benefits Trust

In 1984, the Trust commissioned a series of limited edition prints created exclusively for the Trust by New Jersey wood engraver Stefan Martin. Each of the three prints highlights an object of the Trust's preservation efforts: the State-endangered Peregrine Falcon, titled "Peregrine Falcon;" a northern New Jersey stream habitat titled, "Morning Stream;" and a grouping of three Pine Barrens Gentian, titled "Gentian." After Stefan Martin's death in a 1994 fishing accident, a fellow artist noted that Martin was "absolutely one of the most important artists in New Jersey. He won many awards, was nationally known, and very well-loved."

Unframed prints are \$150 each, or \$400 for all three (a \$50 savings). Remaining as of this writing are 203 "Peregrine Falcon," 127 "Morning Stream," and 18 "Gentian" prints.

To order, contact the Trust at 609-984-1339, or email NatLands@dep.state.nj.us and indicate which print or prints you would like to order and your name and phone number. We will get back to you with ordering details.



"Morning Stream"

2009 List of Donors

The New Jersey Natural Lands Trust gratefully extends its thanks to the following who have donated land, funds or services to the Trust in 2009 to help preserve and protect New Jersey's natural diversity:

Thomas and Catherine Flegel

Beatrice Tracey

Dianne Trainor

CITGO Petroleum Corp.



The Trust accepts gifts, legacies, bequests and endowments of land and/or funds for use in accordance with the Trust's mission. For more information about how you can make a donation to further the Trust's mission to acquire, preserve, and manage natural lands for the protection of natural diversity, call 609-984-1339, or visit the Trust's website at www.njnlt.org

The New Jersey Natural Lands Trust financial report is available upon request.

Thanks to Our Volunteers

The Trust would like to acknowledge and thank its many volunteers for their invaluable contributions to the maintenance of Trust preserves. It takes a lot of commitment and discipline to keep a watchful eye on a piece of property over time, especially since volunteer monitoring is pretty much a self-motivated endeavor. It also takes dedication to

attend a preserve workday and pick up what appears to be the same trash, year after year.

If you are interested in becoming a Trust volunteer monitor or attending a workday, please contact the New Jersey Natural Lands Trust at 609-984-1339, or email NatLands@dep.state.nj.us.

The New Jersey NATURAL LANDS TRUST

Board of Trustees

An 11-member Board of Trustees sets policy for the Trust.
Six members are appointed by the Governor from the recommendations
of a nominating caucus of conservation organizations, and five members are State officials.

Michael Catania

(Chairperson), President, Conservation Resources Inc.

James Hall

(Vice Chairperson), Executive Director, Palisades Interstate Park Commission

Theresa Lettman

(Secretary/Treasurer), Pinelands Preservation Alliance

Amy Cradic

Assistant Commissioner, Natural and Historic Resources, New Jersey Department of Environmental Protection

Emile DeVito

Director of Conservation Biology, New Jersey Conservation Foundation

Steve Eisenhauer

Natural Lands Trust, Inc.

Thomas Gilmore

President, New Jersey Audubon Society

Ernest Hahn

Executive Director, Delaware and Raritan Canal Commission

Adrienne Kreipke

Manager, Budget, Office of Management & Budget, New Jersey Department of Treasury

Judeth Yeany

Administrator, Green Acres Program, New Jersey Department of Environmental Protection

Vacant

State House Commission Member

Staff

Robert J. Cartica, Executive Director

Cari Wild, Real Estate Coordinator

Martin Rapp, Ecologist

Jane Engel, Counsel



New Jersey Natural Lands Trust
P.O. Box 404
Trenton, New Jersey 08625-0404



Printed on recycled paper