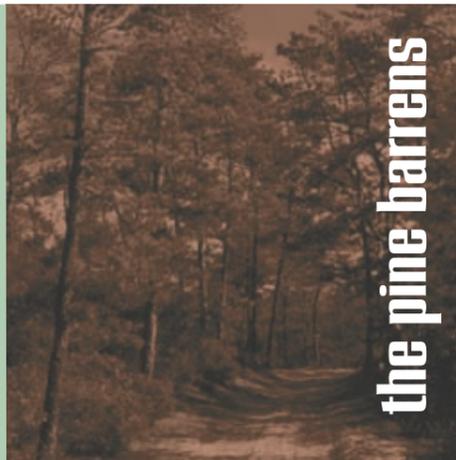




LONG ISLAND
PINE BARRENS
SOCIETY



today

PRESERVATION: NOW OR NEVER

At Long Last

A PLAN TO SAVE THE CARMANS RIVER

Nearly three years after environmentalists began creating a blueprint to protect the Carmans River in the Pine Barrens of Brookhaven, the Town Board there has approved a plan for the watershed. On October 15, a 200-page "Carmans River Conservation & Management Plan" was adopted by the Brookhaven Town Board. The strategy involves adding 3,845 acres to the protected Pine Barrens – 1,660 to the Core Preservation Area where development is prohibited and 2,185 acres to the Compatible Growth Area where development can occur under prescribed circumstances. The annexation of new land was approved by the New York



Credit: Marty Van Lith

WORTH WAITING FOR: The Carmans River flows through the Pine Barrens in Brookhaven Town, through Southaven County Park and the Wertheim National Wildlife Refuge to Bellport Bay.

Supervisor Ed Romaine, is a substitute for a plan proposed by former Supervisor Mark Lesko, which was rejected two years ago amid Town Board bickering. The revised plan calls for acquisition of land near the banks of the ten mile-long river, which runs from Middle Island to the Bellport Bay at Shirley. The earlier plan depended more on transferring development rights from the watershed to less environmentally-sensitive commercial areas of the town.

Supervisor Romaine said, "I'm delighted that my plan to protect thousands of acres in the Carmans River watershed was enacted by the Town Board. This plan not only preserves the river, but ensures our drinking water

Continued on page 3

The new plan, advanced by Brookhaven

State Legislature and signed into law on August 1, by Governor Andrew Cuomo.

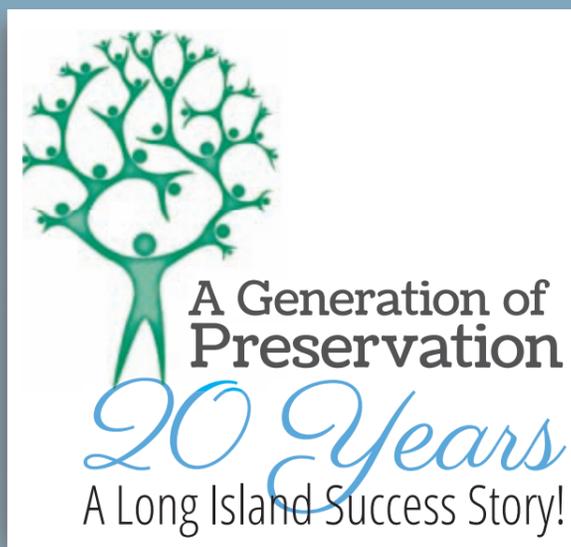
The new plan, advanced by Brookhaven

Town Board. This plan not only preserves the river, but ensures our drinking water

Environmentalists Mark 20th Anniversary of Pine Barrens Act

Long Islanders and their elected officials are marking the 20th Anniversary of passage of the Pine Barrens Protection Act, landmark legislation that now protects 100,000 acres of Long Island's premier ecosystem. More than 50,000 acres are off limits to development, in an effort to protect the Island's purest groundwater and a habitat boasting the greatest diversity of plants and animals anywhere in New York State.

Celebrations began with a ceremonial hike through the Pine Barrens in Quogue on July 14 and a reunion of many who had a hand in the preservation effort on July 15. They continued at the Society's 36th Anniversary Environmental Awards Gala, on October 16. That event honored New York State Comptroller Thomas P. DiNapoli, prime sponsor of the Pine Barrens Act in the State Assembly, and New York State Senator Kenneth P. LaValle, the prime sponsor in the State Senate. Also honored was former Newsday Reporter and Editorialist Robert



TIME FLIES: Long Island is marking the 20th anniversary of landmark legislation that protects water and habitat.

Keeler – a champion of the environment on Long Island.

Actor Alec Baldwin served as Honorary Chairman of the event which drew 200 guests to Oheka Castle in Huntington. Co-Chairs were Ross Ain of Caithness Long Island, Nancy Rauch Douzinas of the Rauch Foundation, supporter of the Society's work, and Jed Morey, Publisher of the Long Island Press and past recipient of the Society's award for "Outstanding Contribution to Long Island's Environment."

The Pine Barrens Protection Act of 1993 was the product of more than ten years of environmental education, led by Society Founders John Cryan, Robert McGrath and John Turner. The state preservation law was the product of the Pine Barrens Preservation Initiative – a legal and legislative advocacy campaign which ran from November 1989 to July 1993 when the Pine Barrens Act was signed into law by Governor Mario Cuomo. The Pine Barrens campaign has been recognized through many state and

Continued on page 3

the thicket

How Humans Have Shaped the Long Island Pine Barrens

by Katharine Muether

"Katharine is an environmental studies major (B.A.) and biology minor finishing up her last semester at Stony Brook University. Her focus of study is in ecology and conservation. She was an intern this past summer at the Society."

The origin of the Long Island Pine Barrens has often been debated. The vegetation in the Pine Barrens thrives due to the acidic, nutrient-poor and dry soil composition common to Central Long Island. However, by studying the historical spatial changes of the area, it is apparent that humans



Credit: LIPBS

EVOLVING: Human interaction with the Pine Barrens alters the ecosystem.

have had a great influence in shaping the Pine Barrens that we all know and love today. Human disturbance throughout the past three hundred years, such as logging, land clearing and fire, have promoted the growth and expansion of Pine Barrens vegetation. Pollen records, charcoal profiles, early maps and records help provide the evidence.

Today, while walking through the Pine Barrens, one expects to see native vegetation such as pitch pines, scrub oak, blueberry, huckleberry, grasses and forbs. However, if one stepped back in time, a couple centuries ago, the landscape would be drastically different from today. What we know as the "Pine Barrens" today, was previously dominated by tree oaks, American chestnuts and other deciduous hardwoods. Pitch pine and scrub oak were present back then, but in much smaller numbers than today. The vegetation of the area changed to its current state some 200 years ago, due to an increase in human-caused disturbance.

Euro-Americans began settling on Long Island in the mid-17th century and thus began the disturbance of an ancient environment. This involved extensive land-clearing and the establishment of a logging industry, using wood for building, fuel and shipbuilding. Wood was exported to New York City and other surrounding areas. In the year of 1812 alone, Brookhaven Town exported over 100,000 cords of wood. Hardwood trees (dominant in the area at the time) were preferred over pitch pines for fuel and cooking because they burned evenly and produced less soot. Large tracts of land across central-eastern Long Island were left barren, stripped of their primordial hardwood vegetation due to logging and brush removal. This heavy removal of hardwoods during the first few centuries of Long Island's establishment provided an opportunity for the shade-intolerant pitch pine and scrub oak to expand in numbers.

The pollen record for Deep Pond (Wading River, NY) has been studied to help examine this change in vegetation and to determine its causes. Pollen profiles were taken by examining levels of pollen trapped deep in pond sediments. Pre-settlement pollen levels account for only 15% of pitch pine and around 50% for oak. These profiles show that pitch pine pollen levels increased dramatically after Euro-American settlement began and that tree oak pollen levels decreased. The clearing of hardwood trees that began with human settlement allowed the shade-intolerant pitch pine to take root.

Fire frequency and intensity also increased with early Long Island settlement. Almost all fires (90%) at this time had human causes. Fires were commonly used for land clearing (burning brush) and for cooking. The establishment of the Long Island Railroad was also a great source of fire during this time. Fires were started by sparks and by hot embers dumped along the tracks. With little or no means of fire suppression, these fires quickly expanded and often burned for weeks at a time. In 1862, one fire was so extensive, that it started in Smithtown and swept all the way into Southampton — essentially burning the entire middle of the island. By the year 1911, the Pine Barrens were burned so much that the area was seen as unproductive and untaxable.

Charcoal profiles have also been studied in Deep Pond. Sediments were examined for varying levels of charcoal within the sediment over time. Charcoal levels almost doubled after settlement. An increase in fire-frequency favored the establishment of the pitch pine. Pitch pines are more adapted to fire than tree-oaks, with thick bark and serotinous pine cones, protecting the seeds from the fire and only opening and releasing seeds after the fire. Oaks also have a longer fire-return interval, taking them longer to return after a fire has burned the area. Pitch pines are dependent on fire (and other disturbances) in order to maintain their dominance over hardwoods.

Pitch pine-oak-heath woodlands and pitch pine-scrub oak barrens expanded so much after Euro-American settlement that they stretched as far west as Hicksville and Farmingdale. Some of these woodlands also covered large sections of Central Park.

Looking again at the pollen profiles for Deep Pond, we see that after 1920, pitch pine began to decline and scrub oak gradually reestablished itself as the dominant tree. This is mainly due to a lack of disturbance, including a flagging logging industry and the development of fire suppression methods. Without fire, oaks and other hardwoods will gradually replace the pitch pine in dominance. In the future, development is not the only threat to our precious ecosystem; fire suppression is also an important threat to these complex plant communities.

Adapted from: Kurczewski, Frank E., and Hugh F. Boyle. "Historical Changes in the Pine Barrens of Central Suffolk County, New York." *Northeastern Naturalist*. 7.2 (2000): 95-112.

ENVIRONMENTAL NEWS NOTES

The Ups and Downs of CPF

Credit: Wayne Cook



State Senator Ken LaValle

This major preservation accomplishment has not come without its problems. East Hampton government raided hundreds of thousands of dollars to plug holes in its budget. The funds were required to be repaid and East Hampton Supervisor Bill McGintee was forced out of office. Southampton was also criticized for its use of CPF funds and restitution obtained.

In the latest turn, an affiliate of the Peconic Land Trust, a non-profit organization which focuses on protecting farming, has sought tens of millions of dollars from the Southampton CPF to help fund lower priced land for agriculture. Opponents of the scheme, including the Pine Barrens Society, say buying land from non-government agencies will prevent the CPF from meeting its open space and farmland preservation objectives and will not result in increased food production.

A special committee established by CPF co-sponsors State Senator Kenneth P. LaValle and State Assemblyman Fred W. Thiele, Jr. is exploring the policy and preservation implications of the proposed land deal and will make recommendations to the Southampton Town Board, soon.

Credit: Wayne Cook



State Assemblyman Fred Thiele

Water We Going To Do? II

Credit: Wayne Cook

The Long Island Clean Water Partnership has held its second major conference aimed at informing and involving Long Islanders in an effort to reverse declining groundwater Island-wide. Led by the Pine Barrens Society, Citizens Campaign for the Environment, Group for the East End and The Nature Conservancy, the program explained the cause and extent of contamination and the remedies being sought.

Long Islanders get all of their water from a system of underground aquifers. Contamination is the result of nitrogen from sewage and fertilizers, pesticides and volatile organic compounds. Unused pharmaceuticals are also finding their way into groundwater. In the past 17 years, nitrogen in the most shallow aquifer — the Upper Glacial has increased 40% and 200% in the Magothy Aquifer, the one supplying the most drinking water. Contamination of groundwater has a major impact on the quality and functionality of rivers, streams, lakes and bays as well. Harmful algae blooms have increased dramatically in recent years, threatening fish, shellfish, tourism and even public health.

The Clean Water Partnership has proposed legislation to establish a more restrictive standard for nitrogen, reduction or elimination of certain pesticides and the establishment of tougher government enforcement of water quality regulations.

The most recent conference was held at the Wind Watch Golf & Country Club in Hauppauge and was broadcast Island-wide on the Society's award-winning television program, seen on Cablevision and on the Society's website. Details of Long Island's water quality problems are available at the website of the Long Island Clean Water Partnership www.longislandcleanwaterpartnership.org.



WATER WORRIES: Professor Chris Gobler of the Stony Brook University Department of Marine Sciences discusses research which has shown that nitrogen from sewage is increasing dramatically in groundwater, threatening both drinking water and surface waters.

State Bond Act Proposed

Credit: Wayne Cook



NYS Assemblyman Robert Sweeney

The Chairmen of the New York State Legislature's Environmental Conservation Committees are considering a \$5 billion "Clean Water/Clean Air/Green Jobs Bond Act" that could be on the ballot as soon as November 2014. State Assemblyman Robert Sweeney and State Senator Mark Grisanti introduced the proposal in late August and it was the subject of testimony before the Assembly Committee on Environmental Conservation in early September.

Credit: NYS Photo



NYS Senator Mark Grisanti

Environmentalists Celebrate!

Continued from page 1



NYS Comptroller Thomas DiNapoli



NYS Senator Kenneth LaValle



NYS Assemblyman Steven Englebright



NYS Assemblyman Fred Thiele



NYS Assemblyman Robert Sweeney

national awards as a major achievement in environmental protection and enlightened land use planning.

The Pine Barrens once covered a quarter of the one million-acre Long Island landscape. By the late 1980's, Pine Barrens land was being lost at a rate of nearly 5,000 acres per year.

In 1989, the Pine Barrens Society brought the largest environmental lawsuit in New York State history. It challenged 234 proposed development projects in the towns of Brookhaven, Riverhead and Southampton which, had they been approved, would have turned the barrens into a giant piece of Swiss cheese – no longer viable as an ecosystem.

The suit asked the courts to require that the towns determine how much of the Pine Barrens could be developed without contaminating the Island's purest water supply beneath the barrens and destroying a habitat that protects the greatest diversity of plants and animals anywhere in New York State.

The Society lost in the Supreme Court, then won in the Appellate Court. The state's highest court, the Court of Appeals, refused to order a cumulative impact statement for the Pine Barrens but admonished the New York State Legislature to craft a plan to protect the pine barrens.

After months of negotiation between environmentalists and developers, the state legislature unanimously approved the Pine Barrens Protection Act. It was signed into law by then Governor Mario Cuomo on July 14, 1993.

The law, and subsequent amendments to it, created a 55,000-acre Core Preservation Area where development is mostly banned. The Core extends from Rocky Point in the west to the Shinnecock Canal in the east and includes federal, state and county preserves and parklands and the home to many species of plants and animals, some of them rare or endangered.

The Pine Barrens Act also created a 47,000-acre Compatible Growth Area outside the perimeter of the Core. There, development is permitted under a strict set of standards and guidelines.

Overseeing the Pine Barrens preserve is a Pine Barrens Commission comprised of the Supervisors of the three Pine Barrens towns, the Suffolk County Executive and a representative of the New York State Governor. Based in Westhampton, the Commission's staff of nine enforces the Pine Barrens statute and determines whether or not development in the Compatible Growth Area conforms to the requirements of the law.

Land in the Pine Barrens has been preserved mostly through purchases by New York State, Suffolk County and by Brookhaven, Riverhead and Southampton towns. Only 1,500 acres of Core Preservation Area remains in private hands, but cannot be developed. Through numerous referenda, Suffolk voters have approved more than a billion dollars to purchase land in the Pine Barrens to protect water and preserve open space.

About 2,000 acres of the Pine Barrens core has been protected by a program of Transferable Development Rights, where owners of protected land can sell their development rights to developers wishing to build more in less sensitive areas. These "Pine Barrens Credits" may also be used to increase a developer's wastewater discharge, largely in areas with existing sewer systems, outside of the Pine Barrens.

Pine Barrens Society President Alan Singer said, "Enactment of the Pine Barrens law is not only one of Long Island's greatest accomplishments – it holds out real hope that environmentalists will be able to reverse the downward trend in groundwater quality in places outside the protected Pine Barrens." The Society is playing a leading role in a long-term plan to reduce nitrogen from sewage and fertilizers as well as pesticides and volatile organic compounds in the Island's underground aquifers which supply all of the Island's drinking water and feed its surface waters. The conservation effort is being coordinated by the Long Island Clean Water Partnership which is expected to involve more than 100 groups and organizations before year's end.

Credit: Wayne Cook



PBS Executive Director Richard Amper



PBS Co-founder John Cryan



PBS Co-founder John Turner



Builders Negotiator Robert Wieboldt



Broadcast Journalist David North

Carmans River Protection Plan Approved

Continued from page 1

remains pristine for future generations."

The Pine Barrens Society refused to accept defeat of the earlier plan and continued to work closely with the new administration to reduce contamination by nitrogen-loaded groundwater, produced mostly by cesspools, septic systems and by fertilizers used for agriculture, lawn and plant maintenance. Limiting development in the watershed will reduce this contamination to maintain the health of the river's waters.

A key component of the plan is the creation of a "Performance Committee," to assure that protection targets are met and water quality improvement is obtained.

"Development of the Carmans River Plan was a painful process, but one worth enduring," said Pine Barrens Society Executive Director, Richard Amper.

Credit: Jack Krieger



CARMANS RIVER WARRIORS: The Brookhaven Town Board, which approved a plan to protect the Carmans River at its meeting, October 15.

"Years of additional land preservation in the watershed and monitoring water quality improvement will ensure the protection of one of the Pine Barrens' and Long Island's greatest natural treasures," he added.

Preservation of the Carmans began in earnest in 1947 when Maurice Wertheim donated three miles of the tidal portion of the river along with 1,700 upland acres to the U.S. Department of the Interior. New York State and Suffolk County added 1,300 acres more in 1962. In 1974, the Carmans became the first river in New York State to enjoy protection under the state Wild, Scenic and Recreational Rivers Act.

More recently, the Carmans River Partnership was created in 2000 and at the urging of the Pine Barrens Society, Peter Scully, Chairman of the New York State Pine Barrens Commission, proposed a Carmans River Protection Plan in 2011.



LONG ISLAND
PINE BARRENS
SOCIETY

547 East Main Street
Riverhead, NY 11901

Non-Profit Organization
U.S. Postage
PAID
Riverhead, NY 11901
Permit #35



LONG ISLAND
PINE BARRENS
SOCIETY

OFFICERS

Alan Singer, *President*
Robert McGrath, *Vice President*
Nina Leonhardt, *Secretary*
Vincent Scandole, *Treasurer*

BOARD OF DIRECTORS

Thomas Casey
Adriana Niazi
Regina Seltzer, Esq.
Samara Swanston, Esq.

EXECUTIVE DIRECTOR

Richard Amper

MANAGING EDITOR

Katie Rose Leonard

ART DIRECTOR

Julie Clark

A copy of the last annual report filed with the New York State Department of Law may be obtained by writing to NYS Attorney General's Charities Bureau, Attn: FOIL Officer, 120 Broadway, New York, NY, 10271 or may be obtained directly from the Long Island Pine Barrens Society, 547 East Main Street, Riverhead, NY 11901

Printed on recycled paper.

Credit: New York State Photo

HISTORICAL OR HYSTERICAL? Governor Mario Cuomo is flanked by Pine Barrens Society Executive Director Richard Amper and the late Edwin "Buzz" Schwenk, Executive Director of the Long Island Builders Institute, at the bill signing ceremony of the Pine Barrens Protection Act, July 14, 1993 at Southaven County Park. The event marked the end of the three-year "War of the Woods" and led to "A Generation of Preservation," being marked this year. Thus, the smiling!



The Pine Barrens Society's television program airs on Cablevision Channel 20 in the following areas. If your region is not listed here, please call our office at 631-369-3300 to find out how you can help us get it aired on your local Cablevision network. The program can also be viewed on the Society's web site, www.pinebarrens.org by selecting TV Show on the home page. The air times below are effective from October 1st through March 30th.

Town of East Hampton

Wednesdays 6pm
Thursdays 9pm
Fridays 6:30pm

Town of Brookhaven, Town of Smithtown and portions of Town of Islip

Mondays 9pm
Tuesdays 8pm
Tuesdays 8:30pm

Town of Riverhead, Town of Southold and Town of Southampton

Mondays 6pm
Tuesdays 8pm
Wednesdays 7pm

Town of Babylon, Town of Huntington, portions of Town of Islip, and all of Nassau County

Tuesdays 8pm (Channel 115)
Wednesdays 7pm
Saturdays 10am

www.facebook.com/PineBarrensSociety

