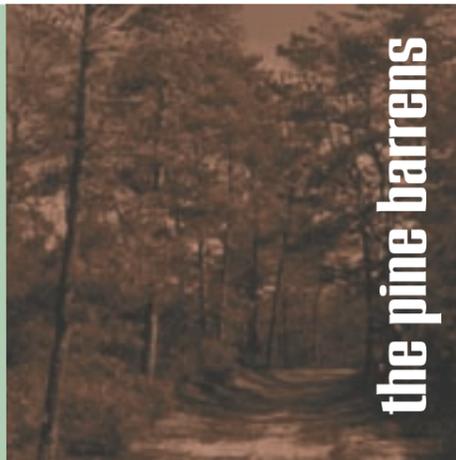




LONG ISLAND
PINE BARRENS
SOCIETY



the pine barrens

today

PRESERVATION: NOW OR NEVER

Earth Day Issue 2012

THREE GREEN CHALLENGES!

Water Quality Protection Effort Gets Underway
Carmans River Plan Stalled in Brookhaven
Attacks On Suffolk Land Preservation Rebuffed



Credit: WayneCookPhotography.com

WATER WORRIES: New York State Assemblymen Robert Sweeney and Fred Thiele listen to testimony on water quality at Legislative Hearing.

Launch Water Protection Campaign

Environmentalists have launched a campaign to improve water quality island-wide in the wake of a 2011 Suffolk County report warning of significant declines in groundwater quality, affecting both drinking water and surface water. The effort involves federal, state, county and local government and may become the largest environmental initiative in Long Island history.

A State Legislative Hearing in September 2011 is expected to lead to state legislation this year. The Society and other leading Long Island environmental groups set out on an ambitious and wide-ranging effort to improve waste-water management, eliminate harmful pesticides, improve land use policy and educate the public on what every Long Islander must do to reverse the increase in nitrogen and other contaminants that are polluting our rivers and bays and degrading our drinking water.

An Island-wide conference, "Water We Going To Do?" is scheduled for May 10 at the Huntington Hilton. Get details by calling the Society at 631-369-3300.



Credit: LIPBS

SIDETRACKED: Brookhaven Town Board, staff, media and public attend March discussion of proposed Carmans River Watershed Protection Plan.

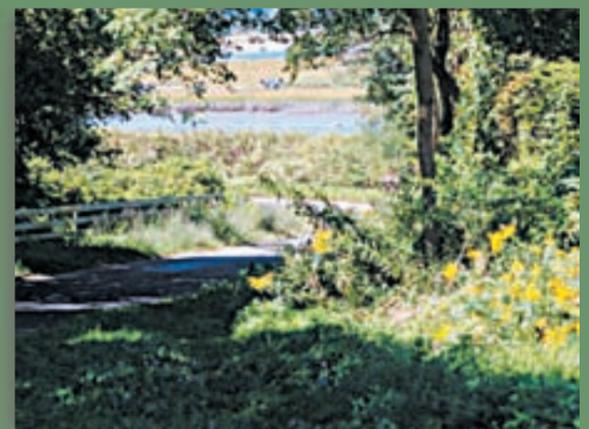
Carmans Plan Blocked

The Carmans River Watershed Protection & Management Plan has been stalled by the Brookhaven Town Board. The proposal called for re-direction of development away from the river corridor and residential communities, to downtown and commercially zoned areas.

Council Members Steve Fiore-Rosenfeld, Connie Kepernt and Dan Panico proposed substituting a re-zoning plan for the more protective Carmans Plan, after meeting behind closed doors for about a week in March. Kepernt and Panico had been serving on an internal review panel within the Town Board, but failed to advance any alternative to the environmental protection plan, during the year-long plan review process.

Pine Barrens Society Executive Director Richard Amper lamented the disapproval.

"The same Town Council members who have previously voted to kill the Carmans Plan now claim they have a magical new plan. I think they have neither the will nor the wherewithal to produce a true preservation plan for the Carmans and that they have signed a death warrant for the river."



Credit: Granville Fairchild

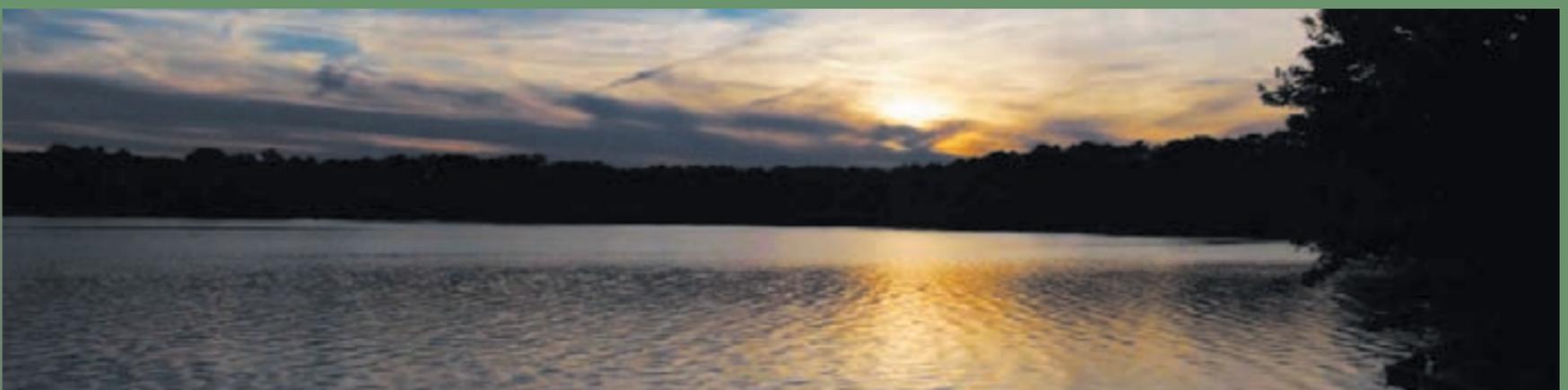
PRESERVATION THREAT: Land like this would be threatened if some Suffolk County Legislators have their way and curtail land acquisitions.

Land Preservation Program Defended

Threats to Suffolk County's drinking water protection and open space and farmland preservation programs were rebuffed through litigation and lobbying in the face of the strongest challenge ever by opponents of environmental protection.

The Society filed suit September 14, 2011 in New York State Supreme Court to reverse a raid by the Suffolk County Legislature on Suffolk's Drinking Water Protection Program to plug holes in the county's bloated budget. Five times at referenda, voters have approved using a 1/4-penny sales tax to protect underground water supplies and critical habitat. A poll, conducted at the height of the recession, showed that 80% of residents want programs like these maintained or expanded and 72% believe there is no need to choose between the environment and the economy.

Then, in December, the Legislature's Presiding Officer proposed a new referendum to use environmental funds for general spending purposes and others suggested temporarily curtailing the programs. So far, environmentalists have defeated such efforts.



PINE BARRENS TREASURE: Wildwood Lake at sunset is featured in the Society's newest television Public Service Announcement, recorded in high definition.

Credit: Kai Simonsen

the thicket

THE HIDDEN LIFE OF THE PINE BARRENS

By Joel Horman

A life-long interest in natural history led Horman to mushrooming, and the Long Island Mycological Club. Horman serves as the club newsletter's (LI Sporeprint) contributing editor and chief identifier. While inventorying the macro-fungi of Long Island, he recorded species previously unknown in the northeast and New York State.

In early spring, signs of returning life are visible all around us, as buds and blossoms swell and unfold, clothing trees and shrubs with a gauze of pastel hues, while the earliest of our returning migrant birds fill our senses with their song and lift our spirits. But there is an unseen world under the earth, where life forms of ancient origin gather their resources and prepare to emerge. The mycorrhizal fungi, those thousands of species which have partnered with trees in a mutually beneficial symbiosis, are preparing to emerge as fruiting bodies, in a procession of myriad forms and colors beginning in spring and culminating in an immense autumnal fructification: the mushrooms of the Pine Barrens.

They are mostly content to live underground, where they reside as an extensive network of microscopic tendrils and filaments, often so numerous that a gram of soil can contain lengths of thousands of meters of them. This is the complete organism itself, and only when it feels the need to propagate, and conditions are right, does it form the spore-producing reproductive bodies which we know as mushrooms. They can be considered the equivalent of fruits on a tree, so that removing them is not like uprooting a plant or felling a tree, but more like harvesting berries or apples. No harm is done to the living organism, which lives on to fruit again next season.



Credit: Joel Horman

FOREST FRIENDS: The Orange-capped Bolete (*Leccinum aurantiacum*) is an edible mushroom often found close to pine and aspen trees.

Mycorrhiza translates as fungus root, which accurately describes how the mushroom's filaments, called hyphae, envelop the roots of their chosen partner, often a pine or oak. Then, extend their range and area many times, doing most of the labor of obtaining water and minerals, the tree's own roots serving mostly as support. In return, they receive sustenance in the form of carbon-containing sugars. This ancient partnership now includes over 90 percent of existing plants, and their complex networks permeate the forest floor, linking not only fungus to plant, but plant to plant, and fungus to fungus in what has been called the original www: the wood-wide-web. (A single fungal individual can comprise many fruiting bodies spread across an area that can be as large as 2,000 acres. In Michigan one such organism (the "humongous fungus") estimated to be 1,500 years old, is claimed to be the world's largest living thing.) Without this cooperative network, our forests would be much diminished, particularly in nutrient-poor soils such as the Pine Barrens. Trees raised experimentally without a fungal partner grow at a much lower rate, and sometimes fail to survive.

So rich is this subterranean pipeline that plant thieves have developed that tap into it but offer no payment in return: the mycoheterotrophs. One species wide-spread throughout our Pine Barrens, the white Indian Pipe (*Monotropa uniflora*), glimmers ghostlike in shadowy groves. Without chlorophyll to manufacture food, thievery is its only way to exist. While some mushrooms form associations with several species of trees, others are more specialized, so that mushroomers seeking them must be able to recognize their arboreal partner. So seekers of the Orange-capped Bolete (*Leccinum aurantiacum*) a large and particularly esteemed edible, know to look out for pine or aspen stands. On the other hand, one species of pine is known to form connections with as many as thirty different mushroom species. Gourmet items such as Chanterelles, Morels and Truffles must be collected from the wild since they are mycorrhizal and cannot be cultivated in the absence of their forest friends.

If plants have friends among the fungi, they also have foes. These numerous disease causing parasites, mostly microfungi, attack and infiltrate many flowering plants by their invasive hyphae, digesting their substance and thereby nourishing themselves. The larger bracket fungi, some several feet across, which are seen attached to the trunks of living trees, are all parasites, some so virulent as to cause the rot and destruction of millions of dollars of valuable timber. Others are relatively benign, not causing the immediate demise of their host but merely draining some of its resources. Some digest only the dead hardwood at a tree's core, hollowing it out but leaving the living layers intact, so that it becomes more supple and better able to withstand storm winds.

The third category of fungi are the decomposers, also known as saprotrophs, which live by digesting the organic remains of plants, and are the primary recyclers in forest ecosystems, able to break down stubborn substances such as cellulose which bacteria cannot. They are indispensable in their role of returning these nutrients to the soil. This type of mushroom is easily cultivated, grown on straw and dung, and includes the familiar White Button, the Portobello, and others found on supermarket shelves.

Mushrooms have been a food source for humanity for millennia, extolled by the ancient Romans and depicted in Egyptian hieroglyphs. Edible mushrooms are found in all three of the categories (saprotrophs, parasites and symbiotes) mentioned above, with neither one of these being superior in quality. The largest, however, are the parasites, shelf mushrooms such as *Leitiporous sulfurous* (Chicken of the Woods) and *Grifola frondosa* (Hen of the Woods) which can weigh many pounds and are avidly sought by mushroomers. Contrary to persistent old wives' tales, there exists no rule of thumb (such as a silver coin turning black upon cooking) to identify edible and poisonous species. Neither can we turn to the example of animals to learn what is edible, since, for example, squirrels, which are immune to the toxins of deadly *Amanita* species, can be seen happily munching them. One must learn to identify precisely the species of mushroom in hand in order to know whether it is edible or not, much as a birder can tell a Blue Jay from a Bluebird. The great majority of species, not having been subjected to the trial and error of human sampling over the centuries, are simply of unknown edibility, although we may make educated guesses regarding particular families or groups.

Worldwide, about 20,000 species of macrofungi have been identified, although estimates of existing populations are much higher. On Long Island, the Long Island Mycological Club has compiled a checklist of about 900 species, with more being added each year. On a good day in autumn, more than 70 species can be found, ranging from edible orange Milkcaps that exude white latex to delicate, fragrant Black Trumpets; deadly, gleaming white Destroying Angels and golden, apricot scented Chanterelles. The beauty, variety and unpredictability of this kingdom are very compelling, and attract more and more natural history buffs as well as natural food lovers. To access the checklist of LI mushrooms or to learn more, visit our website at www.limyc.org.

ENVIRONMENTAL NEWS NOTES

PBS TV Show Starts Eleventh Season

The Long Island Pine Barrens Society's award-winning television program began its eleventh year in January. Pine Barrens Society Executive Director, Richard Amper and co-host Kathleen Nasta appear weekly on Cablevision Channel 20, island-wide, interviewing newsmakers, public officials and environmental activists, for the 30-minute program.

Credit: LIPBS



GREEN TALK: PBS TV Show Co-Hosts Dick Amper and Kathleen Nasta chat with Councilwomen Bridget Fleming, of Southampton Town, and Jane Bonner, of Brookhaven Town.

Each episode features a visit to a park, preserve or other natural attraction on Long Island with naturalist guides like Tom Casey, Bob McGrath and John Turner, all Board Members or former Board Members of the

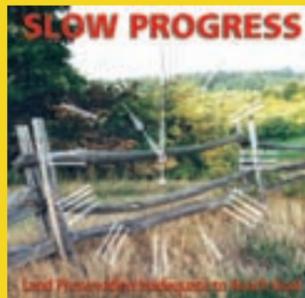
Society. Occasionally, the program goes on location to cover special environmental stories, such as a hike through the Pine Barrens with New York State Assemblyman Steve Englebright or a visit to a forest fire fighting demonstration.

This spring, the show will introduce viewers to environmental organizations such as the Long Island Nature Collaborative for Kids and the North Fork Environmental Council, will take a look at "Green Buildings," and will explain the work of the Suffolk County Water Authority.

A listing of show times on the different Cablevision systems appears on page four. The program, which changes monthly, also streams on the Society's website, www.pinebarrens.org. Tune in anytime!

Land Preservation Gains

Credit: Julie Clark



After the Island-wide "Long Island's Last Stand" commitment in 2006, the Society has annually documented the progress made by all levels of government in attaining the goal set: to protect 35,000 acres of open space and farmland before final build-out in 2020. At the height of the recession, a scientific poll found that eight out of ten Long Islanders favored maintaining—or even expanding—the current preservation programs. In the recession, Long

Islanders recognized an unprecedented opportunity, available for the first time in decades: we could buy more land now, while prices are down and sellers are eager. Sadly, not all government entities — those charged with executing the preservation programs that serve the public interest—recognized the same opportunity, and acquisition numbers plummeted in 2008 through 2009, with a slight increase beginning in 2010 and continuing in 2011. However, with last year's total of just over 1,500 acres, the acquisition rate is still falling short by 50% annually of what's needed to meet the goal. The full report will be released later this spring. Read it online: <http://pinebarrens.org/openspace.asp>.

Pine Barrens Plan Revised

Credit: CPBJPPC



Seventeen years after it was adopted, the Comprehensive Land Use Plan for the Pine Barrens is being updated. Over the winter, the five-member, New York State Pine Barrens Commission began in earnest, revising the rules that protect Long Island's premier ecosystem. Representatives of the Governor, Suffolk County Executive and the Town Supervisors of Brookhaven, Riverhead and Southampton have set out to amend the plan to reflect all that has been learned in more than a decade-and-a-half of experience implementing the Pine Barrens Protection Act.

Perhaps the most important adjustment to the land use plan calls for a 15% mandatory redemption of Pine Barrens Credits every time one of the Pine Barrens towns grants increased density of development above "as-of-right" entitlement. One way land is preserved in the most sensitive Core Preservation Area of the Pine Barrens is through the sale of credits a landowner receives because their land cannot be developed. These credits can be used by developers to permit additional development in areas outside the Pine Barrens Core.

Up to now, towns were not requiring developers to purchase such credits in exchange for the right, say, to build 12 houses on property zoned for only 10. If adopted, the new regulation would require any developer who proposed to develop more than permitted under zoning to purchase these Pine Barrens Credits, thus making the credits more valuable and better ensuring proper compensation of landowners unable to build in the heart of the Pine Barrens. Action on many of the proposed amendments is expected this summer.



The President's Point of View

Water Worries

By Alan Singer

Last year, the Suffolk County Department of Health Services released a Draft Report which revealed an alarming decline in the county's drinking and surface water over the past 17 years, without concrete recommendations on how to reverse the trend, nor even a process for doing so. While the report does not indicate that many Suffolk residents are drinking contaminated water, nor that the public sources don't regularly meet state standards, the study makes clear that Suffolk's water is declining in quality, but it advances no specific actions to improve the situation.

The Report says that harmful nitrates have increased 40 percent in the Upper Glacial Aquifer, the one closest to the surface, and 200 percent in the heretofore largely pristine Magothy, over the past 17 years. It acknowledges that Volatile Organic Compounds — true carcinogens — are finding their way into supply wells and that fertilizers and pesticides, principally from agricultural activities, are contaminating drinking and surface water as never before.

The Report blames human activity on the surface — particularly continued real estate development — for most of the quality decline, but it proposes no reduction in this activity nor effective strategies for minimizing the adverse impacts. Similarly, the report acknowledges that the preservation of open space atop aquifer recharge areas is key to ensuring quality drinking water in the future and even identifies the most suitable

parcels for such protection. Yet it makes no recommendation for an increase in the rate of land preservation which has been declining in Suffolk for the past 20 years.

The Report admits that sewage treatment plant discharges do not always meet state drinking water standards and that private wells show unacceptable levels of nitrates and other contam-

Long Island needs to develop a sustainable Water Quality Protection Plan to reverse current trends and provide for drinking water and surface water quality maintenance.

inants. Long Island's surface waters are also declining precipitously. Coastal waters, rivers and streams are even more sensitive to declining water quality than is the human population. State standards for drinking water limit nitrates to 10mg/L for human consumption but concentrations of even 10 percent of that level will impair the Island's waterways.

So, what's to be done? Long Island needs to develop a sustainable Water Quality Protection Plan to reverse current trends and provide for

drinking water and surface water quality maintenance. Only with a comprehensive, science-based water protection plan and the regulations to ensure its objectives can the nation's first, federally-designated Sole Source Aquifer be protected. We must craft a plan with the political teeth to enforce the solid long-range planning that is necessary for protecting Long Island's water supply.

To reverse the downward trend of water quality, Long Island will have to do many things, including, but not limited to:

- 1) Increasing land acquisition in groundwater recharge areas;
- 2) Improving local land use decision-making;
- 3) Developing new management plans for pesticides and fertilizers;
- 4) Producing septic system upgrade incentives;
- 5) Improving sewage discharge practices;
- 7) Creating return procedures for prescription drugs;
- 8) Banning Volatile Organic Compounds found in drinking water supplies;
- 9) Improving management of storm water run-off;
- 10) Establishing future standards for drinking and surface water.

Long Island is currently facing its greatest environmental challenge ever — one which must be met for the health of our environment and economy. The Pine Barrens Society is committed to taking on this challenge. It's going to be a huge, but essential job.

PINE BARRENS SOCIETY CELEBRATES 34 YEARS!

Credit: Daniel Goodrich



OH WHAT A NIGHT: The stage is set at Oheka Castle in Huntington, October 20, for the Pine Barrens Society's 34th Anniversary Environmental Awards Gala.



CLASSICAL: 50's through 70's nostalgia was the theme of Gala 34 as evidenced by the classic cars that greeted guests as they arrived at Oheka for festivities.



PRESENTATION: Fox News Channel Anchor Patti Ann Browne is honored for her coverage of the Pine Barrens Preservation Initiative. Dick Amper and Kathleen Nasta do the honors.



HONOREES: New York State Assemblyman Robert Sweeney & Fox News Channel Anchor Patti Ann Browne, flanked by PBS President Alan Singer & Dick Amper.



COLLABORATORS: Adrienne Esposito, Maureen Dolan Murphy and Tara Bono of Citizens Campaign for the Environment support the Society with their attendance.



LONG ISLAND LEADERS: NYS Assemblymen Fred Thiele and Robert Sweeney are joined by Long Island Association President Kevin Law and Dick Amper.



PBS NEWS: That's Pine Barrens Society, not Public Broadcasting System! Society TV Show co-hosts Kathleen Nasta and Dick Amper do a gala spoof.



NASSAU NEIGHBORS: Beth Baldwin and Lisa Ott of the North Shore Land Alliance are joined by Lisa Mitten of the Northeast Organic Farming Association.



LAVISH SETTING: More than 200 guests attended the Long Island Pine Barrens Society's 34th Anniversary Environmental Awards Gala at historic Oheka Castle.



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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: Nassau County



DEVELOPERS DON'T EVEN SPEAK THE SAME LANGUAGE AS REAL PEOPLE: Builders characterize extraordinary natural beauty like this, as "unimproved property." Yet, when they build on such land, it is seldom, if ever, improved. This view is of Smithers Pond in Mill Neck. If it were replaced by a strip mall, developers would then term it "improved." Do you really think so?

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 April 1st through September 30th.

Town of East Hampton
Wednesdays 6pm
Thursdays 9pm
Fridays 3:30pm

Town of Riverhead, Town of Southold
and Town of Southampton
Mondays 6pm
Tuesdays 7pm

Town of Brookhaven, Town of Smithtown
and portions of Town of Islip
Mondays 8pm
Tuesdays 7pm
Thursdays 5pm

Town of Babylon, Town of Huntington,
portions of Town of Islip, and
all of Nassau County
Tuesdays 7pm
Wednesdays 9pm
Saturdays 11am