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

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.

Carmans Plan Blocked

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

Council Members Steve Fiore-Rosenfeld, Connie Kepert 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. Kepert and Pancio 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.

“Thel 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."

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.
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 oral identifier. While investigating the macrofungi 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 floated through the ages without changing much, mostly adapt to other species by forming, in preparation to photosynthesis, a process 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. They are the complete organism itself, and only when it feels the need to propagate, and conditions are right, does it form the reproductive reproductive bodies which we know as mushrooms. They can be considered the equivalent of fruits on a tree, so that removing that part is not like uprooting a plant or felling a tree, but more like harvesting berries or apples. None is harm to do the living organism, which lives on to fruit again next season.

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 fungi to plant, but plant to plant, and fungus to fungus in what has been called the original www. (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 enormous 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 mycophagist. One species wide-spread throughout our Pine Barrens, the white Indian Pipe (Monotropa uniflora), glisters ghostlike in shadowy groves. Without chlorophyll to manufacture food, they must depend on their arboreal partner. So seekers of the beauty, variety and unpredictability of this kingdom are very compelling, and attract more and more natural history buffs as well as nature lovers.

The third category of fungi are the decomposers, also known as saprotrophs, which live by digesting the organic remains of plants and animals, 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 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 Lactarius sulphureus or Chicken of the Woods and Gorda Fon- donus (Hen of the Woods) which can weigh many pounds and are avidly sought by mushrooms. 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 bird 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 unknown edible or poisonous. Thus, we may not be able to identify particular species of mushrooms among families or groups. Worldwide, about 20,000 species of macrofungi have been identified, although estimates of existing popula-

Environmental News Notes

Land Preservation Gains

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 through final build-out in 2022. As 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/openospace.asp.

Pine Barrens Plan Revised

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, and Nassau 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—end 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 reservation of Pine Barrens Credits every time one of the Pine Barrens towns grants increased density of development above “as-of-right” growth. One way land is preserved is in the most irreplaceable 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 rights to build, nor to buy 20 acres 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 small to build in the heart of the Pine Barrens. Action on many of the proposed amendments is expected this summer.

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 Kathie Karr, broadcast their show weekly on Cablevision Channel 20, island-wide, interviewing newsmakers, public officials and environmental activists, for the 30-minute program.

Each episode features a visit to a park, preserve or other natural attraction on Long Island with naturalist guides like Tom Casey, Rob McGrath and John Turner. All Board Members or former Board Members of the Society. Occasionally, the program features cover special environmental stories, such as a hike through the Pine Barrens with New York State Assembliamet 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 Authorities. 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!
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 discharge does not always meet state drinking water standards and that private wells show unacceptable levels of nitrates and other contaminants. 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.

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;
6) Creating return procedures for prescription drugs;
7) Banning Volatile Organic Compounds found in drinking water supplies;
8) Improving management of storm water runoff;
9) 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.
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?

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.

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 1-3pm

**Town of Brookhaven, Town of Smithtown and portions of Town of Islip**
- Mondays 9pm
- Tuesdays 7pm
- Thursdays 5pm

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

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

Credit: Nassau County