SUBURBAN SPLENDOR: A sailboat awaits a captain at a Pine Barrens lake.

Pine Barrens TV

The program can also be viewed on the Society's YouTube page at www.youtube.com/lipinebarrenssociety.

Towns of Babylon, Brookhaven, Huntington, Islip, Riverhead, Smithtown, Southampton & Southold Channel 20:
Saturdays at 10:30 AM
Wednesdays at 7:00 PM
Thursdays at 12:30 PM

Town of East Hampton:
Wednesdays at 6:30 PM
Thursdays at 9:00 PM
Fridays at 3:30 PM

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Thirty years ago, we gathered at Southaven County Park in Yaphank to witness then-Governor Mario Cuomo sign the Pine Barrens Protection Act into law, which had been passed unanimously by the New York State Legislature after a three-year battle. He delivered an eloquent speech that day, memorializing the importance of protecting Long Island’s Pine Barrens. Since then, over 106,000 acres of precious Pine Barrens have been preserved. Our drinking water, rare species and their habitats have been safeguarded.

Please join us on June 17, 2023, when we will celebrate this momentous achievement in style, once again at Southaven County Park. Several of the original forces behind the legislation will be present, including Assemblyman Fred Thiele and Steve Englebright.

In addition to the retrospective, the morning celebration will also focus on “The Best of the Rest,” a campaign to preserve 3,800 acres adjacent to the lands previously protected, which the Long Island Community Foundation is helping to fund. As reported in Newsday on April 4, 2023, we have achieved initial success with the protection of 152 acres, representing a portion of one of the 15 aggregated parcels that comprise this campaign. These acres are part of the approximately 700 acres of Rose-Breslin land nestled between Brookhaven Airport and the Long Island Expressway. Due to its size, this area supports numerous different natural communities and provides habitat for many plant and animal species, such as great horned owls, screech owls, white-tailed deer, foxes and pink lady slippers. “The Manorville property should be permanently preserved for open space protection,” said Richard Amper, the Society’s executive director.

Brookhaven Town’s acquisition of the parcel, on the northwest corner of Moriches-Middle Island Road and Weeks Avenue, used the transfer of development rights (TDR) process, which was written into the Comprehensive Management Plan that complements the Pine Barrens Protection Act. This process allows for the preservation of environmentally sensitive land while permitting developers to increase activity adjacent to other construction. The TDR process also saves taxpayer dollars since money is not exchanged. It is a win-win process for all.

Rose-Breslin spokesman Brian Ferruggiari said the company never had any plans for this special property, which is in the compatible growth area of the Pine Barrens. Instead, Rose-Breslin will be able to expand their Meadows project. “Our project is a prime example of how responsible development and preservation can coexist,” he said.

Suffolk County has also embraced “The Best of the Rest.” The Office of Economic Development and Planning has contacted landowners of the identified parcels to determine their interest in selling their land for preservation.

Students representing our Middle School Kids Go to College Program, which is supported by the National Grid Foundation, will demonstrate how the next generation of environmental stewards will protect our water supply. Live music and guided hikes will add to the festivities.

Join us at Southaven on Saturday, June 11, 10:00 am – 1:00 pm, for what is sure to be an exciting time for all!
Pinecone Love

By John Turner

Mr. Turner is a member of the Board of Directors of the Long Island Pine Barrens Society.

In spring, about a decade ago, I decided to hike the 4.5-mile loop trail at the NYSDEN’s 2,000-acre David Sarroff Preserve in Riverhead. I parked my navy-blue Hyundai Excel in the southern end of the eastern parking lot, near a row of mature pitch pines and headed off to enjoy the hike. Upon returning several hours later I was surprised to learn the once dark blue car had become light yellow—a gift from pine pollen—a coating provided by what must have been many millions of tiny pollen spores the pines had released while I hiked the pine-dominated forests of the preserve.

After placing my backpack and walking stick in the car, I watched with interest for a few minutes as diffused clouds of yellow smoke wafted away from the pines, carried on the slightest of breezes. Moving closer to an overhanging branch, I could see thin pollen wisps drifting from the male, or pollen, cones, clustered like little sausages six inches from the branch tip. The purpose of all this abundance? Pollination of the more well-known, reddish-colored female, or flower cones, located higher in nearby trees (female cones are higher than male cones to reduce the likelihood of self-pollination that would be likely if male cones were higher and shed pollen downward to the female cones below it on the same tree). If ever there was a need to illustrate an example of wind pollination at work here it was!

If a pitch pine pollen grain (which, by the way, looks like Mickey Mouse with a face and two rounded ears) pollinates a female cone, the cone begins to enlarge, taking on the familiar wooden pinecone form of an open shape with numerous projecting scales, the tips of which often possess a tiny bristle or thorn to deter animals from feeding on them. The cones take two years to mature with two seeds per scale and at maturity, they begin to shed their seeds. The seeds are elongated, with a flat, winged membrane which aids in dispersal.

The conical-shaped cones of dwarf pines behave differently. Rather than growing and opening after two years, to shed seeds as “normal” or open cones do, the cones on dwarf pitch pines remain resolutely closed, patiently waiting for the tick of flame to melt the resins holding the scales closed. This way, the vulnerable cones on the low stature pines take advantage of the fire rather than being destroyed by it. These cones are referred to as closed or serotinous cones and are found on dwarf pitch pines and on jack pine which grows in highly fire prone environments in the Upper Midwest.

Pitch pinecones have another adaptation that enhances the chances the seeds survive. In wet weather, the scales close, making it more difficult for the seeds to disperse. This is important because a heavier, wet seed won’t disperse far, and pine seeds want to spread away from the shade of the parent tree.

While pitch pinecones are generally round and between the size of a golf and tennis ball in size, the cones of some other pines are very different. The cones of the western sugar pine are huge, often more than a foot long, sometimes reaching one and one-half feet in length and four inches wide (Be careful when hiking in sugar pine forests!) Our other native pine—white pine—has elongated cones about four inches long and are one and one-half inches wide.

The pinecones on pitch pine serve an important, if utilitarian, purpose—as a protective structure for the development and dispersal of seeds. And while I’ve come to appreciate pine cones for this vital function, as the years have gone by, I’ve come to appreciate even more these cones for their swirling shape, symmetry, and their overall design. I never tire of looking at these objects of natural architectural beauty.
On Thursday, March 23, Dr. Christopher Gobler, endowed chair of coastal ecology and conservation in the School of Marine and Atmospheric Sciences at Stony Brook University, presented his annual talk, “State of the Bays, 2023: Love Where You Live.” Dr. Gobler cited the numerous fish kills in area waters that occurred last summer as evidence of climate change. He described a new study that revealed that combinations of high temperatures, heat waves and low oxygen have contributed to the collapse of New York’s bay scallop industry. And once again, excessive nitrogen loading was shown to significantly increase the intensity of algal blooms, harmful algal blooms and low oxygen conditions across more than 25 locations on Long Island.

Nitrogen from household sewage enters poorly performing home septic systems and then seeps into groundwater and ultimately, into Long Island’s bays, harbors, and estuaries or, in some cases, is directly discharged into surface waters. This nitrogen loading is a root cause of algal blooms and dead zones, that are exacerbated when a tropical storm delivers more precipitation than supersaturated ground conditions can handle.

Unfortunately, every major bay, inlet and estuary continues to be affected by nitrogen and coastal ecosystem have continued to degrade. Since the 1990’s, critical marine habitats had no ability to study it. That’s because chaos is not amenable to math. Math can’t do it, or even deal with it at all. After a year, we went to free internet distribution, and Moths of the Past went viral. It has been read by millions around the world, and its audience is constantly expanding.

Somehow, over the last few years, I was able, again working in bits in the middle of the night, to complete and distribute 14 additional implications white papers, supplements to the original concepts in Moths of the Past, both expanding and extending them. I’m working on more now.

When I read about the lost and found notebook containing the really big (big because neither Darwin nor anyone else had ever found a satisfactory answer to it) question, I realized this was the key to the story. Solve that question, and I will solve the Buck Mystery, and probably much more.

And chaos certainly lay at the center of any solution. It was the biggest thing I knew when science couldn’t touch.

So I took one last quick trip to the library to get a list of the biggest gaps in science. The unanswered questions scientists were trying to answer, but didn’t know how or have the tools yet to study. At the heart of just about all of them lay more than a bit of chaos.

I also found out about interlibrary loans. This tiny branch had access to the entire Hudson Valley. Now I was in business.

I made a map of all the gaps in science, and determined to fill them, realizing chaos was what was missing. And I bought, and took out, a ton of books. Each night, I read whenever I couldn’t sleep.

One by one, the brainstorms came over the next three years, like a pinball game lighting up. Bing-bang-boom! Before I knew it, one thing had led to the next and I had two interlinked, brand-new scientific theories, one in physics, the other in biology, specifically evolution. Chaos lay at the heart of all of it. The Chaos-Convolution Theory was born.

I kept my friend Bob, who is a polymath in the arts and sciences, totally in the loop. He got all my ravings, all my scribblings. All he said was “when you’re done, send it all to me and I’ll turn it into a science one. This is your life thesis.” Thus was born Moths of the Past.

It was published by our longtime mutual friend Don Rittner, who himself has authored and edited over 30 books. It came out three years ago, just as the pandemic hit full force. Don had to coax the hard copies out of the last print house still running in America, down in South Carolina. But out it went, into a world in agony. We sent out several hundred author copies to select people and institutions around the country and world. Because of its enormous scope, and Bob’s creation of a work that truly blended art and science, we deliberately went for as wide an audience as possible, knowing scientists would probably be the last to embrace it, or even deal with it at all. After a year, we went to free internet distribution, and Moths of the Past went viral. It has been read by millions around the world, and its audience is constantly expanding.

Somehow, over the last few years, I was able, again working in bits in the middle of the night, to complete and distribute 14 additional implications white papers, supplements to the original concepts in Moths of the Past, both expanding and extending them. I’m working on more now.

But in that same period, my beloved Christina slowly weakened. She never lost her mind, her love or her fighting spirit. On the early morning of February 16th, at sunrise, she left this world. I miss her.