The Nature Conservancy
Protecting nature. Preserving life.

The Nature Conservancy, Long Island Chapter
250 Lawrence Hill Road
Cold Spring Harbor, NY 11724
nature.org/longisland

Long Island Conservation News Inside

SAVE THE DATE!

An Evening on Georgica Pond

The Nature Conservancy's
SUMMER BENEFIT

Saturday, June 27, 2015
Cocktails at 6:30
Dinner by Acquolina at 8:00
Summer Party Dress

HOSTS
Priscilla Rattazzi and Chris Whittle
East Hampton

FOR INFORMATION (631) 367-3384 Ext. 138 · nature.org/summerbenefit

Cover Photo © Derek Rogers
Grasshopper Sparrow at EPCAL, Riverhead.

NATURE
LONG ISLAND

CONSERVATION NEWS FROM THE NATURE CONSERVANCY

The Nature Conservancy

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SPRING/SUMMER 2015

A Letter from The Director

A Billion Dollar Nudge

© Marian Lindberg/TNC

Let's face it. Humans don't always make choices in our long-term best interests. Sometimes we need to automate a good choice – like the Community Preservation Fund (CPF). When people buy homes or property in the five East End towns, 2% of the purchase price goes into a fund to buy land and historic sites. This spring the CPF passed the $1 billion mark, and that's worth celebrating.

The architects of the CPF never expected such high proceeds, which have enabled the preservation of more than 10,000 acres. We are grateful to our trustee Paul Brennan and others who had the foresight to make environmental protection an ongoing, sustaining program. Social scientists call this a "nudge" – a one-time decision that commits us to beneficial action, rather than making it one more thing we have to think about every day.

Today, some of the founders of the CPF are exploring ways in which we can nudge ourselves to do a better job of protecting and restoring our bays and harbors. One proposal is to set aside up to 20% of CPF revenues to upgrade wastewater infrastructure. Another idea is a fee on water bills. Proponents point out that tap water is a great value; they argue that a small fee is well worth it to protect the source of Long Island's drinking water – our underground aquifers – from pollutants.

A technological nudge that already exists is the switch that turns off automatic sprinkler systems when it rains. This smart feature saves energy and water, and reduces waterborne pollutants.

Whether the nudge is small – like a sprinkler turn-off switch – or large – like a billion-dollar Community Preservation Fund, we all need to be open to new ideas to protect the environment. We'd like to hear from you if you have a good idea for a nudge that advances conservation!

Nancy N. Kelley
Executive Director
The Nature Conservancy on Long Island
nature.org/longisland

Tapped by the EPA

Long Island Conservation Director Marci Bortman recently completed a seven-month assignment with the Environmental Protection Agency in its regional New York City office. Dr. Bortman took a leave of absence from the Conservancy in order to work on several EPA projects involving the Clean Water Act.

Dr. Bortman, a marine scientist, provided advice and a report with a set of recommendations to the EPA based on first-hand experience with the damaging impacts of excess nitrogen on Long Island's bays and wetlands.

She returned to the Conservancy and its water quality team full-time in April with new insights into the perspectives of federal officials charged with interpreting and enforcing the nation's clean water laws.

© Marian Lindberg/TNC

Acidification is Affecting Long Island Sound

The chemistry of Long Island Sound is becoming more acidic and for clams, oysters and scallops, this is bad news: It threatens their survival. Among other problems, acidification makes it difficult for shellfish to build their shells. It also affects the local economy and the livelihoods that depend on the shellfish industry.

Long Island Sound Director Chantal Collier. © S. Depino

Dr. Christopher Gobler of Stony Brook University and colleagues warned in a 2014 paper that because of nitrogen pollution, the acidification of Long Island Sound may be 100 years ahead of where it would be due to climate change alone.

Concern for the issue prompted the Prospect Hill Foundation to convene experts earlier this year for a symposium focusing on the harmful impacts of nitrogen pollution on marine systems, including acidification, algae blooms, and low dissolved oxygen. Long Island Conservation Director Marci Bortman, and Rhode Island Director of Ocean/Coastal Conservation John Torgan helped plan the symposium and made presentations to an audience of key government officials.

> "The Sound is particularly vulnerable to acidification because of nitrogen pollution entering coastal and ground waters from sewage and fertilizers," explains Chantal Collier, director of the Conservancy's Long Island Sound Program. "That pollution exacerbates the effects of acidification. Reducing local nitrogen pollution is an action we must take to help mitigate the problem – so that species have the best chance of survival."

The New York and Connecticut chapters of the Nature Conservancy are working to reduce nitrogen pollution from both sides of the Sound by advocating for advanced wastewater treatment and conducting scientific research to support community action.

Derek Rogers with a Saltmarsh Sparrow. © Marian Lindberg/TNC

What birds do you look for during summer on Long Island?

When the buzz of spring migration ends, Preserves Manager (and ace birder) Derek Rogers turns his attention to the breeding birds of Long Island. Derek marvels at the ability of Saltmarsh Sparrows to deal with high tides and flooding. "The most successful populations are those that nest immediately following the flood tides of the new moon," he observes. He is also fond of Grasshopper Sparrows, such as the one pictured on the cover. Grass-hopper Sparrows breed in large open grasslands, such as Gabreski Airport in Westhampton and EPCAL in Riverhead. Like Saltmarsh Sparrows, they are a member of the Ammodramus genus, a tribe of sparrows that are known for skulking through grassland habitats. Send your questions to longisland@tnc.org.

News from the North Fork

Nature Conservancy Boardwalk Dedicated to the Late Paul Stoutenburgh

© Derek Rogers/TNC

© Photo courtesy of The Suffolk Times

Mattituck's Husing Pond Preserve is a place the late Paul Stoutenburgh – one of Long Island's most knowledgeable, respected and beloved naturalists – likely walked many times through the years. The freshwater pond and marshland are home to ducks, herons and osprey. Now, a new boardwalk and observation platform dedicated in Stoutenburgh's name provide visitors a safe place to walk, relax and enjoy nature.

"Whether telling a story about birds at his feeder, fish in our bays, or the value of land preservation, Paul helped The Nature Conservancy achieve its mission of protecting the lands and waters on which all life depends," explained Nancy Kelley, executive director. "Through his column in the Suffolk Times, 'Focus on Nature,' Stoutenburgh educated and inspired thousands of readers about the mystery, glory and fragility of nature."

Paul leaves an extraordinary legacy of commitment, action and passion for the environment.

Four-Season Inventory Assesses Plum Island's Wildlife Diversity

Located less than a mile from Orient Point, at the tip of Long Island's North Fork, lies the 840-acre, pork chop-shaped Plum Island – and it's currently for sale. This wildlife-rich island is a vital stopover site and breeding ground for migratory birds, seals and a haven for countless other flora and fauna.

Just how rich a natural mecca Plum Island may be is being studied by the New York Department of Environmental Conservation through a four-season biological inventory.

"We have a sense of the diversity of the wildlife that uses the island and this inventory will give us insight into the animals found here on a year-round basis," said Joseph Jannsen, conservation lands director for The Nature Conservancy on Long Island.

A coalition of groups, including The Nature Conservancy, is working towards Plum Island's protection by designating its undeveloped acreage, approximately 80% of the island, as a National Wildlife Refuge.

Plum Island's natural shoreline is home to terns, plovers, osprey and many other birds.
© Randy Parsons, TNC

Chowder Contest Raises Funds & Awareness for Local Waters

Fun at the 16th Annual LI Clam Chowder Contest – Kimberly Williams, George Remmer Carl LoBue and Richard Remmer. The Remmer family opened the Snapper Inn in 1929
© Jade Lukowski

Chef Maureen Denning cooks bay-to-bowl, preparing award-winning clam chowder and bisque at the waterside Snapper Inn in Oakdale.

"You live on Long Island, you've got to eat clams," says Maureen, noting that shellfish was a staple in her family home in Deer Park – back when clams and oysters abounded in Long Island's bays.

In the 1970s, Great South Bay supplied half the nation's clams, but today Maureen is lucky to get a delivery of clams from the bay, and the oysters are gone. She still gets clams from Long Island Sound and Peconic Bay, and fresh local fish, but much of the shellfish served in Long Island restaurants comes from elsewhere.

Richard Remmer, co-owner with his brother George of the Snapper Inn, says he "grew up thinking clams and oysters." The Remmers' forebears were commercial fishermen who also extracted oysters from Brick Kiln Creek. The Remmers are enthusiastic supporters of efforts by The Nature Conservancy and its partners to restore Great South Bay, as well as other Long Island water bodies, by reducing nitrogen pollution.

"Clearly the New Inlet is giving us a little hope," says Richard, referring to the cut across Fire Island made by Superstorm Sandy, which has allowed clean ocean water to enter Great South Bay. "We're seeing more clams in the eastern bay now."

Because of the impacts of nitrogen pollution, such as harmful algae blooms and loss of seagrasses, Nature Conservancy scientist Carl LoBue has worked with decision-makers to keep the inlet open – once it was proven not to be a flooding threat. LoBue says the ongoing recovery in the eastern bay "is an excellent demonstration of how all our waters can recover once nitrogen pollution is reduced."

Water quality improvement is also a goal of several Sandy recovery projects. A proposal favored by Richard in his role as co-chair of the Oakdale-West Sayville New York Rising Committee would restore natural flows to wetlands along Grand Canal, while directing water away from flood-prone neighborhoods. The addition of a hiking path would provide wildlife viewing opportunities and reconnect the neighborhood to the waterfront.

"I'm hoping to see the project involve community volunteers," says Richard, who started the Long Island Chowder Contest in 1999 in an effort to connect people on Long Island to where they live.

The winners in this year's Chowder Contest, in addition to the Snapper Inn (1st place, bisque; 2nd place, New England), were Vincents of Carle Place and Wave Seafood Kitchen of Port Jefferson (1st place tie, New England) and the Jolly Fisherman of Roslyn (1st place, Manhattan.)

Chef Maureen Denning prepares clams from the Long Island Sound.
© Marian Lindberg/TNC

Town of East Hampton Partners with U.S. Natural Resources Conservation Service

Voluntary Buy-Out of Flooded Homes at Lazy Point will Restore Beach, Dunes and Floodplain

© Randy Parsons/TNC

If you've driven out to Montauk, you've no doubt taken a deep breath and felt your body relax as soon as you hit the Napeague stretch. The trees are different. The air is tinged with the smell of the sea. And the landscape starts to look just a little bit wild.

Perhaps it's all of those feelings that drew homeowners to the peninsula of Lazy Point in the hamlet of Napeague along with the exceptional fishing in the Peconic Estuary waters. Located in the Town of East Hampton, it's bounded on the southwest by the 1300-acre Napeague State Park and on the north and east by the waters of Napeague Harbor and Napeague Bay.

But the entire area is low-lying and subject to severe coastal flooding and erosion. Homeowners here experience chronic flooding and erosion, and can be cut off from the mainland during coastal storms. A salty mix of groundwater is just below the surface of the land, making it difficult to get fresh drinking water and to dispose of household wastewater.

"Lazy Point's roads and residences were established before zoning, wetland and flood mitigation regulations and environmental review were required," explains Nate Woiwode, policy advisor for The Nature Conservancy on Long Island. "Now, some homeowners realize their property is more of a liability than a place where they can relax. Residences and septic systems are flooded regularly. We see serious environmental consequences as a result of having homes in the middle of a dynamic coastal system."

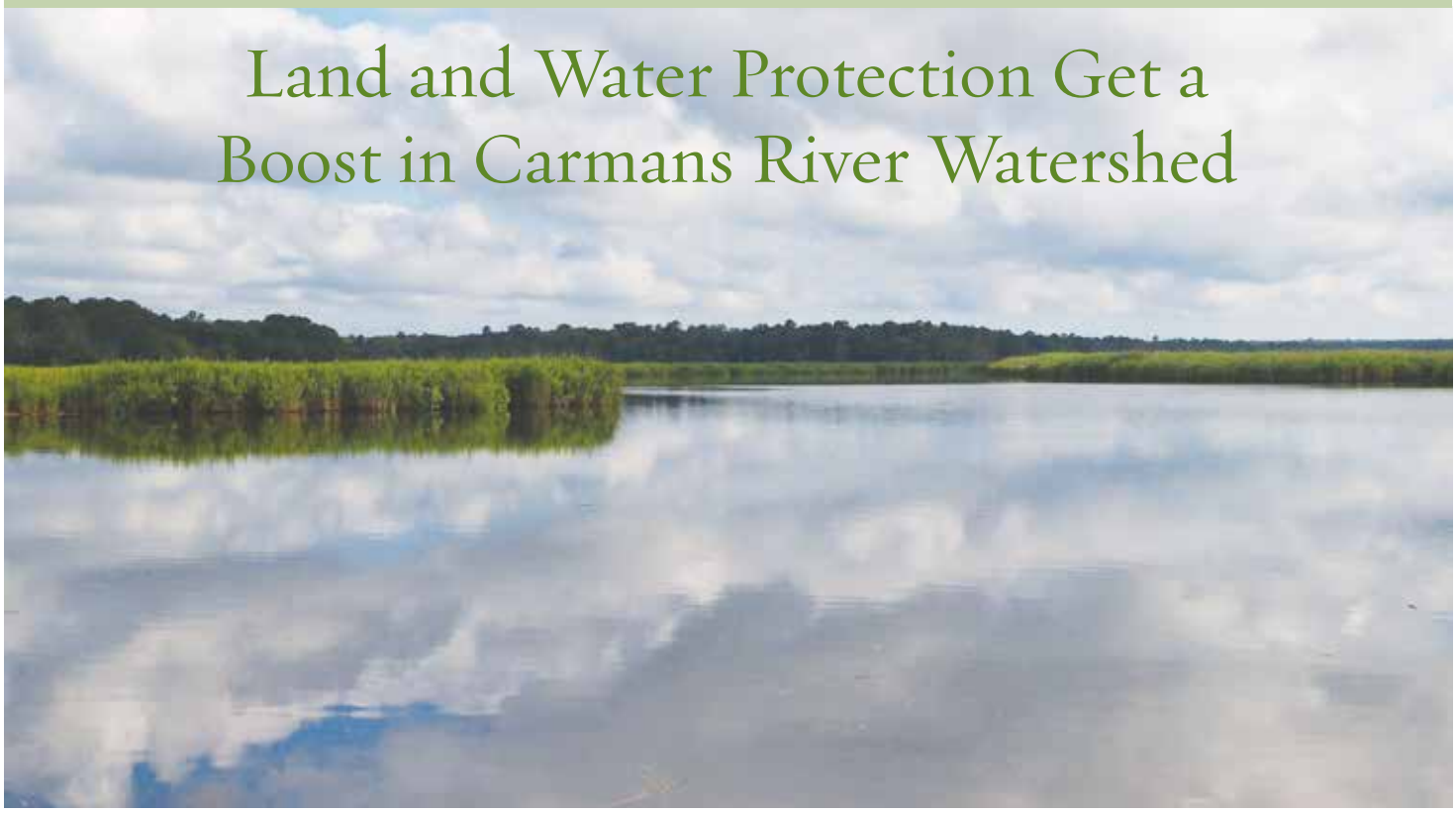
To mitigate the situation, The Nature Conservancy, the town of East Hampton, and the United States Department of Agriculture (through its Natural Resource Conservation Service) are working on a voluntary buy-out program. The town, with the help of the Conservancy, received nearly $10 million to purchase properties from willing sellers to restore the floodplain and protect and restore wetlands, dunelands and natural shorelines.

To date, participation in this voluntary program has resulted in the selection of 16 properties for potential purchase. East Hampton is also using its Community Preservation Fund to acquire other nearby properties.

In a similar effort in the Village of Mastic Beach on Great South Bay in Brookhaven, the Conservancy teamed up with Suffolk County to obtain $5.6 million from the same federal program for voluntary buy-out of homes and land there.

For more information, visit
nature.org/longisland

Land and Water Protection Get a Boost in Carmans River Watershed



© Wayne Cook

Long Island's longest river, the Carmans, begins in Middle Island and meanders 10 miles through distinctive Pine Barrens forest, eventually feeding into Great South Bay.

Elected officials in Brookhaven Town and Suffolk County recently took two bold actions to maintain the river's health.

First, at the end of 2014, Suffolk County and the town of Brookhaven preserved 171 acres of forestland in Yaphank, known as the Avalon Bay Properties. The Nature Conservancy ranked these parcels among its top 10 preservation priorities on Long Island.

Applauding the acquisition of Avalon Bay Properties, Randy Parsons, the Conservancy's conservation finance and policy advisor said, "This is a huge victory for the Carmans River and continues the aggressive efforts by the Suffolk County and Brookhaven Town to protect our vital water resource.

We are helping restore water quality in our rivers, bays and aquifers, allow for world class outdoor recreational opportunities, provide habitat where fish and wildlife can thrive, and pass on our unique natural heritage to the next generation."

Second, because land preservation is only one piece of the puzzle, Brookhaven has now become the first municipality on Long Island to enact pollution reduction standards for apartment buildings and businesses – any improved properties that discharge between 1,000 and 30,000 gallons daily.

Wastewater discharged from such facilities into the ground in the vicinity of the Carmans must now be treated or purified so that nitrogen, a serious water pollutant, does not exceed 3 parts-per-million per liter, down from the 10 parts-per-million federal standard for safe drinking water, which is not considered stringent enough to protect marine systems.

Efforts to abate nitrogen and other pollutants in Long Island waters by preserving land in the Carmans watershed go hand in hand with the more stringent water treatment standards enacted by Brookhaven Town. Protecting land remains one of the best ways to protect water because natural land filters pollutants, reduces wastewater, and avoids impervious surfaces that contribute to storm-water run-off.

For more information, visit **nature.org/longisland**

Meet our Environmental Economist Elizabeth C. Smith

Environmental Economist Liz Smith with her dog Mimi. Her other dog, Delilah, is camera shy.
© Marian Lindberg/TNC

You wouldn't know it from the quiet of her sun-filled office, but Elizabeth C. Smith inhabits a bold space in the conservation field. Liz is an environmental economist, and it's her job to ask what nature is worth.

Liz doesn't use a sticker gun to put price tags on trees – someone actually asked her that once – but she does try to understand "how people value our natural resources." For example, she has commissioned a study that will show how changes in the environmental attribute of clean water affect housing prices on Long Island.

Not everyone accepts this approach because it runs counter to the idea of nature as "priceless" and environmental protection as a moral imperative – a position Liz believes is tantamount to saying "that nature isn't worth anything, because the tendency is to undervalue nature or give it a zero value."

The audience for Liz's work consists of policy-and decision-makers, who operate in a world of limited resources, especially time and money. She is keenly aware that from a government official's point of view, numerous priorities exist, and economic valuation is a way to make sure that nature isn't left out of the equation when decisions are being made.

The Nature Conservancy employs hundreds of scientists around the world in biology and ecology, but staff economists to date are rare. The Long Island Chapter hired Liz in 2012 at the start of a major campaign to abate nitrogen pollution and reduce the harmful algae blooms it causes.

According to Dr. Marci Bortman, a marine scientist who heads Long Island's conservation staff, "The solutions to improve water quality are expensive, and we knew that offering economic information to decision-makers would be a critical tool in addition to providing biological science."

"The Conservancy's approach is evolving," notes Liz, and some of her most satisfying moments have been when she has succeeded in persuading colleagues to "see the world a little differently, as full of trade-offs."

Making her turn toward economics while obtaining a master's degree in policy at Columbia University's School of International Affairs, Liz became fascinated with how and why decisions affecting the environment are made. She went on to earn a Ph.D. from Rhode Island University in environmental and resource economics.

Liz will be partnering with a recently hired environmental economist at Stony Brook University on an analysis of how housing values are affected by water quality on Long Island. This project is being funded by the McConnell Family Foundation.

While she may be interested in opening minds to a new way of thinking, there is plenty of room in her personal life for traditional conservation. One of her favorite ways to unwind is to run through Montauk's Shadmoor State Park, which the Conservancy helped protect in 2000. Liz has been visiting relatives in Montauk since girlhood, and it remains one of her favorite places.

If she had to, she could even put a value on it.

Seen A Novel Species Lately?

Can high school students contribute to scientific knowledge? The answer is an emphatic "yes" from Bruce Nash, a scientist who runs *Barcode Long Island*, an ambitious new program at the Cold Spring Harbor Laboratory DNA Learning Center.

The project trains teachers and students to use DNA sequencing to help document Long Island's current biodiversity. Some students have found species with novel DNA "barcodes" unrelated to anything previously recorded. They may not be the most charismatic creatures – try water mites from a former mill pond – but the excitement is in the science itself.

"This project gets students engaged in science," says Nash. "They are doing research out in the world and asking their own questions about how they relate to the environment and biodiversity. It's quite clear that students can make discoveries."

The Nature Conservancy is participating by making its nature preserves available for the sampling of plants and insects. Other partners include the American Museum of Natural History, Brookhaven National Laboratory, Stony Brook University, and Dowling College.

So far 60 teachers from across Long Island have been trained in how to lead students through DNA sequencing to identify species. The project is a pilot funded by the National Institutes of Health and may be expanded beyond Long Island in the future.

More information is available at barcodeli.org.

Collecting a sample for DNA testing. Photo courtesy Cold Spring Harbor Laboratory.

Andy Warhol Preserve Visual Arts Program Combines Science and the Arts

The Nature Conservancy, working with the Andy Warhol Foundation for the Visual Arts, sponsors visual arts programs linking the educational and artistic communities.

© Mark Dzula

Painting by Field Kallop

Art projects inspired by the raw natural beauty of the oceanfront preserve revolve around a variety of themes, including glaciers that formed the area and the forces of wind and tides that contribute to an ever-changing coastline of shifting sand and stones. The group pictured below participated in a water-themed workshop. And, Artist-in-Residence Field Kallop devoted a week at the Warhol Preserve to examining local tidal patterns.

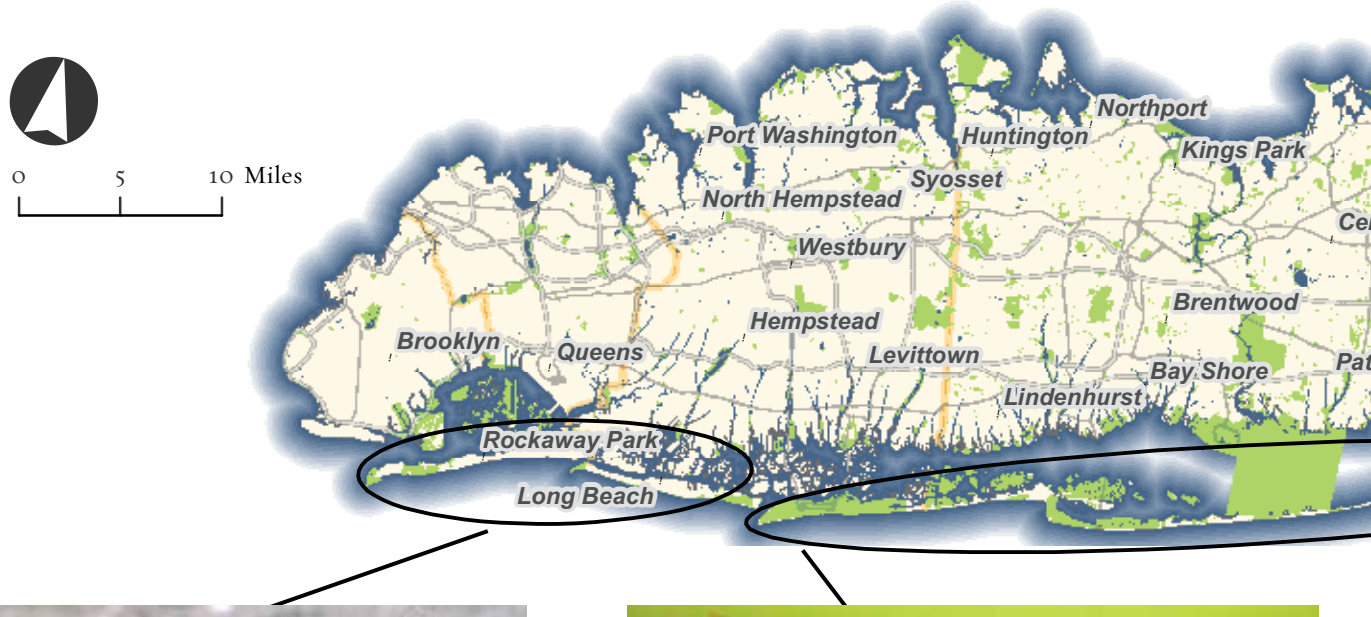
An Updated Animal Census

New York recently completed an animal "census" to determine which species are most at risk of population declines or extinction. Problems facing birds, mammals, fish, reptiles, amphibians, and insects include "habitat loss, invasive species, pollution, and climate change," according to the Department of Environmental Conservation.

At The Nature Conservancy, scientists look for unified solutions to these problems. For example, voluntary buy-outs of shorefront homes create habitat and improve water quality, and that puts marine species in a better position to withstand the impacts of warming waters. Widening culverts can increase tidal flow, which improves wetland health and reduces invasive species such as phragmites.

Here we show natural areas on Long Island that are important to some of the 372 species on the State's updated list of Species of Greatest Conservation Need. Fifty-five species are now considered extinct in New York, including two kinds of chub (minnows), two kinds of bumble bee, and three kinds of tiger beetle. The good news is that eighteen species on the 2005 list are now considered "stable and secure," including Osprey, Cooper's Hawk, American Marten and Rainbow Smelt.

For a complete list, see dec.ny.gov/docs/wildlife_pdf/sgcnlist.pdf



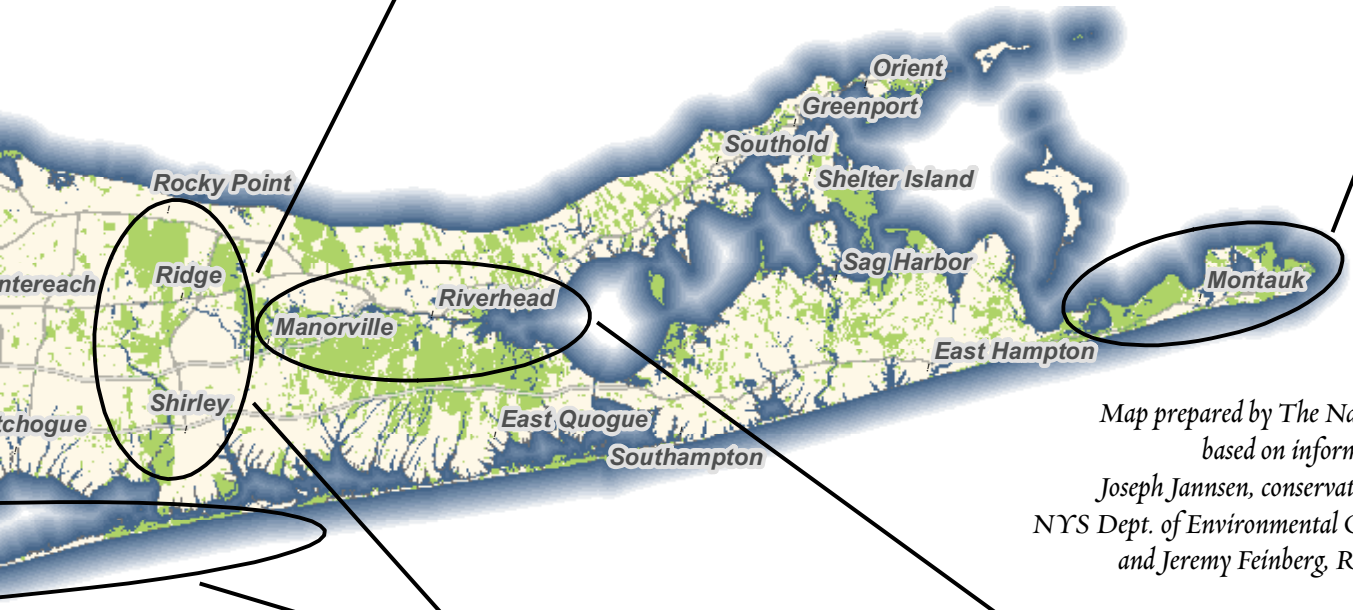
Black Skimmer:
Drags or "skims" its lower bill through the water as it attempts to catch small fish. © Don Sias

Lined Seahorse:
Not just a tropical species, but a true fish dependent on the eelgrass beds of New York's coastal waters. The male becomes pregnant and gives birth! © Carl Lobue/TNC

Northern Long-eared Bat: Uses echolocation (and its long ears) to navigate through dense forest to pluck stationary moths from surfaces.

Effective May 2015, listed as threatened under the U.S. Endangered Species Act.

Blue-spotted Salamander: Long Island is home to one of the few populations of pure blue-spots, which spend most of their lives underground.



Map prepared by The Nature Conservancy based on information provided by Joseph Jannsen, conservation lands director; NYS Dept. of Environmental Conservation staff; and Jeremy Feinberg, Rutgers University.

Eastern Hognose Snake: May inflate, hiss and strike when confronted, or "play dead" on its back with its mouth open.

Banded Sunfish: Long Island's smallest native sunfish – only two to three inches long – can tolerate high temperatures, low dissolved oxygen and acidic conditions.