

Nature

central & western new york

The Nature
Conservancy 

Protecting nature. Preserving life.™

FALL/WINTER 2010

*Success at Hemlock
and Canadice Lakes*

Message from Laurie & Jim



Jim Howe, Executive Director



Laurie Branch, Chair, Board of Trustees

One of the hallmarks of The Nature Conservancy is our desire for tangible conservation results. Sometimes results arrive quickly. Other times, they take decades to achieve. One thing is certain: The grander our vision, the more likely that realizing it will require patience and persistence.

A case in point is Hemlock and Canadice Lakes. After 25 years of effort, the only two undeveloped Finger Lakes are now permanently protected by the State of New York. *(Please see the cover article for the full story of how these two lakes came to be protected.)*

The Nature Conservancy is delighted to have played a leading role in achieving one of the conservation community's top priorities in New York State. For a generation, the Conservancy and other conservation organizations have been working to facilitate the permanent protection of these two lakes, building on the City of Rochester's initial conservation efforts.

The Nature Conservancy will continue to work with governments, individuals, businesses, and private landowners to protect the Earth's ecosystems – the plants, animals, and natural communities that ensure our very existence. Our science solves complicated conservation problems; our non-confrontational approach finds common ground; and our tenacity gets results.

We need your help to continue making progress toward our critical mission of protecting nature and preserving life on Earth! We hope you'll continue to support our results-oriented work. Thanks in advance for your support!

The mission of The Nature Conservancy is to preserve the plants, animals and natural communities that represent the diversity of life on Earth by protecting the lands and waters they need to survive.

CENTRAL/WESTERN NEW YORK CHAPTER

1048 University Avenue · Rochester, NY 14607
(585)-546-8030 · (585)-546-7825 (fax)

Jim Howe, Executive Director ext. 26
jhowe@tnc.org

Kristin France, Senior Conservation Scientist ext. 22
kfrance@tnc.org

Gretchen Holtz, Office Manager ext. 32
gholtz@tnc.org

David Klein, Senior Field Rep for Lake Ontario ext. 24
dklein@tnc.org

Liz Marr, Operations/Finance Manager ext. 21
emarr@tnc.org

Zachary Odell, Director of Land Protection ext. 33
zodell@tnc.org

Kathleen Rogers, Director of Philanthropy ext. 28
krogers@tnc.org

Gregg Sargis, Program Stewardship Ecologist ext. 34
gsargis@tnc.org

Stacy Wais Seretto, Major Gifts Manager ext. 27
swaisseretto@tnc.org

Northern New York Project Office (315) 387-3600
269 Ouderkirk Road (315) 387-3602 (fax)
Pulaski, NY 13142

Christopher Lajewski, Field Representative ext. 22
clajewski@tnc.org

Mary Pappa, Office Manager ext. 21
mpappa@tnc.org

Lorna Wright, Tug Hill Project Director ext. 28
lorna_wright@tnc.org

French Creek Project Office (814) 332-2946
PO Box 172 (814) 333-8149 (fax)
Allegheny College
Meadville, PA 16335

Darran Crabtree, Director of Conservation
dcrabtree@tnc.org

Niagara Frontier Project Office (716) 257-3689
10 Main Street phone/fax (please call prior to faxing)
Cattaraugus, NY 14719

Patrick McGlew, Project Director pmcglew@tnc.org

Board of Trustees

Laurie Branch Olean, Chair
Lew Allyn Naples, Florida
Maria Bachich King Ferry
Richard Bennett, M.D. Skaneateles
Barry Boyer East Aurora
Michael Brace Buffalo
Patricia Calkins Webster

Nick Donnelly, Ph.D. Binghamton
Lina Echeverria, Ph.D. Corning
John Fitzpatrick, Ph.D. Ithaca
Paul Fuller, M.D. Rome
Richard Hill, Emeritus, Remsen
D. Bruce Johnstone, Ph.D. Buffalo
Deb Koen Rochester

Tony Lee Rochester
Tom Lunt Orchard Park
Clayton Millard Rochester
Brian O'Shea Barneveld
John Palmer, Ph.D. Fayetteville
Robert Papworth Syracuse
Frederick Parker, M.D. Dewitt

Stephen Rosenfeld, M.D. Pittsford
Sandra Rothenberg, Ph.D. Rochester
Chuck Ruffing, Ph.D. Rochester
Sue van der Stricht Rochester

Hemlock and Canadice Lakes Achieve Permanent Protection



© Laura Kammermeier

“The newly established Hemlock-Canadice State Forest offers visitors a whole corner of the world to themselves, a wild outdoor experience not far from the bustle of busy lives.”

Travel 30 miles south of Rochester and a wilderness awaits you. No cottages or houses, just trees and water, reflecting days gone by when all of the Finger Lakes were wild. Long-whiskered river otters shore up burrows and swim after frogs, crabs, and fish. Bald eagles soar overhead, scavenging prey to feed fuzzy nestlings in a treetop aerie. The gentle hum of songbirds fills the air, singing tunes that seem to express gratitude for the land that is now theirs - forever. Visitors can experience all of this and more due to New York State’s land-

mark purchase of the Hemlock and Canadice lake watershed lands from the City of Rochester. Both lakes have supplied Rochester its drinking water for the past 130 years.

For generations, forested hillsides free of development and protected by the City of Rochester filtered the water supply. But when the US EPA required the City to build a filtration plant, avoiding development was no longer vital to the safety of the water supply. The City of Rochester sought

continued on page 3

1852:

A cholera outbreak in Rochester prompts the need to find a clean source of water.

1876:

The City of Rochester begins drawing its drinking water from Hemlock and Canadice Lakes.

1896:

A proposal to build a hotel and summer resort on Hemlock Lake prompts the City to begin acquiring lakeshore properties to protect its investment in the water supply.

1950's:

The City completes its multi-decade acquisition program by acquiring the few remaining shoreline properties. More than 7,000 acres of critical shoreline property are controlled by the City, with cottages and houses removed and agricultural land replanted to forests.

Hemlock and Canadice continued from page 2

to sell the lands and keep them conserved, but had to meet fiscal realities. The state's purchase of the lands ensures permanent protection for the pristine forest habitat.

Under the terms of the agreement, which was completed at the end of June, the state's Department of Environmental Conservation (DEC) purchased approximately 6,700 acres of land for \$13.7 million. "This is without a doubt the most important land acquisition project the state has

undertaken outside of the Adirondack and Catskill Parks in more than a generation," said NYS DEC Commissioner Pete Grannis.

The newly established Hemlock-Canadice State Forest offers visitors a whole corner of the world to themselves, a wild outdoor experience not far from the bustle of busy lives. The two undeveloped Finger Lakes will continue to provide the area its drinking water, habitat for fish and wildlife and myriad recre

ational opportunities that include unmotorized boating, hunting, fishing, bird watching, hiking and geocaching.

This landmark deal was long in the making and a welcome triumph for The Nature Conservancy. For the last 15 years, the Central & Western New York Chapter has been ardently keeping city and state officials abreast of what was at stake and what was needed to protect the area's water, wildlife, recreational

©NYS DEC



1970's:

The area is recognized not only as a source of drinking water, but as prime fish and wildlife habitat. In the 1970s, bald eagle populations were critically endangered nationwide. The sole remaining bald eagle nest in New York State was located at Hemlock Lake. Today, two pairs nest in the watershed.

1993:

Created under Mario Cuomo's administration, the New York State Environmental Protection Fund (EPF) provides resources for open space conservation and land acquisition. Hemlock and Canadice Lakes are identified as a "high priority" on the state's Open Space Conservation program, which guides EPF spending.

A water filtration plant is constructed at the north end of Hemlock Lake.



© Laura Kammermeier

opportunities, quality of life and economic health.

Over the course of three gubernatorial administrations, two mayors and an ever-changing suite of players, The Conservancy helped keep all parties informed and at the table.

The Chapter also acquired 1,100 acres of sensitive lands in the Hemlock-Canadice watershed – providing additional leverage for today's conservation success.

Protecting these two Finger Lakes, the

continued on page 5

Planning a Visit?

The City of Rochester has allowed public access for decades by limiting usage to activities that will not affect water quality. The DEC will continue the city's high level of stewardship and protection of the land and water at Hemlock and Canadice Lake, while maintaining public access for fishing, hiking, biking, nature study, boating and hunting. Park in designated areas, practice "Leave No Trace" principles and respect rules such as no swimming. A permit is no longer required to visit these pristine waters. For recreational information, visit the DEC's Web site at <http://www.dec.ny.gov/lands/66521.html>.

1996:

The Nature Conservancy begins efforts to convene City and State officials and facilitate a state purchase of the City's lands.

2000:

River otters successfully reintroduced to the western Finger Lakes.

2002:

The Nature Conservancy acquires a 165-acre property that connects the City's lands on Canadice and Hemlock Lakes, the Conservancy's first purchase in the watershed. By 2009, the Conservancy will own 1,100 acres of sensitive lands in the watershed.

2005:

Hoping to spur action by the City and State, The Nature Conservancy invests in an independent appraisal of the City's lands, helping to establish a value for the lands.

continued from page 4

open spaces that surround them and these pristine natural areas, also protects quality of life. "Studies show that communities that preserve open space, outdoor recreational opportunities, and their quality of life are better at retaining residents and attracting businesses," says Jim Howe, Director of the Conservancy's Central & Western New York Chapter. "Industries of future growth aren't

big manufacturers but mostly small businesses and high-tech firms like health care companies and computer tech software organizations," added Howe. "These employers need smart people, and smart people want to live where quality of life is high."

Permanent protection of Hemlock and Canadice Lakes couldn't have happened without dedicated state

funding for conservation. In 1993, under then-governor Mario Cuomo, New York State launched its Open Space Conservation Program and identified high priority projects eligible for funding under its Environmental Protection Fund. Both lakes were identified as high priority conservation areas.

In the 19th century, hundreds of bald eagles nested in New York. Illegal shooting and the precipitous loss of remote, wild habitat next to water caused dramatic population decline. DDT contamination was the final blow. By 1970, only a single breeding pair remained in the entire state—right on the shores of Hemlock Lake.

The Hemlock pair was dangerously unlucky as breeders, however. By 1976, it was clear that the species was functionally extirpated from New York. Introduction of young from other states was the only way to ensure the species' survival.

Meanwhile, the eagle pair on Hemlock Lake successfully fledged infrequent clutches. Taking advantage of western New York's rural landscape and plentiful freshwater, those young established their own territories. Eventually, a descendant pair inherited the nest, and another nest was established in the watershed.



Eaglets from the Hemlock Lake nest. ©TNC

2008:

The Nature Conservancy dedicates Rob's Trail to honor former Board Chair Rob van der Stricht. Rob's Trail enables hikers to go from the top of Bald Hill all the way to the City's trail on the western shore of Canadice Lake.

NYS DEC renews negotiations to purchase Hemlock and Canadice.

2010:

In June, the DEC purchases the city's land around the two lakes, including their shorelines.

The Nature Conservancy 
Protecting nature. Preserving life.™



Wildlife Protected:

BALD EAGLES: Hemlock Lake is a reliable place to see a bald eagle, and frequently has two nests.

TROUT: Hemlock is home to a coldwater trout fishery.

BLACK BEAR: Large, unbroken tracts of forest are necessary for black bear to thrive. Close to 80% of a bear's diet is woody vegetation, and if bears can't get enough to eat, they will often stray into human habitations searching for food. At least one den is located in the Hemlock-Canadice watershed.

WOODLAND SALAMANDERS: The healthy wetlands system here helps this sensitive group of species thrive (*see Meet The Spotted Salamander on the back cover*).

RIVER OTTERS: Once common, river otters were trapped to the point of extirpation in western New York. The Nature Conservancy was a part of the partnership that successfully reintroduced the species. They are now re-established in these lakes.

SONGBIRDS: The new State Forest provides great birdwatching opportunities. The bald eagles aren't the only birds that build nests in the forest around the lakes - the watershed is a haven for breeding birds of all kinds. Thousands of migrating songbirds also depend on the wooded shorelines as a safe stopover site on their travels. The lakes and their shorelines are stopover points for waterfowl, shorebirds, and loons.

Birding for Better Conservation

Volunteering for the Migratory Bird Study



Northern Parula ©Larry Master www.masterimages.com

A Morning Monitoring Routine

On an early morning in mid-May, Mike Morgante, an environmental engineer from Orchard Park, jumps out of bed, grabs his binoculars, field guide, notepad, boots, and data sheets, and hits the road.

By 6:00 am, when the birds' morning chorus is at full tilt, Mike arrives at his assigned sampling location: a linear, 300-meter section of woods that has been carefully marked with flagging tape. He readies his notebook and walks the transect, making note of all the birds he sees and hears.

Mike's been birding since he was

4 years old—when he first set eyes on a red cardinal perched inside a blazing yellow forsythia bush in his backyard—so placing names to all the birds comes easily.

From a nearby tree, he hears a liquid gurgling sound and knows that's the alternative call of a black-capped chickadee. A quick visual check confirms a black cap and black bib on a small gray bird. He marks "1 black-capped chickadee" on his data sheet. A few dozen yards later, he hears another, this time singing the classic, sweet "fee-bee, fee-bee" song, and he marks a second individual. He also hears a descending whinny of a downy woodpecker and the rusty-hinge squeak of a blue jay.

At this hour, songs of the morning chorus are overlapping and cacophonous, but the excitement of finding migratory birds, such as a suite of colorful warblers, keeps Mike's ears alert and focused. He listens closely and teases out the song of a distant chestnut-sided warbler (*please, please, pleased to MEETcha*) and hears a thin, mechanical *zi zi zi zi zi zi zi zi* of a blackpoll warbler from high in the canopy. A flitting just ahead in the tangle catches his eye, so he raises his binoculars and sees the bird's bluish head, yellow throat patch, and broken white eye-ring. Two white wing bars help him confirm this is a northern parula. Mike makes notes of these birds and continues his walk.

Lakeshore Migrants Beat the Odds

Birds have beaten incredible odds during their spring pilgrimage to these woods. Many have survived the long-distance migration from places as far away as Peru, Ecuador, Panama, the Bahamas, and Mexico. They've crossed oceans by night, traversed scarred landscapes by day, and successfully eluded keen predators. They've dropped down into these woods, hungry and exhausted, where they will take a few days to rest and refuel before again taking to the air and crossing their last big obstacle, Lake Ontario, before they find and claim breeding territories.

The entire Great Lakes basin presents a significant obstacle for birds in their northerly migration to Canada. For millennia, migrating birds have relied on safe zones around the lakes where they can safely pause their journey. Because up to 85% of bird mortality occurs during migration, protecting these stopover sites is enormously important.

But just where ARE these migratory bird stopovers? In western



Project co-lead Mike Berger marks a transect
©Audubon NY

New York, they include places such as Island Cottage Woods, Hamlin Beach State Park and Tiff Nature Preserve. Migrant warblers, kinglets, thrushes, sparrows and more can be found in large numbers here from April through July.

But as much as birders know about these sites, they don't know them all and many exist on inaccessible private holdings. Furthermore, scientists need hard data to construct conservation models.

Migratory Bird Study

To better understand the importance of lakeshore habitats on bird populations, a team of scientists led by The Nature Conservancy and Audubon New York has banded together to study the question of what qualities make a good stopover site.

Volunteers such as Mike are gathering data needed to groundtruth a working model which will reveal the areas most important to migratory birds. According to Kristin France, Senior Conservation Scientist for the Chapter, the model currently suggests that "areas close to the lake that have high habitat diversity and are within a highly wooded landscape are most likely to have greatest appeal to migrating birds." However, the scientists are also aware that fairly isolated wooded areas within urban or agricultural landscapes could be very important—the field study will help them determine how important.

"During both spring and fall migration, we ask our volunteers to go into the field to sites that we have randomly selected – some high



A tufted titmouse spotted by a volunteer.
© Karen Lee Lewis

quality and some low "says Kristin." By looking at the birds that utilize each spot, and comparing sites, we can find out what kinds of places the birds are using. We can figure out how on or off target we are with our hypotheses, and improve our model."

Birding with a purpose

On a different morning in May, Janie Mellas, a case manager from Lockport, New York finishes walking a 300-meter transect in Orleans County. After tidying up her notes, she walks back to the center of the transect where she conducts part two of the survey: the chickadee mobbing protocol.

Removing a small MP3 player with speakers, she broadcasts a recording of chickadees mobbing a screech owl. The mobbing sequence induces excitement and curiosity in birds, and a dozen or so come to investigate.

continued on page 10

No Summer Vacation for Conservation:

Field Work Around the Chapter

Across Western New York, The Nature Conservancy's staff, volunteer stewards, interns and community partners have been working hard to monitor and preserve ecologically important lands and waters. Highlights include:

Tug Hill

Survey work on Tug Hill focuses on monitoring invasive species. With funding from the National Fish and Wildlife Foundation, two seasonal Nature Conservancy employees finished a third year of monitoring hundreds of roads and a number of streams that originate in the Tug Hill wetlands. They took action, too, by removing discovered patches of garlic mustard and *Phragmites*.

"The further you move from Tug Hill's core conservation area, the more invasives you find and the more opportunities they have to spread," says Gregg Sargis, the Chapter's Program Steward Ecologist. "Our survey work helps us and our conservation partners implement an action plan to protect Tug Hill."

Forest Regeneration

Our staff spent the summer assessing forest regeneration and impacts of white-tailed deer in a number of Chapter preserves, including Malloryville, Rob's Trail and Thousand Acre Swamp.

"We looked at what deer like and

don't like to eat," says Jerome Cunningham, one of the Chapter's diversity program workers, who are college and graduate students interested in exploring conservation careers with TNC. "In doing so, we can better manage the health of the forest and of the deer population." Jerome and seasonal employee Maggie MacNeil conducted the studies and determined that while some of

the preserves are in decent shape, impacts of deer are growing in others. Overgrazing by deer, when coupled with invasive species and beech bark disease, significantly affects forest structure by decreasing plant diversity and removing the shrub layer that provides food and habitat for other creatures, such as songbirds.

Jerome Cunningham in the field ©Maggie MacNeil



Alvar limestone barrens

The alvar limestone barrens of Jefferson County are one of New York's most unique and sensitive environments where sparse, fragile vegetation clings to thin soils that coat glacially carved limestone grooves. The finest example occurs at our Chaumont Barrens preserve, just northwest of Watertown.

"This area is home to a number of globally rare species such as prairie smoke, wood lily, and lady's slipper," says Chris Lajewski, our Northern New York Field Representative. "So keeping invasive species at bay here has impacts on global biodiversity."

Due to ongoing land management and invasive species control by our

seasonal employee and volunteers, the Chaumont Barrens preserve is relatively free of swallow-wort. The chapter is now beginning to tackle a number of woody invasive shrubs, including honeysuckle and buck-thorn, that threaten the alvar grasslands. This work has been funded through a grant from the NYS DEC's Terrestrial Invasive Species Eradication grant program.

Eastern Lake Ontario Invasive Species

The first step in managing invasive species is to understand their distributions and trends. In addition to developing invasive species distribution maps of the Eastern Lake Ontario dune and wetland complex,

two seasonal employees employed managed Early Detection and Rapid Removal (EDRR) techniques in the barrier beach dune and wetland ecosystem.

"The EDRR principle simply means getting rid of invasives that are low in number so that they don't gain a foothold," explains Gregg.

The main invasive at Eastern Lake Ontario is the water chestnut, but manual control (pulling by hand) has paid off by keeping the patches small. Other invasives mapped in our survey include *Phragmites*, purple loosestrife and swallow-wort.

Birding for Better Conservation continued from page 8

"This gives me excellent views of the birds, and allowed me to confirm the identity of a few I'd heard but not seen earlier." The recording also brings in a quiet skulker, the veery, which she can now add to her list.

While Janie ticks off observations, a large raptor lands on a branch about 30-40 meters away to her left.

"My heart fluttered, because I knew it was something good!" She waited for the recording to end, marked down all the birds she saw, then quietly snuck around to obtain a better vantage point of the bird.

"It was a Great Horned Owl!"

Janie gasped in awe as she took in its majestic form through her binoculars. The father of the forest had flown in, coolly surveyed the situation (he did not look back at Janie with any interest) and when satisfied, flapped his wings and flew back to his daytime perch.

"Every bird is special to me, but great moments like that make this monitoring study so rewarding," said Janie. While Mike and Janie both enjoy having access to new bird-rich places (such as Lakeside Beach in Orleans County where Janie saw warblers "dripping from the trees"), their main motivation for participating is "to give something back" to the birds they love and enjoy so much.

The connection of this monitoring study to the eventual protection of birds is not lost on them. As Mike says, "I believe in what NY Audubon and The Nature Conservancy are doing, so supporting them in the field like this feels good."

Lake Ontario Migratory Stopover Project*

BY THE NUMBERS:

seasons of data: 4
birds tallied: More than 18,000!
species: 130 and counting
volunteers: 32 in Spring, 2010
volunteer hours: over 1000

* Summer, 2010 update

Meet the Spotted Salamander

In early spring, after warm, nocturnal rains have saturated the ground, nature buffs pay close attention to small pools of water that linger in the woods. Under the right conditions, these temporary bodies of water, which to the untrained eye may appear nothing more than a large puddle, can spring to life with hundreds or thousands of amphibians, such as the spotted salamander.

Like most salamanders, the spotted salamander is wired to wake from its winter slumber, migrate across the land, and return to the same vernal pool in which it was born. Spotted salamanders are best distinguished

by the bright, bold yellow spots that line its stout bluish-black body. Individuals reach an average of 6 – 7.5” in length and spend most of their potentially long lives (up to 20 years) hidden beneath the ground. They range broadly through New York and, though they can be found in upland forests, are best adapted to moist, low-lying forests near floodplains. When not hiding under moss-covered logs or stones, they emerge for breeding or for hunting insects, worms, slugs, spiders, and millipedes.

Currently the spotted salamander is unlisted in New York. But since it



Spotted salamander ©Bruce Gilman

thrives in mature woodlands, deforestation threatens to diminish its numbers. Also, because salamanders normally return to the same mating pool via the same route every year, the loss of vernal pools to development or drainage can be devastating to local populations.