Nature

central & western new york

The Nature Conservancy
Protecting nature. Preserving life.™

SPRING/SUMMER 2012

Message from Tom & Jim

Jim Howe, *Executive Director*

Tom Lunt, *Chair*

This message is to express our sincere thanks to you – our members – who responded so generously to our recent request for help in purchasing 500 acres of land and water on the shore of Sodus Bay.

With your help, we raised every dollar we needed – nearly $1.3 million! – to protect this important property and make it accessible to the public.

Our success gives us confidence to move forward with our work to protect and restore land and water, and to find better, more sustainable ways to use nature.

As you can see from this newsletter, we're putting your contributions to hard work:

- restoring the health of Lake Ontario
- finding solutions to the challenges posed by hydrofracking
- acquiring important land and water in the Finger Lakes
- and making sure that people can experience the wonders of nature at our impressive network of preserves

Throughout the world, lands and waters are being altered in ways that threaten our future. But there is hope. Working together, we can conserve the lands and waters on which all life depends.

Thanks again for your support. Please don't hesitate to contact any of our Board of Trustees or staff if you have questions about The Nature Conservancy and our work in Central & Western New York and beyond.

nature.org

Jim Howe, Chapter Director

Tom Lunt, Board Chair

The mission of
The Nature Conservancy
is to conserve
the lands and waters
on which all life depends.

Board of Trustees

Tom Lunt *Orchard Park, Chair*
Lew Allyn *Naples, Florida*
Bruce Bongarten, Ph.D. *Syracuse*
Barry Boyer *East Aurora*
Lina Echeverria, Ph.D. *Corning*
John Fitzpatrick, Ph.D. *Ithaca*
Paul Fuller, M.D. *Rome*
Bruce Gilman Ph.D. *Canandaigua*
Richard Hill, Emeritus *Remsen*
D. Bruce Johnstone, Ph.D. *Buffalo*
Victoria Kennedy *Fayetteville*
Deb Koen *Rochester*
Tony Lee *Rochester*
Clayton Millard *Rochester*
Brian O'Shea *Barneveld*
John Palmer, Ph.D. *Fayetteville*
Robert Papworth *Syracuse*
Stephen Rosenfeld, M.D. *Pittsford*
Sandra Rothenberg, Ph.D. *Rochester*
Chuck Ruffing, Ph.D. *Rochester*
Sue van der Stricht *Rochester*
Susan Suwinski *Ithaca*
Jim Wagner *Syracuse*

The Nature Conservancy
Protecting nature. Preserving life.™

These numbers show the savings derived from this newsletter being printed on 80% recycled (including 30% PCW), process chlorine free paper, creating the following benefits:

17.9 trees preserved for the future

51.7 lbs water-borne waste not created

841.1 lbs solid waste not generated

1,656 lbs net greenhouse gases prevented

New Water Plan for Lake Ontario Offers Balanced Approach

Plan Bv7 offers a balanced approach for all the interests affected by water levels in Lake Ontario.

Across the globe, people have dammed most of the world's rivers for hydropower, flood control, or shipping. We now realize the negative environmental impacts of these dams. Many agencies and dam managers are trying to incorporate environmental needs into flow releases.

Built in 1959, the Moses Saunders Dam created the St. Lawrence Seaway, which opened the Great Lakes to international shipping. Located on the St. Lawrence River between Massena, NY, and Cornwall, Ontario, the dam manages the levels and flows of Lake Ontario and the St. Lawrence River. Although the Seaway brought international commerce to the Great Lakes, it also brought unforeseen environmental problems. Now, the U.S. and Canada are hoping a newly proposed water management plan for the dam will help right some of these problems.

Proposed changes to Lake Ontario's water levels will help restore the economy and environment of the Lake.

Lake Ontario was once the most biologically diverse Great Lake. We still see this heritage today in 64,000 acres of coastal wetlands; the beaches, dunes and bays of the shoreline; and in the natural spectacle of millions of ducks, hawks, and songbirds that use the lake's coastal habitats for migration each spring.

The lake's coastal habitats evolved in response to the natural ebb and flow of the lake and river. Prior to the dam, Lake Ontario water levels naturally fluctuated in response to water supplies. "This natural variability was the engine of biodiversity in the Lake Ontario ecosystem," says David Klein, the Chapter's Senior Field

continued on page 3

Representative. "It provided opportunities for a wide variety of species to survive." Unfortunately, water regulation by the dam stabilized the lake, removing the 30-year cycles that shape and maintain the lake's coastal habitats, and the myriad species they harbor.

The impacts to the Lake Ontario ecosystem are clear:

- northern pike populations have crashed by 70% after losing access to spawning habitat
- black terns have declined in coastal marshes by over 80% and are now a threatened species in New York
- cattails, the dominant wetland plant when fluctuations in water levels are suppressed, have taken over coastal wetlands along the shoreline

These are just a few symptoms of a much broader malaise in the coastal zone of Lake Ontario.

Regulation of Lake Ontario is the responsibility of the International Joint Commission (IJC), a bi-national body created by treaty in 1909. Since 2001, the IJC has been working with a wide range of people and interest groups, including the Conservancy, to develop a new regulation plan for the Lake Ontario - St. Lawrence ecosystem.

The IJC's new proposal, Plan Bv7, offers a balanced approach. It restores the natural cycles of the lake while dampening the extreme high and low levels that can cause economic damage.

Lake Ontario's current water level plan favors dense monocultures of cattails that crowd out native species.

Hunting, fishing, the environment, recreational boating, hydropower, shoreline property, and commercial shipping all benefit. Under Plan Bv7, shoreline property owners will continue to save nearly $24 million a year in estimated damages to their breakwalls when compared to unregulated conditions. To be sure, this represents a benefit of about $3 million a year less than the current regulation plan provides. But anyone who lives along the water knows that erosion is a fact of life under any plan. And in an era of increased environmental awareness, it's time for a new plan that will begin to reverse more than 50 years of damage to Lake Ontario and the St. Lawrence River.

That's why a range of people, interest groups, and governments all back Plan Bv7 — the plan that provides a balanced approach to Lake Ontario. Please help by lending your voice to the effort – sign our petition at nature.org/bv7.

visit. sign. share. nature.org/bv7

We Need Your Voice!

1. Visit our new Bv7 website – nature.org/bv7.
2. Sign the petition in support of this new and balanced approach.
3. Share this information with your friends and family!

Public input will be crucial to the acceptance of Bv7 by the federal governments of the two countries, and to the plan's implementation by the IJC.

Please "use your outside voice" and contribute to the restoration of one of the world's largest lakes!

Leaving a Conservation Legacy for Future Generations – Meet Dr. Cenie Cafarelli

Follow Cenie Cafarelli around her property and you quickly learn that she loves every square inch of her remarkable land. You also discover that Cenie is just one of many visitors to this land – she's sharing it with fox, whitetailed deer, coyotes, bluebirds, woodpeckers, salamanders, and the occasional black bear.

Cenie had her land's rich habitat in mind when she recently donated a conservation easement on her 43-acre parcel to The Nature Conservancy. Located on the western edge of the Hemlock Lake watershed in Livingston County, the property's woods and fields are returning to their pre-sheep grazing days. Cherry, oak, maple and pine trees are thriving. Hemlock Lake bookends the western edge of The Nature Conservancy's Western Finger Lakes Priority Conservation Area, which extends east to the Canandaigua Lake watershed and also includes Canadice and Honeoye Lakes. The land is known for its striking glacial characteristics of steep cliffs dropping off into long narrow lakes. The Western Finger Lakes supports large blocks of forest habitat as well.

Dr. Cafarelli, a retired pediatrician in Rochester, discovered this land when a friend called with news that the property might soon be subdivided into residential lots. She'd always thought about owning land, but not necessarily a second home. Her friend's call was literally a call to action! She purchased the land in 2008 with the goal of protecting it. A longtime supporter of The Nature Conservancy, Dr. Cafarelli enjoys skiing, camping and hiking. Cenie comes to Upstate New York by way of California, Long Island and Albany. "When I started my practice, I looked at several communities throughout the U.S. Although I miss the mountains, the Finger Lakes region is a rich landscape with much to enjoy outdoors in any season." She is also active with the Genesee Land Trust and the Sierra Club. She's been passionate about the environment for as long as she can remember, from her Girl Scout camper days to her recent ski trip to Jasper.

Dr. Cenie Caferelli at her Hemlock Lake property. Gifts of land can be powerful tools to leave a legacy for the future.

Leaving A Legacy

"This conservation easement is an extremely important contribution to the conservation of Hemlock and Canadice Lakes. It's essential to the health of the municipal water the lakes provide for the City of Rochester and townships along the way," says Zachary Odell, the Chapter's Director of Land Protection. As part of Dr. Cafarelli's estate planning, the land will pass to The Nature Conservancy upon her death. She hopes her gift will inspire others to consider The Nature Conservancy in their estate planning. "I'm delighted to do this," Cenie says. "We live in a very special area and knowing that my land will remain intact, forever protected, just as I found it, means so much to me."

Restore

Clockwise from top: The Chapter is the happy recipient of a newly donated mini-van! Sue Suwinski, one of our Trustees, and her husband, Jan, are shown here with the van.

Intern Rachael Dye works with Gregg Sargis, the Chapter's Stewardship Ecologist, to select preserves for Wegmans Passport to Family Wellness, which will encourage visitors.

Trustees Dick Hill and Bob Papworth and Chapter Director Jim Howe enjoy the view from Chimney Bluffs State Park.

Legacy Club member Kim Leitner scans the Montezuma National Wildlife Refuge for osprey on a spring field trip.

Bob Mauceli, President of the Rochester Birding Association, presents David Klein, Senior Field Representative for the Chapter, with a $20,000 check from RBA for our recent Shaker Heights acquisition.

Preserve

The Nature Conservancy

©Stevie Adams/TNC

Educate

Above: Board Chair Tom Lunt and the Chapter's Tug Hill Director, Lorna Wright, "scope out" a raft of spring ducks at Montezuma National Wildlife Refuge.

At right: Suzanne Robinson and Len Lettau view the "Cloud Forest, Coffee, and Quetzal" exhibition at Rochester Institute of Technology. The Nature Conservancy, RIT and Friends of El Triunfo celebrated an exhibit of photos taken at El Triunfo Biosphere Reserve, a 300,000-acre-plus protected area in the Sierra Madre of Chiapas, Mexico. Our Chapter helped the Chiapas team set aside 350,000 acres of new reserves, establish a ranger system, and develop a new conservation easement program in Chiapas.

©Jan Miller/TNC

Restoring the "Lungs of the Lake"

As early as the 1960s, the Central & Western New York Chapter of The Nature Conservancy realized the value of the eastern shore of Lake Ontario and Tug Hill and targeted them as a conservation priority. These areas are intimately linked: 4,000 miles of rivers and streams that originate on the Tug Hill plateau flow to the barrier beach wetland complex on the shore of Lake Ontario. High up in the watersheds of the East Branch of Fish Creek, Mad River, Sandy Creek and others, water brings life to creatures like brook trout and freshwater mussels. Water then flows across the lake plain on its way to the unique coastal marshes of Eastern Lake Ontario where hundreds of resident and migratory bird species rest, forage, and nest; where nearly every species of nearshore fish spends some part of its life; and where rare animals like the bog turtle and the bog buckmoth persist.

With its first purchase of land in the area in 1968 — 360 acres that are now the El Dorado Preserve – The Nature Conservancy permanently protected a vital stopover for migrating shorebirds traveling thousands of miles from the Arctic to South America. Our efforts haven't stopped there. The Conservancy has gone on to protect an additional 1,000 acres of wetlands and 50,000 acres of forest on Tug Hill.

Over the past four decades, our work has evolved from traditional land protection to dune management, non-native invasive plant mapping and control, education, habitat restoration, and lake level regulation. Together these projects assist dune formation and improve dune grasses for native shorebirds; halt the decline of native plant and animal diversity due to invasion by non-native plant species; restore wetland habitats for northern pike and black tern; and allow for more naturally fluctuating water levels of Lake Ontario that will build beaches and take steps to restore the lake after 50 years of environmentally damaging water level regulation.

In 2010, our Chapter was awarded two grants totaling $720,000 from the federal Great Lakes Restoration Initiative. These funds are being used to implement a multi-faceted project that will benefit streams and wetlands along 17 miles of Lake Ontario shoreline as well as several subwatersheds on the Tug Hill plateau.

The Nature Conservancy has removed 100 acres of water chestnut from eastern Lake Ontario waters, preventing this invader from gaining a foothold.

Invasive Species

What disrupts natural habitats, reduces the diversity of plant and animal species, and costs our country more than $100 million per year to combat in wetlands alone? Invasive plants! The Chapter has embarked on a 3-year project to: 1) prevent the establishment of invasive plants through monitoring and on-the-ground control techniques, and 2) to reduce the impact of established invasive species on native plants and animals. "In 2011, we searched over 24 miles of streams and nine waterbodies for invasive plants, and removed 100 acres of water chestnut from four locations," says Mathew Levine, the Chapter's Northern NY Field Representative." "With two years of work remaining we expect to double these numbers.

Chapter staff also removed already-established populations of purple loosestrife, glossy buckthorn and Phragmites. Purple loosestrife beetles – which eat invasive purple loosestrife and nothing else — were released at three sites, thereby controlling purple loosestrife within over 400 acres of wetlands All control efforts are monitored closely with one year of baseline, or pre-treatment, data collection followed

by annual post-treatment surveys.

Wetland Restoration

In partnership with Ducks Unlimited and the NYS DEC, GLRI funds will restore over 275 acres of coastal marsh habitat at the state's Lakeview Marsh Wildlife Management Area to benefit northern pike and wetland-dependent birds like ducks, American bittern, least bittern, Virginia rail, black tern, sora rail and sedge wren.

Each of these species depends on a diverse wetland system, in which dominant plants such as cattails are interspersed with openings and channels formed by natural fluctuations in water levels and the habitat-shaping activities of muskrat. "As a result of water level regulation in Lake Ontario, most of the lake's wetlands are now dominated by invasive cattails," says Stevie Adams, the Chapter's Freshwater Conservation Practitioner. Over the last 30 years northern pike populations have declined by 70% and black tern populations by 80%. Last December, the Conservancy oversaw the excavation of nearly two miles of meandering channels and three potholes totaling 1 acre in the dense cattail stands. This will provide access to spawning habitat for northern pike and create open water areas for black tern, waterfowl and other wetland birds, that will be maintained through ecosystem engineering activities of the muskrat.

An integral part of this experimental project is an extensive monitoring program designed to capture impacts to wetland plants and animals. Prior to channel excavation, black tern, northern pike and muskrat were surveyed and vegetation communities were described. Annual monitoring will continue post-construction so any changes in these populations can be evaluated. Results of this monitoring effort will help guide future restoration projects of this kind.

Above: Mat Levine checks flow in a newly excavated channel at NYS DEC's Lakeview Wildlife Management Area.

At Right: Excavators dug two miles of channels in a dense cattail mat.

Hydrologic Connectivity

The final component of our work focuses on improving hydrologic conditions for fens – a rare type of wetland — at two sites along the eastern shore of the lake. Coastal fens are supported by a complex interplay of water levels in Lake Ontario, surface water from creeks, groundwater, and precipitation. This interplay has been altered in recent decades by increased nutrients from runoff and septic tanks, and by roads and culverts that have fragmented the wetland system.

By modifying existing road culverts and adding additional culverts more natural flows will be restored to 235 acres of wetlands, and a serious threat to the integrity of these two coastal fens will be abated. The Town of Sandy Creek is helping us install the culverts.

"Our partnership with Ducks Unlimited, and the local communities has already been very successful," says Gregg Sargis, the Chapter's Program Stewardship Ecologist. "We're delighted to be teaming up with NYS DEC, Ducks Unlimited, and local communities to restore the health of the lake. A healthy lake will provide more fish, more birds, and more recreational opportunities for all of us."

The Nature Conservancy
Protecting nature. Preserving life.™
nature.org

Go Slow, Make Informed Choices on Hydrofracking

Hydrofracking wellpads in Pennsylvania. The Conservancy advocates that hydrofracking not proceed in New York until all key issues are fully understood and addressed.

No single environmental issue has engrossed New Yorkers more than hydrofracking. In January, the NYS Department of Environmental Conservation (NYS DEC) received more than 46,000 comments on its proposed regulations.

NYS DEC's decision on whether or how to permit hydrofracking – the extraction of natural gas from shale bedrock below the earth's surface by injecting water and chemicals – will define our state for generations to come.

New York's environmental health is essential to our economic vitality and well-being. An irrefutable body of evidence indicates that quality of life — clean air and water, open space, recreational opportunities, scenic views — is the best indicator of a state or community's ability to attract people and businesses.

The process of extracting gas from deep below the earth's surface is complex. Elsewhere in the country, the process has caused severe impacts to water and natural resources, and the people who depend on them. If hydrofracking is permitted to occur in New York, it is critical that appropriate policies and regulations are established based on careful analysis.

Unlike other states where hydrofracking is already underway, New York has the time to understand trade-offs and make informed choices so that hydrofracking's impacts on nature and people are understood and avoided before the practice begins.

With a mission of conserving the lands and waters on which all life depends, The Nature Conservancy is one of New York's most trusted conservation organizations. The Conservancy advocates that hydrofracking not proceed in New York State until all key issues are fully understood and addressed. Evaluating impacts on a site-by-site basis is not adequate: hydrofracking is likely to result in tens of thousands of wells and staging areas; thousands of miles of new roads and pipelines; and billions of gallons of water withdrawals and wastewater. A cumulative impact analysis needs to be prepared.

Last month, the Nature Conservancy completed just such an analysis for

the forests of Tioga County. Our analysis, the first of its kind, shows that forest damage from hydrofracking will be extensive. Potentially, almost none (1%) of the intact forest patches in Tioga County would escape impacts. More than 450 miles of new roads could be required in Tioga County alone. (You can find the complete analysis at nature.org/newyork)

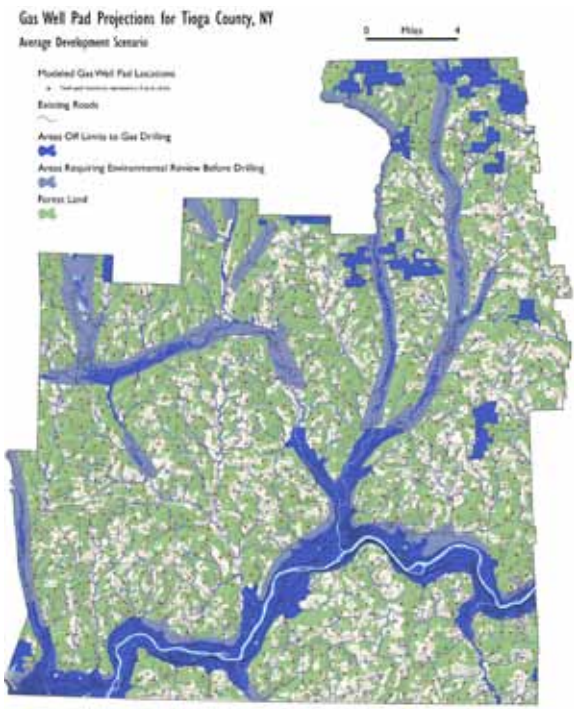
A major concern about hydrofracking is its impact on water. New York's water is our most important economic and environmental asset. Hydrofracking generates large quantities of wastewater that are not treatable by conventional methods. Before hydrofracking moves forward in New York, we need to ensure that there are workable solutions to the challenge of disposing wastewater.

There's also the question of water withdrawal. The state's new Water Resources Protection Act – enacted in 2011 – will require users withdrawing more than more than 100,000 gallons of water a day to obtain a permit from NYS DEC, and requires analysis of the ecological impacts of each withdrawal. But while the law has been enacted, much more work needs to be done to develop regulations to implement it.

NYS DEC's capacity to monitor and enforce hydrofracking regulations must be resolved as well. The agency estimates that another 226 officials will be needed.

Finally, unlike most states that permit natural gas drilling, New York does not have a severance tax – a fee levied on oil, gas, and minerals extracted from the state. The Nature Conservancy supports a severance tax, both to ensure that NYS DEC can effectively regulate hydrofracking and to help cover the cost to the state and to affected communities and habitats.

Clean water, clean air, and healthy forests and landscapes are the economic engines of New York. Before hydrofracking goes forward in our state, let's make sure we fully understand its impacts so that we can make informed choices about whether and how it proceeds.



Under a high development scenario, 99% of the large forest blocks in Tioga County would be impacted by hydrofracking.

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

Stevie Adams, *Freshwater Conservation Practitioner* ext. 29
sadams@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 Great Lakes* ext. 24
dklein@tnc.org

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

Jan Miller, *Senior Philanthropy Officer* ext. 28
jan_miller@tnc.org

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

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

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

NORTHERN NEW YORK PROJECT OFFICE

269 Ouderkirk Road · Pulaski, NY 13142
(315) 387-3600 · (315) 387-3602 (fax)

Mat Levine, *Field Representative* ext. 22
mlevine@tnc.org

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

Rob Williams, *St.Lawrence - Eastern Lake Ontario Partnership for Regional Invasive Species Management Coordinator* ext. 25
rwilliams@tnc.org

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

FRENCH CREEK PROJECT OFFICE

PO Box 172 · Allegheny College · Meadville, PA 16335
(814) 332-2946 · (814) 333-8149 (fax)

Darran Crabtree, *Chapter Director of Conservation*
dcrabtree@tnc.org

NIAGARA FRONTIER PROJECT OFFICE

10 Main Street · Cattaraugus, NY 14719
(716) 257-3689 phone/fax *(please call prior to faxing)*

Patrick McGlew, *Project Director*
pmcglew@tnc.org

The Nature Conservancy
Protecting nature. Preserving life.™

Central and Western New York Chapter
1048 University Avenue
Rochester, New York 14607
585-546-8030

nature.org/cwny

2012 Preserve Day Hikes

Join us for an unforgettable outdoor experience during the spring and summer of 2012! Experience and learn from staff and expert volunteers why The Nature Conservancy's members have protected some of Central and Western New York's most important lands and waters. There is no cost to join us on a hike. Hikes are suitable for all ages unless otherwise specified. We recommend you wear sturdy footwear and bring drinking water. All hikes are rain or shine, but may be cancelled if conditions are unsafe.

To see our full calendar of events in New York, visit nature.org/newyork.

May 30th • 10:00 am – 11:30 am
Rome Sand Plains *(near Rome, NY)*
Tiptoe Through the Lupine
Reservations required by May 23

June 4th • 4:00 pm – 6:00 pm
Chaumont Barrens Preserve, Chaumont *(near Watertown, NY)*
Wildflowers and Plants of the Prairie…in New York!
Reservations Required by May 29

June 10th • 2:00 pm – 4:00 pm
O.D. von Engeln Preserve at Malloryville *(between Ithaca and Cortland)*
Bogs, Swamps, Eskers and Kettles
Reservations required by June 3

July 14th • 9:00 am – 12:00 noon
Cherry Creek, NY *(near Dunkirk)*
Forests that Sustain Us
Reservations required by July 9

August 4th • 9:00 am – 12:30 pm
Eastern Lake Ontario Paddle Trip, Sandy Creek
Reservation required by July 27

Sept. 22nd • 10:00 am – 12:00 noon
Shaker Heights *(Near Sodus, NY)*
Reservations required by September 14

Oct. 13th • 10:00 am- 12:00 noon
Rob's Trail, Canadice
Reservations required by October 6th

ALL hikes require pre-registration. Please email Gretchen Holtz at cwnyevents@tnc.org with the hike name in the subject line, or call 585-546-8030 x32.