

ne Land Steward

NEWSLETTER OF THE FINGER LAKES LAND TRUST

working to protect the natural integrity of the Finger Lakes Region

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Easement Donation Secures Scenic Hillside Near Watkins Glen

The drive between Watkins Glen and Montour Falls on State Route 14 is distractingly beautiful, especially in the spring.

The road runs along a sheer bluff cut by numerous waterfalls, each one more stunning than the last. Many of them are seasonal, but Aunt Sarah's Falls, just north of Montour Falls, flows all year round. At a notch in the ninety-foot cliff, Aunt Sarah's Creek spills over the edge in a thin ribbon, then cascades down the rock face in a wide fan like a long sweep of hair. It is a favorite of photographers and stands out even in a region famed for its waterfalls. However, the dramatic terrain that creates this natural wonder also makes it vulnerable to development. The land above the falls, with its spectacular views of Catharine Valley, the southern end of Seneca Lake, and the hills beyond, is attractive for development. Yet if the vegetation on the steep hills surrounding the creek were to be removed, erosion and storm runoff could damage not only the falls but also the wetlands below.

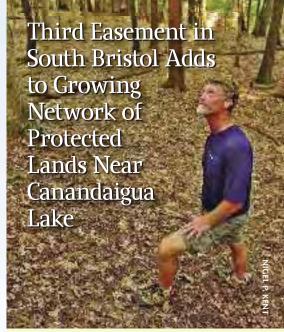
A 193-acre conservation easement recently donated to the Land Trust by Carl and Suzanne Blowers will help protect Aunt Sarah's Creek, as well as the natural beauty of the southern end of Seneca Lake, for generations to come.

A conservation easement limits future development of the land, while allowing it to remain in private ownership and on the tax rolls. Donated by private landowners and held by conservation organizations such as the Land Trust, these easements typically provide for traditional uses of the land such as agriculture and forestry. Donors are eligible for state and federal tax benefits, provided that their agreements meet certain criteria.

The Blowers property, which is bounded on the east by the cliff edge and on the north by the final segment of Aunt Sarah's Creek, has almost half a mile of undeveloped road frontage and is visible from as far away as State Route 79 on the

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Easement donor Chris Luley on his property in South Bristol

riving south along the west side of Canandaigua Lake, you can't help but admire the natural beauty in a pastoral landscape of farms, woodlots, and vineyards. This time of year, roadside farm stands and retail outlets offer a variety of farm-fresh products as well as wine, juices, table grapes, even grape pies — all symbols of the land's bounty. Every fall thousands of people make the trek to the Canandaigua Lake area for the annual Grape Festival in Naples, or for a fall foliage tour or hike in the Bristol Hills. What makes this daytrip so special? Most agree, it's a combination of unsurpassed scenery and welcoming rural communities.

For a number of property owners dotting the scenic hillsides between State Route 21 and Canandaigua Lake, the land supports an agricultural livelihood, recreational interests, or both. The Land Trust is now working with several landowners in this area committed to conserving these natural resources for their generation and those that will follow. Two conservation easements donated to the Land Trust in recent years in

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PERSPECTIVES

With each day's news headlines focused on national and international economic woes, it's not surprising that discussions on how to spur upstate New York's economy are ramping up in volume and intensity. The governor has convened regional councils to chart a course for future growth, and some people are intent on the near term exploitation of shale gas resources as the answer to our economic problems.

There may be a perception out there that land conservation is somehow anti-growth, possibly even harmful to local economies. One may ask, "What does land conservation have to do with economic development?" Well, we have more than \$3 billion worth of answers — that's the amount of annual revenue our region derives from agriculture and tourism. These pillars of our economy cannot be sustained without those scenic rural landscapes that support our farms and inspire our visitors. We also must sustain the clean waters that attract so many people to our region and, at the same time, provide many of us with our drinking water.

By investing in land conservation, we can secure the future of our best farmland, providing stability that will encourage additional investments in local agriculture. We can build networks of attractive open space with long-distance trail systems for a variety of recreational uses; they will become a destination for additional visitors to the region. We can also conserve those critical wetlands and streamside areas that filter

our runoff, enhance our water quality, and reduce downstream flooding.

In the current age, many people can choose where they live and where they locate their business enterprises. Our region has much to offer. If we enhance our rural landscapes, while strengthening our cities, towns, and villages, we can compete with the most coveted regions of our nation. But if we fail to take action, the quality of life we enjoy may become a bittersweet memory.

The future of our region today hangs in the balance. In considering potential impacts from hydrofracturing and horizontal gas drilling on tourism and agriculture, a state-commissioned study simply stated that these techniques "could have a negative impact on some industries such as tourism and agriculture," but failed to provide any detailed analysis of our region.

We can grow our economy and we can maintain our quality of life. In fact, maintaining our quality of life is essential if we are to be economically competitive in the future. We must work together as a region in ways that we haven't before if we are to strengthen our cities and villages and develop sustainable economies for our rural areas. It won't be easy and it won't happen overnight, but in the long run it's really the only choice we have.

Curlew 5

—Andy Zepp

Dedication Held for Town of Geneva's Kashong Conservation Area

Town of Geneva council members recently joined staff and volunteers from the Finger Lakes Land Trust to officially dedicate the new Kashong Conservation Area. The event was held at the 81-acre natural area on Kashong Road in the southern part of the town and was widely attended by neighbors and members of the public. Highlighting the festivities was the attendance of Polly Spedding and her family, who donated the property in 2008.

Spedding was a longtime resident of the area and now lives in North Carolina. She and her late husband owned and managed the land for more than 50 years before she donated it with the goal of establishing a public conservation area.

The Finger Lakes Land Trust and the town of Geneva worked together to secure the land, which provides much needed public open space in that part of the Finger Lakes, while also helping to protect municipal drinking water supplies. A committee of volunteers has developed a network of hiking trails that traverses a diversity of habitats, including fields, brush lands, and forest.

"The town of Geneva is extremely fortunate to receive this land from Polly Spedding and her family", said the town Supervisor Mary Luckern. "We plan to develop the area to be enjoyed by our residents."



Polly Spedding (right) with two of her four children

"Polly has made a wonderful gift to the community," added Land Trust Executive Director Andrew Zepp. "We're honored to have the opportunity to work together with Geneva to continue her tradition of land stewardship."

The Kashong Conservation Area is located on the north side of Kashong Road, just west of its intersection with State Route 14. The Conservation Area is open to the public during daylight hours.

Goetchius Grows

The Land Trust recently acquired a new parcel to add to its growing Goetchius Wetlands Preserve in Caroline, Tompkins County. A 7.5-acre meadow is the second piece of land purchased from owner Beverly Armitage.

The previous piece, 35 acres purchased in 2007, doubled the size of the preserve. With the recent addition, the preserve now stands at just over 80 acres.

The Land Trust also now has its second opportunity to work as a partner with the Upper Susquehanna Coalition (USC) to restore wetland in that area, having undertaken a forest wetland restoration on the first Armitage parcel several years ago. Two new wetlands — one-third of an acre of scrub-shrub wetland and about one acre of emergent wetland — will be created in the meadow property, which abuts the existing preserve, just north of the Land Trust parking lot on Flat Iron Road.

The projects will begin this fall and should take a few weeks to complete.

The vast forested wetland that once characterized the Caroline valley was largely cleared and drained long ago for farming. The drained agricultural fields and existing wetlands of the Goetchius preserve flow south into New York's Southern Tier and beyond to the Chesapeake Bay, rather than north to Lake Ontario, as most Finger Lakes residents expect.

Protecting the headwaters of the Susquehanna River is a fundamental goal of the USC, a coalition of 19 soil and water conservation districts in New York and Pennsylvania. The organization specializes in wetland restoration, which is crucial to maintaining or improving water quality. Just as important, in light of recent Southern Tier flooding, wetlands will absorb runoff, slowing the cascade of water downstream.

Wetland restoration also provides habitat for wildlife, creating a complex ecosystem in which a great many species of animals, insects, and plants can thrive. Chris Olney, the Land Trust's director of stewardship, is excited about the ongoing work in Caroline. "The expanding Goetchius Preserve, as well as an adjacent NYS Department of Transportation wetland mitigation parcel, are really emerging as an important place in our region to showcase the benefits that wetland restoration projects can have on local bird populations," he said. "Local

birding enthusiasts and researchers continually choose this location for outings and routinely report interesting birds using the mix of habitat types. The additional new wetlands to be created by the Upper Susquehanna Coalition will add to that habitat diversity."

USC Watershed Coordinator Jim Curatolo refers to wetland restoration as an "art," since each wetland project is different. The 2007 Armitage restoration at Goetchius was a forest wetland restoration, requiring shaping topography to mimic older forest terrain, then planting typical wetland trees, like red maple, swamp white oak, and green ash. By contrast, the two new projects are focused on two different types of meadow wetland: scrub-shrub and emergent plant marshes. Both will be created in the field immediately west of the Land Trust parking lot on Flat Iron Road.

Curatolo described using a unique "groundwater dam," rather than a surface embankment, in creating the emergent marsh — part of the art of wetland restoration. Groundwater flows beneath the soil surface and is often overlooked by those who think of runoff only in terms of streams they can see. Constructing a subterranean dam, and fitting its contours to the pattern of groundwater flow in a particular site — perhaps mimicking a rock ledge — could create typical emergent wetland. "When the groundwater seeps downhill it sort of hits the dam and keeps the water level high enough to feed the plants," he explained.

Most of the water for the new wetlands will come from the existing drainage stream running along the meadow edge. That stream is actually a product of a farmer's labor to dry up the original marsh in order to work a larger field, Curatolo points out. "So what we're going to do is pull down the old berm that parallels the stream on the meadow side," he said. "Then the water comes into the wetland better during heavy rainfalls and gradually flows downhill into the other wetlands."

Once constructed, the emergent marsh will be seeded with

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Easement Donation Secures Scenic Hillside Near Watkins Glen continued from cover

opposite side of the valley. A half-mile to the north, also running along the cliff, is the Land Trust's Gahada Gehn Yod Preserve (a Seneca name meaning "top of the marsh"): a tract of cliffs and woodlands, scored by five waterfalls. Together,

these properties will ensure that a significant portion of the valley rim will remain protected from further development.

Like almost every corner of upstate New York, forests on the Blowers' property were cleared long ago and the land brought under cultivation. However, farming was abandoned in different areas at different times and, as a result, the land contains a remarkably diverse patchwork of habitat types. Meadows that are regularly mowed for hay cover 60

acres. Over half of the property is covered in trees, including 55 acres of mature hardwood forest containing several large American chestnut trees. The property is also dotted with streams and wetlands, including a few small waterfalls.

The Blowers easement will play an important role in protecting significant natural habitats as well as preserving the scenic landscape in this corner of the Finger Lakes. Even more important, it will also help to protect the water quality of the fragile Catharine Valley wetlands. Thousand-acre Queen

Catharine Marsh is home to 64 bird species and 29 fish species; it has been identified as an Important Bird Area by the National Audubon Society and supports a number of at-risk species, including the Bald Eagle, Least Bittern, and Pied-billed

Grebe, all of which are threatened in New York state. New York state owns and manages a significant portion of the marsh as a wildlife management area and the Land Trust is reaching out to adjacent landowners as part of an effort to secure additional lands in this area.

"We're grateful to the Blowers for their commitment to the land," said Land Trust Executive Director Andrew Zepp. "The Land Trust recognized this property as a priority for protection both for the

diversity of its natural habitats as well as its proximity to Queen Catharine Marsh. We look forward to working with the Blowers family to continue their tradition of responsible stewardship."

—Jacqueline Stuhmiller

The Land Trust gratefully acknowledges Attorney Stephanie Sechler in Ithaca, NY for providing pro bono legal services in support of this project.



Goetchius Grows continued from page 3

a mix of native wetland grasses, Curatolo added, while the shrub marsh will be planted with several species of dogwood, buttonbush, and other shrubs that will help shade out the invasive reed canary grass.

Funds for both the property purchase and restoration work come from the Greater Binghamton Airport as mitigation for impacts on wetland caused by airport runway improvements. The Broome County Soil and Water Conservation District purchased the land in Caroline with these funds and transferred title to the Land Trust, ensuring the land's future protection as part of the Goetchius Wetlands Preserve.

– Eben McLane

The mix of habit found at the Goetchius Wetland Preserve often attracts interesting species of birds, such as this Spotted Sandpiper chick photographed last summer.





Third Easement in South Bristol Adds to Growing Network... continued from cover

South Bristol combine to protect nearly 140 acres of forests, fields, and stream gullies overlooking the lake near Seneca Point. The latest conservation easement donated to the Land Trust adds to this block of conserved land in noteworthy ways.

The conservation easement donor, Christopher Luley, is owner and operator of Happy Goat Farm, where he resides on Hicks Road in South Bristol. A relatively small tract at just under 22 acres, the parcel is jam-packed with natural resources including 2,500 feet of frontage on two tributaries to the lake, mature forest stands, agricultural land, and a lovely view of Bare Hill on the opposite shore.

Chris has grown a wide variety of organic fruits and vegetables on this land. Garlic was a mainstay of his operation in the past. He has been experimenting with Saskatoon berries, a relative of the vitamin C-rich juneberry. The conservation easement allows for continued agricultural uses of the property within a certain zone, and can accommodate changing farm practices. Chris also has (as do future landowners) flexibility to maintain, remodel, or replace the single family home on the

A Hudson Valley native, Chris has degrees from the State University of New York College of **Environmental Science and** Forestry and Iowa State University, and he knows his trees. Besides farming, he works as a consulting forest pathologist — or "tree doctor"— for the firm Urban Forestry, LLC. "Trees are an important part of my life, and this property has some pretty nice specimens that have intrinsic value to me," Chris remarked,

pointing to a variety of native trees like red, white and less abundant black oak, as well as pitch pine, and soaring white pines and hemlocks.

The woodlands on the Luley property are certainly impressive and provide a habitat for forest birds and mammals. They also serve an important water quality protection function by buffering the streams that cascade down the hillsides to Canandaigua Lake. Under the conservation easement, timber harvesting will only occur as guided by a Land Trust approved forest management plan. No permanent structures are allowed in the forest zone near these streams.

About 935 feet of stream gully are now more fully protected by the Luley conservation easement on one side, and the adjoining Morse Conservation Club conservation easement on the other. The latter was donated to the Land Trust in 2005. Land Trust Senior Field Representative Betsy Landre explained, "The Luley conservation easement adds value to conservation efforts by the neighbors. This is a case where the whole is greater than the sum of its parts. Each conservation easement is an important stand-alone project but, collectively, we're able to have a more powerful impact in this neighborhood on the protection of wildlife habitat, streams, Canandaigua Lake water quality, and the signature scenery that people care deeply about."

Chris Luley offered this assessment of the impact of his actions in donating the easement: "There are few places left to build along the lake and the development pressure is moving up the slopes. I don't think we can imagine what the lake will look like in the very long run, like 100 years from now. Setting this aside seems like the right thing to do for now and for the future."

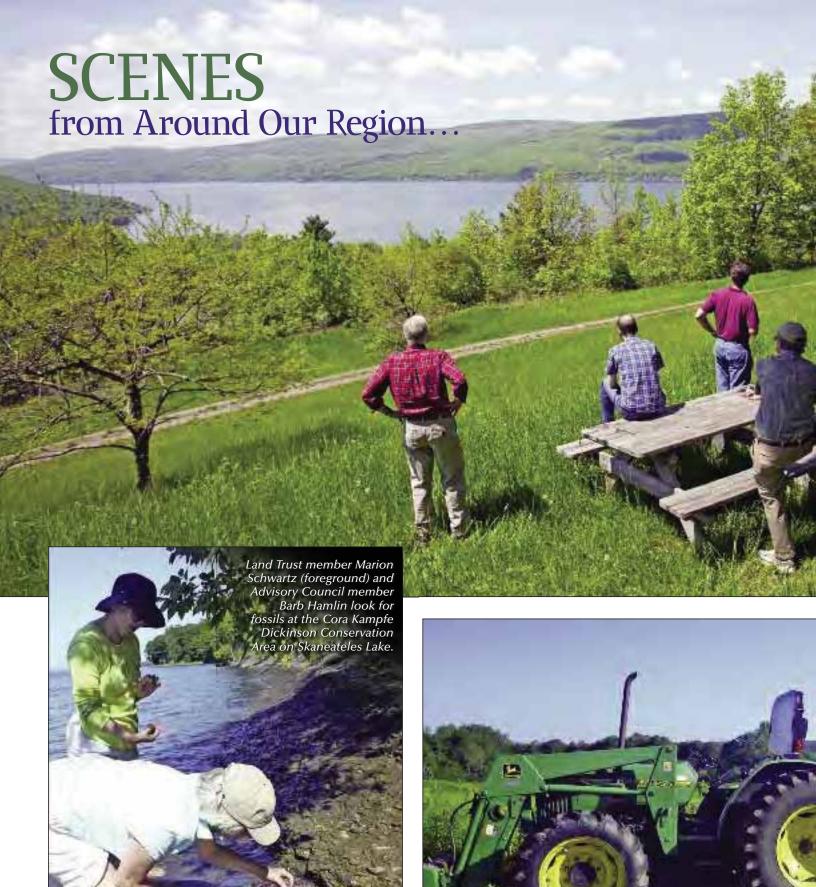
On a more personal level, he noted, "I really like the idea that this little oasis will remain essentially as is forever. I like the thought that whoever is fortunate enough to wander through here in the future will have this unique piece of the earth to enjoy, unspoiled by development. I thank the Finger Lakes Land Trust for providing the opportunity to allow this to happen."

The Land Trust gratefully acknowledges Attorney Edward F. Premo, II and paralegal Debra Williamson of the law firm Harter, Secrest and Emery in Rochester, NY for providing pro bono legal services in support of this project.



The woodlands on the Luley property serve to protect water quality by buffering the streams that cascade down the hillsides to Canandaigua Lake.





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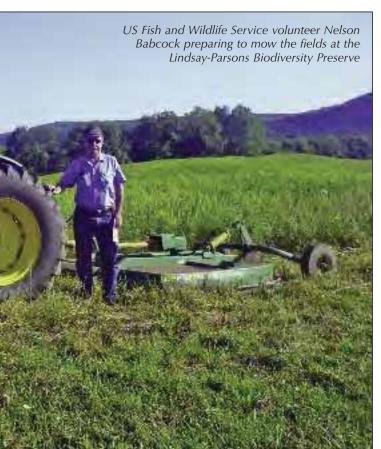




Participants on a recent field trip to the Morse Conservation Club hear about forest management practices. The property, located on the west side of Canandaigua Lake, is protected by a conservation easement held by the Land Trust.



Eagle Scout Dennis Baldwin on the Leopold Bench that he just completed for Mary's Woods at the Goetchius Wetland Preserve in Caroline, Tompkins County





Volunteers (left to right) Bruce Johnson, Roger Hopkins, and Charles Buniger install the road sign for the new William and Marjory Thayer Preserve at Lick Brook.

First Regional Trails and **Greenways Conference** Held at Cornell

In September, the Land Trust partnered with Parks and Trails New York to convene the first ever Finger Lakes Regional Trails and Greenways Conference.

ore than 140 trail advocates and municipal officials Mgathered at Cornell University for two days of workshops, networking opportunities, and education field trips.

Land Trust staff were involved in planning and hosting the conference and also led a field trip, facilitiated a regional visioning discussion and presented a workshop on working with landowners. Lead funding for the conference was provided by the Park Foundation.

"The event was one of the most informative, comprehensive and well-run conferences that I have attended in 10 years - good job," said Jim Pfiffer, director of the Chemung River Watershed in Elmira.

Conservation Easement Stewards Wanted

Easement Steward, helping the Land Trust to conduct inspection visits to conservation easement properties once a year? New Stewards are needed in the following towns: Caroline, Danby, Dryden, Ithaca, and Ulysses in Tompkins County, and Geneva and Richmond in Ontario County.

Earth Share of New York

Take advantage of one of the easiest and most convenient ways to support the Finger Lakes Land Trust! Hundreds of workplaces across the country give their employees the opportunity to make charitable gifts through payroll contributions. Finger Lakes Land Trust is a

member of EarthShare New York, a federated workplace-giving fundraising entity, that represents and supports the Land Trust



and many other respected and responsible environmental and conservation charities. Federal employees may support the Land Trust in the annual CFC by designating #71966 on their pledge forms.

Find out if *your* employer hosts a workplace giving campaign and if it includes EarthShare New York and its member charities. To learn more about how you and your workplace can support the Land Trust through an EarthShare New York charitable giving campaign, please call 607-275-9487, or visit EarthShare New York's web site at: www.earthshareny.org.

STAFF DEVELOPMENTS

We are delighted to announce the arrival of Kelly Makosch as the Land Trust's new director of development. Kelly will be filling the position formerly held by Jan Hesbon, who is returning to join his former

employer, National Audubon, as vice president and director of planned

Kelly has a bachelor of science degree in natural resources from Cornell University as well as a master's in public administration from Binghamton University. An accomplished fundraiser, Kelly was formerly director of the Cornell Annual Fund for the College of Veterinary Medicine. As an outdoor enthusiast, Kelly is well acquainted with the



New Director of Development Kelly Makosch

Land Trust's past achievements and has garnered a deep

appreciation for its efforts across the region.

We are also pleased to welcome Elizabeth Newbold, who will be taking over the position of land protection specialist formerly held by Megan Fenton. Megan has returned to school to pursue a Ph.D. in agricultural resources management from Cornell University; she is currently doing field work in India.

Elizabeth is a recent graduate of Vermont Law School where she focused on environmental law. In addition she has a master's in global environmental policy from American University and a bachelor's in international

> agriculture and rural development from Cornell University. Elizabeth grew up on a dairy farm in Central New York and has a deep passion for both agriculture and the environment, making her uniquely well qualified for the position.

The land protection specialist is a joint staff position for both the Land Trust and Cornell Cooperative Extension of Yates County, established as the result of our expanded partnership



Land Protection Specialist Elizabeth Newbold

with CCE to protect the region's most productive farmland and at the same time educate farmers and local officials about options for conserving prime agricultural land.

Our congratulations and welcome to both Kelly and Elizabeth, and our very best wishes to Jan and Megan in their bright futures.

Each year, the Land Trust recognizes two individuals for their commitment to conservation at its Annual Meeting held each July.

This year's award for Conservationist of the Year was given to Carl Schwartz for his outstanding contributions to the long-term protection of the Finger Lakes region; and the award for Volunteer of the Year was given to Susanne Lorbeer for her generous and outstanding service to the Finger Lakes Land Trust.

2011 Conservationist of the Year: Carl Schwartz

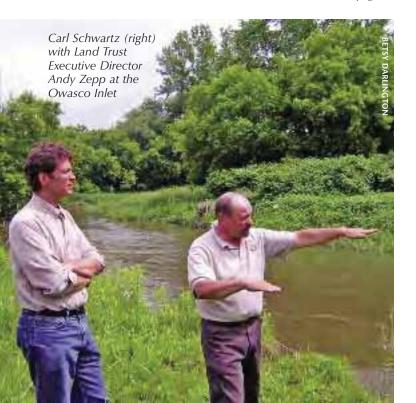
Carl Schwartz has been working in the New York field office of the U.S. Fish and Wildlife Service (USFWS) since 1988. In 1991, he was promoted to Branch Chief of the Partners for Fish and Wildlife Program, a program that works with private landowners and other partners to restore wetlands, streams, grassland and other habitats throughout New York to benefit fish and wildlife. Under Carl's leadership, the program has worked with hundreds of partners and about 700 landowners. More than 750 projects have contributed to the protection, enhancement and restoration of more than 20,200 acres of habitat and 60 river miles, supporting dozens of migratory and federally protected species.

Carl has a real passion for his work and will go the extra mile to help landowners plan projects and get them started on the ground. His experience working with landowners, government agencies, and organizations has built strong partnerships. He thoroughly understands the importance of combining funding, staff, and equipment in order to bring conservation efforts to fruition.

In partnership with the Land Trust, Carl has made many projects possible, including wetland restoration at the Owasco Flats, and the enhancement of both Nine Mile Creek in Onondaga County and the Cayuga Inlet just outside of Ithaca.

Anyone who knows Carl will tell you that he works round the clock, and that is no exaggeration! At the end of his long day with the USFWS, he goes home to his family — wife

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Susanne Lorbeer leading a group through Cornell Plantations

2011 Volunteer of the Year: Susanne Lorbeer

Susanne's love of the outdoors and the natural world goes back to her downstate childhood in White Plains. With encouragement from her mother and grandmother, she explored the fields, forests, streams, and ponds within walking distance from her home. Always fascinated by nature, she attended Audubon Society Summer Camps in the 1960s.

A Cornell summer school class brought her to Ithaca in 1963, and she never left. She met and married her husband of 47 years, Jim, and they live in the village of Lansing. Since her retirement from teaching elementary school in 2000, Susanne has become increasingly active with local groups including Cornell's Liberty Hyde Bailey Hortorium, Cornell Plantations, Finger Lakes Native Plant Society, and, of course, the Land Trust. She keeps a life list of plants and birds for the Finger Lakes, Cape Cod, and in Connecticut, near Old Lyme.

In the last year, the Land Trust has really been able to take advantage of Susanne's passion and expertise: the local flora of the Finger Lakes region.

The Land Trust keeps lists of species observed at our nature preserves, and over the years these lists have become long and somewhat difficult to use. Susanne stepped in last winter and offered to convert all of the species lists into a standardized and easily searchable format, also adding Latin names where they were lacking. Susanne, with some help from another volunteer, spent innumerable hours reorganizing and reformatting the lists so that they are now a more useful resource for the

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2011 Conservationist of the Year: Carl Schwartz

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Teresa, daughter Honor, and son Tanner — who together run a large dairy farm in Chenango County. Carl also contributes his time and energy as a volunteer on the Land Trust's Land Protection Committee, where his expertise is invaluable.

"We're delighted to recognize Carl's tremendous contribution to the conservation of our region's natural resources," says Land Trust Executive Director Andrew Zepp. "His strong land ethic is demonstrated both through his work with the Fish and Wildlife Service and on his family farm."

Note: Just before we went to press with this issue, Carl was honored with Trout Unlimited's national Trout Professional Conservation Award, in recognition of his work with private landowners to restore natural design to streams in New York.

2011 Volunteer of the Year: Susanne Lorbeer

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Land Trust, allowing easier tracking of species occurrences and changes at our preserves. In addition, Susanne came forward to help document floristic changes within a new deer exclosure constructed at the Sweedler Preserve.

"Susanne's contribution of time and talent over many months this past year, to make more than 30 species lists much more uniform and useable, was truly impressive and a great contribution to the Finger Lakes Land Trust - we appreciate her efforts and dedication very much!" said Director of Stewardship, Chris Olney. Susanne says she loves the volunteer work she does for the Land Trust and around the community because she likes "the opportunity to share what I have learned and care about, and to put it to some good use. Working cooperatively is fun and productive. I love being outdoors, and learning about all of nature, but about plants, especially."

We're pleased to present this award to Susanne for her dedication and commitment to the Land Trust and the natural areas of the Finger Lakes.

Our appreciation for gifts in honor of:

Callahan Family and summer on Owasco Lake

FROM John Marshall

James Engel FROM Amaris Elliot-Engel Pat and David Maule FROM Kelly Makosch

Tom Reimers FROM Cayuga Trails Club Mr. and Mrs. Harry Voss FROM Julie Odenbach

Keith Vanderhye and Limbwalker Tree Care, LLC in Trumansburg for donating his time and equipment to clear more than 130 downed trees along the hiking trail at the Kingsbury Woods Conservation Area.

Our deepest gratitude for thoughtful gifts in memory of:

James Baker

FROM
Crosswinds Wesleyan Church
Patrick Crowley
Howard and Joyce Keeney
Magnus Precision Manufacturing
Tom Shepherd

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FROM

Jane and Irving Bentsen Betsy and Dick Darlington

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Doug and Carol Brewer Fenton,
Betsy S. Brewer and Bill and Carol Brewer

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A CLOSER LOOK

Jumpin' Spiders!

A side from their characteristic ability to leap, jumping spiders' most remarkable feature is four highly sensitive sets of eyes, which allow them to see far better than all other terrestrial invertebrates. With such visual acuity, jumping spiders skillfully hunt their prey. The spiders' sharp color vision also comes into play as the males of some species use elaborate courtship dances to attract female glances.

Jumping spiders account for about 13 percent of all spider species, with some 5,000 known species, and some argue they represent the most diverse family (Salticidae) of modern spiders.

Jumping spiders can be found in tropical and temperate forests, scrub lands, deserts, intertidal zones, and mountains, with one species (*Euophrys omnisuperstes*) collected as high up as the slopes of Everest. Throughout the world, they build tent-like silken retreats under rocks or logs, on plants, and inside houses, where they hide at night, during hibernation, or on cloudy days.

Locally, at this time of year when the weather cools, one may find the silken hovels of common jumping spiders (*Phiddipus audax*) on goldenrod, windowsills, and inside mailboxes. These ¹/₄-to-¹/₂-inch spiders can commonly be seen taking up residence in window sashes, where they hunt for stray insects on sunny days. *Phiddipus audax* are identifiable by their solid bodies set on short legs, four sets of large eyes and the ability to jump. In other parts of the world, jumping spiders come in a dizzying variety of shapes and colors, with some species closely resembling and behaving like ants and even beetles. Males can be brilliantly colored in iridescent or metallic shades of purples, blues, reds, greens and yellows, and black, white, and brown.

Unlike grasshoppers, which have powerful hind leg muscles, jumping spiders are equipped with a hydraulic system that works by a rapid pressure change in their legs. Before they jump, these spiders drop their abdomens to the surface beneath them and tether themselves with a silk thread. In case they miss their mark, they are tied down like mountain climbers on ropes.

With four pairs of eyes, their principal eyes, called anterior median eyes, sit at the top, front and center of their bodies, face forward and have excellent resolution but a narrow field of vision; the three secondary pairs discern motion over a wider field. A jumping spider's principal eyes create a focused image on their retinas, which have up to four layers of receptor cells. Physiological and behavioral studies suggest that these spiders may have color vision that extends into the ultraviolet range.

Their acute vision combined with their ability to jump allows them to actively hunt during the day in a variety of ways. Some species have been described as cat-like when



they hunt, slowly stalking their prey before pouncing and delivering a venomous bite. Others have been observed ambushing their prey by stealthily moving to an advantageous spot before jumping on them. Though jumping spiders are primarily carnivores, some species also feed on nectar.

Their excellent eyesight also facilitates some unusual visual courtship displays (known for about 100 species) in which the males display their colored or iridescent body parts as they engage in a complex courtship dance that is specific to each species. Appealing to the visual acuity of the females is what drives these courtship displays. Recently, researchers have amplified and recorded vibrational, buzz-like signals used during courtship and competition with other males. After mating, females lay their eggs in their silken huts and will often guard their eggs and young until dispersal.

Researchers have found fossils of jumping spiders in amber that dates as far back as the Cenozoic era (54 to 42 million years ago), but some researchers suggest that the first salticids, or proto-jumping spiders, predate the breakup of Panagea (175 million years ago).

If you see a jumping spider up close, you may notice it turning to face you and even hopping towards you. But don't worry, they are generally harmless to people.

–Krishna Ramanujan

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Cornelius B. Murphy, Jr.
Richard Raines
Mark Stash
James Walsh
David Zorn

Staff:

Andrew Zepp, Executive Director Abbey Chernela, Office Manager David Diaz, Director of Land Protection Karen Edelstein, GIS Projects Manager Emily Eisman, Outreach and Membership Manager

Betsy Landre, Senior Field Representative Kelly Makosch, Director of Development Elizabeth Newbold, Land Protection Specialist

Chris Olney, Director of Stewardship Kris West, Senior Field Representative

Newsletter Editors:

Eben McLane Krishna Ramanujan

Newsletter Layout: Westhill Graphics, Inc.

Advisors:

Legal Counsel: Elizabeth Bixler; Randy Marcus; Miller Mayer, LLP; Peter Miller; Richard Ruswick; True, Walsh, & Schubert, LLP

Forestry Consultant: Michael DeMunn Stewardship Advisor: Betsy Darlington



Finger Lakes Land Trust

202 E. Court Street
Ithaca, New York 14850
Ph: 607-275-9487
Fax: 607-275-0037
email: info@fllt.org • www.fllt.org





Finger Lakes Land Trust 202 E. Court Street Ithaca, NY 14850

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Join us in Ithaca, Elmira or Geneva for a free screening of *Green Fire: Aldo Leopold and a Land Ethic for Our Time*. This documentary focuses on the life and philosophy of the legendary environmentalist Aldo Leopold. Aldo's son, Carl, was the founding president of the Land Trust and is featured in the film. All showings are free and open to the public. *For more information on the movie, visit www.greenfiremovie.com*

Wednesday, November 2, 7:00 PM, Green Fire screening in partnership with Museum of the Earth, 1259 Trumansburg Rd, Ithaca. This event will feature short remarks by representatives from the Land Trust and the Museum of the Earth, as well as comments from Lynn Leopold.

Thursday, November 3, 6:30 PM, *Green Fire* screening in partnership with Tanglewood Nature Center & Museum and Chemung River Friends. Event will be held at Tanglewood Nature Center, 443 Coleman Avenue, Elmira.

Wednesday, November 9, 7:00 PM, Green Fire screening in partnership with Finger Lakes Institute, 601 South Main Street, Geneva, NY.

See our web site for maps and photos of the preserves.

CONSERVATION BUYER WANTED

For 35-acre rural retreat located just outside of Ithaca in Town of Danby. Features mixed hardwoods and hemlock. Located on Olsefski Road (seasonal). To be sold subject to conservation easement.

Asking price is \$29,000. Contact Ed Finegan at 607-272-8213