

The Land Steward NEWSLETTER OF THE FINGER LAKES LAND TRUST

working to protect the natural integrity of the Finger Lakes region

Vol. 33, No. 2 • Spring 2021

Farmland Forever: 600 Acres Conserved in Canandaigua

In 2020, the American Farmland Trust released a report analyzing the impacts of development pressure on America's farmland. The report reveals that in New York State, 78% of farmland conversion results in low-density residential development which fragments farms piece-by-piece, and limits the long-term viability of nearby farms.

To protect our region's viable agricultural lands, the Land Trust works with the New York State Department of Agriculture and Markets (NYSDAM) to secure funding through their Farmland Protection Implementation Grant program (FPIG). In partnership with NYSDAM and the Town of Canandaigua, the Land Trust recently protected 606 acres at Kim-Mar Farms in the towns of Canandaigua and Hopewell, Ontario County, with a conservation easement. Kim-Mar Farms is located just off State Route 332, north of the city of Canandaigua. In recent years, residential development pressure has become intense in this area of Ontario County, given its proximity to the Rochester metropolitan area. The farm is owned and operated by Kim and Mark Stryker, first-generation farmers who produce corn, wheat, soybeans, hay, straw, and beef cattle—all of which are sold to local markets.

Kim and Mark bought their first 84

acres in 1991 and continue to purchase neighboring parcels to grow their operations. Almost 500 acres of their property's soils are classified as prime or soils of statewide significance. They are committed to best management practices and work with the Ontario County Soil & Water Conservation District to control erosion and stormwater runoff. These practices are important ecologically, as the farm drains into Beaver Creek and Padelford *continued on page 2* For more than 30 years, the Land Trust has been working "to conserve forever the lands and waters of the Finger Lakes region, ensuring scenic vistas, local foods, clean water, and wild places for everyone." As you can see in this issue of The Land Steward, our work continues.



hat is not highlighted is the collective effort of the Land Trust staff and board to ensure that our work truly benefits everyone in our region.

Our preserves are free and open to the public, but not everyone who wants to visit has the opportunity to do so, or will feel a sense of safety while there. How can we best ensure that our network of preserves is truly open for everyone?

There are stressed communities within our region that suffer from poverty and other major challenges. How can we best help these communities connect with nature?

Our work takes place on the traditional homeland

of the Haudenosaunee (Hodinöhsö:ni') who lived on these lands and waters long before their first contact with Western settlers. How can we partner more closely with the Haudenosaunee to achieve shared goals?

We are wrestling with these and many related questions right now. We have embarked on a journey of discovery – a journey that promises to strengthen the Land Trust and allow us to better meet the diverse needs of our region.

Andrew Zepp, Executive Director



Farmland Forever: 600 Acres Conserved in Canandaigua

continued from cover

Brook, tributaries of the Canandaigua Outlet.

The Stryker easement provides for a forested buffer and "Resource Protection Area" to protect Padelford Brook. The Town of Canandaigua created the "Padelford Brook Greenway," an area designated for conservation in the town's Padelford Brook Greenway Plan. The Greenway contains a significant portion of prime farmland as well as wetland and riparian areas worthy of protection.

"We would like to thank all of those involved in this project for their foresight and commitment to preserving our great natural resources, farmland, and water quality," the Stryker family stated. "With the help of NYSDAM, Ontario County, the leadership of the towns of Canandaigua and Hopewell, and the Finger Lakes Land Trust, this project has come to fruition."

"The commitment of the Stryker family to protecting their farm is outstanding," said Elizabeth Newbold, Project Manager for the Land Trust. "They first started the process with the town nearly 10 years ago, showing their long-term dedication to preserving their land. This project protects not only a beautiful farm, but also an important water resource and development buffer for the town, and the history and legacy of the family's stewardship of that land."

This is the fifth project done in partnership with the NYSDAM, the Town of Canandaigua, and the Land Trust. Recent projects include the protection of Catalpa Farm and Brock Acres, both large-scale crop farms located two miles away,

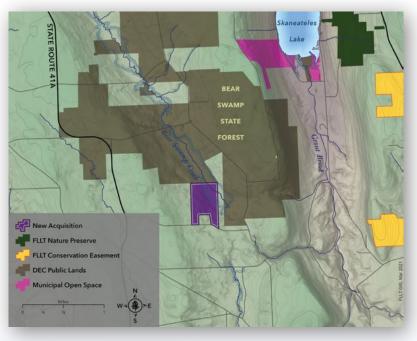
By protecting farms with conservation easements, the Land Trust can ensure long-term agricultural viability. The organization has protected over 4,000 acres of farmland, helping to sustain the Finger Lakes agricultural community for generations to come.

Land Acquisition A Win for Skaneateles Lake

The Land Trust recently acquired 102 acres nestled among the rolling hills of southern Cayuga County in Sempronius. The property is bordered to the north by Bear Swamp State Forest and contains 2,275 feet of frontage on Bear Swamp Creek, a critical tributary to Skaneateles Lake. The property also contains 26 acres of wetlands, many springs and streams, mature forest, and a well-maintained trail system.

The Land Trust purchased the property from Brenda (Bean) Contento, who spent her childhood farming, hunting, and foraging on the land with her family. "We picked every kind of berry imaginable to eat or freeze for pies," Brenda said. "Neighbors stopped by sometimes to play cards and have a slice of my mom's famous pie."

The family also spent time exploring the forests and wetlands on the property, and Brenda remembers waking up early in the mornings, packing a snack, and leaving a note for her



parents as she went out alone to the swamp. She seems to have memories of every corner of the property and describes herself as being "both sad and thrilled" to have sold the land and to know that it will continue to be protected.

Conserving the property will help protect Skaneateles Lake—the source of drinking water for the city of Syracuse. Ongoing efforts by the Land Trust focus on securing hillsides in this area, known as the Skaneateles Highlands, especially those adjacent to Bear Swamp State Forest.

The organization intends to transfer the property to the state in the future as an addition to Bear Swamp State Forest. The forest is part of an Audubondesignated Important Bird Area, hosts a popular network of recreational trails, and features extensive wetlands and rare flora.

"Bear Swamp is one of the most pristine wetlands remaining in our region," said Finger Lakes Land Trust Executive Director Andrew Zepp. "Acquisition of this land

is a win for wildlife, water quality, and outdoor recreation."

This is the Land Trust's seventh conservation project on Bear Swamp Creek, where it has protected 4.5 miles of streambank. Other protected lands in the area include Carpenter Falls State Unique Area, the Land Trust's Bahar Nature Preserve, and three privately owned properties that have entered into conservation easement agreements with the Land Trust.

Six Mile Creek Watershed Projects Help Protect Ithaca's Drinking Water Supply

March, the Land Trust accepted the generous donation of a 170-acre conservation easement from longtime members and supporters Charles and Jane Walcott. Avid conservationists, the Walcotts wanted to protect the land they love, located in Dryden, Tompkins County, in perpetuity.

The property is wholly located in the Six Mile Creek watershed, the municipal water supply for the city of Ithaca. Situated off of Besemer Hill Road, high above the Six Mile Creek valley, the largely wooded property includes part of Cooks Corner Gully, a Tompkins County Unique Area, and several intermittent streams that drain to the creek. While portions of the property are maintained as brushlands and meadows to provide habitat for a variety of birds and other wildlife, nearly 85% of the property will remain forested forever.

The role forests play in protecting water quality cannot be overstated, especially on this property which is entirely underlain by erodible soils. Complex associations between roots and fungi hold soil in place and cycle nutrients and water back into the living system. Above ground, leaf litter, branches, and fallen logs (what ecologists like to call "coarse woody debris") absorb and slow the flow of water across the land, allowing it to soak into the ground. This moderates the impact of both heavy rains and prolonged dry spells. Trees cast shade over streams, cooling the water which results in higher oxygen concentrations and a corresponding increase in the abundance and diversity of aquatic life.

Protecting the Walcott property with a conservation easement will also prevent their land from being subdivided and developed into smaller housing lots. More importantly, it maintains more than 140 acres of forest which will continue to live, grow, thrive, and ultimately, protect the drinking water that flows to nearly every tap in the city of Ithaca.

The project was supported by a generous grant from the City of Ithaca's Six Mile Creek Watershed Protection Fund. "This donation is a welcome and important addition to other efforts of the Finger Lakes Land Trust to protect the Six Mile Creek watershed," said Ithaca City Mayor Svante Myrick. "My sincere thanks to the Walcotts and the FLLT for their visionary generosity and work in keeping the source of the city of Ithaca's drinking water safe and clean."

The Land Trust gratefully acknowledges attorney Christopher K. Werner of Bolan Code for providing pro bono services in support of this project. "This project is the Land Trust's 20th conservation easement within the Six Mile Creek watershed and the state's funding will build upon other conservation investments made by the Land Trust, the City of Ithaca, and Tompkins County."

January, the Land Trust protected 13 acres in Dryden, Tompkins County, with a conservation easement using grant funds from the New York State Water Quality Improvement Project (WQIP) program, administered by the Department of Environmental Conservation (DEC). This project is part of the Land Trust's broader Six Mile Creek Conservation Partnership Project.

The property is owned by Ithaca resident Lenore Boris who was initially uncertain if her property's size would be of interest to the Land Trust. However, size is only one factor the organization considers when assessing projects. Sometimes, a property's location relative to other protected lands plays a large role in elevating seemingly small projects. When the state announced land conservation projects as eligible under the WQIP program, Lenore's property was a perfect match.

Though modest in size, from a conservation perspective the Boris property is mighty! This narrow strip of land, with frontage on Slaterville Road, also has more than 1,000 feet of frontage on both banks of Six Mile Creek, a wide gravel bar, and part of a floodplain forest. Short, but steep wooded slopes prevent soil from washing into the creek. The property is also immediately adjacent to and upstream of two other private properties protected with Land Trust conservation easements.

The conservation easement will limit development of the property while protecting the creek corridor, floodplain

San Augur

forest, and sensitive slopes above the creek. Additionally, the Land Trust will continue to partner with Lenore and the Tompkins County Soil and Water Conservation District to rehabilitate and restore vegetation on the creek's south bank to further safeguard water quality.

As part of New York State's Environmental Protection Fund, the WQIP supports projects to improve water quality, reduce the potential for harmful algal blooms (HABs), and protect drinking water across the state. DEC has announced more than \$37 million in grants that are helping partners support 37 WQIP land acquisition projects to date.

"We are grateful for the state's commitment to this project through the WQIP Program," says Finger Lakes Land Trust Executive Director Andrew Zepp. "This project is the Land Trust's 20th conservation easement within the Six Mile Creek watershed and the state's funding will build upon other conservation investments made by the Land Trust, the City of Ithaca, and Tompkins County."

The Land Trust gratefully acknowledges attorney Peter Miller for providing pro bono legal services in support of this project.

Land Acquisition Adds to Conservation Lands at Connecticut Hill

Spanning over 11,000 acres across Schuyler and Tompkins counties lies Connecticut Hill Wildlife Management Area, one of the largest contiguous high elevation forests in the region. A rugged landscape that is home to black bear and notable bird species such as the Northern Goshawk, Connecticut Hill is also the largest wildlife management area in New York State.

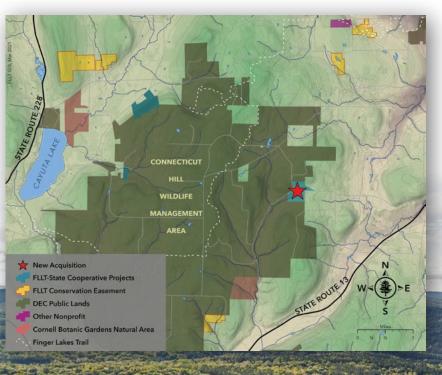
January, the Land Trust purchased 66 acres directly adjacent to Connecticut Hill in Newfield, Tompkins County, from Walter Cogswell of Schenectady, NY. After fleeing Germany during World War I, Walt's grandfather settled in Newfield and bought the land with a business partner in 1921. He raised Walt's mother and her three siblings on the property in a plank house during the Great Depression. "She often told of hanging pictures of steaks on the kitchen walls so they could imagine that the potatoes and sauerkraut they ate for most meals was, in fact, meat," Walt shared.

Walt grew up on the property, too. "I spent many days of my childhood exploring the property, helping split firewood, jumping from the haymow, picking beetles off the potato conserved. "It's been my fervent hope that the land would remain undeveloped, so I was extremely pleased to happen upon the opportunity to have the Finger Lakes Land Trust take possession of it," he said.

The property features a mix of fields, forests, wetlands, and more than 4,000 feet of road frontage. The Land Trust intends to transfer the land to the state as an addition to Connecticut Hill when funds become available.

Connecticut Hill is a key component of the Emerald Necklace, an emerging greenbelt that will ultimately link 50,000 acres of existing conservation land in an arc around Ithaca, from the Finger Lakes National Forest in the west to the Hammond Hill State Forest in the east. The Emerald Necklace is recognized as a priority project within New

plants, and drawing pails of water from the dug well for use in the house and garden," Walt writes. Although he intended to build a home on the land after he purchased it from his mother in 1983, his life took him to the Hudson Valley, where he and his family still live. Since the property was in his family for 100 years, Walt wanted to make sure the land was



York State's Open Space Plan and is a conservation priority for the Land Trust.

With its road frontage and easily accessible recreational opportunities, this property would have been an attractive prospect for residential development. Thanks to Walt, and his connection to this land, it is now conserved forever. -Alli Sribarra

Join Us for the June 2021 **Bioblitz!**

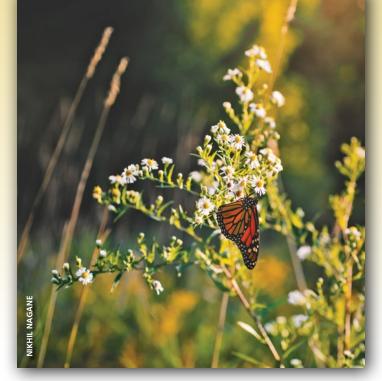
Mark your calendars for our 1st official Bioblitz, this June 11th to June 13th! This event is free and open to all. Participants will visit Land Trust preserves, discover and document living things, then submit their observations via the online platform iNaturalist.

Learn how to Bioblitz on Tuesday, May 25th at 7:30 p.m.

Download the iNaturalist app to your mobile device and register as a user, or just register at inaturalist.org. Then, join us online for a presentation by member and volunteer Mark Chao who will teach you how to use iNaturalist to become a citizen scientist. Register in advance at fllt.org/events.

(Optional) From your iNaturalist mobile app or desktop browser, search "Projects" for "Finger Lakes Land Trust June 2021 Bioblitz" and join the project. This will enable you to find the project easily in your own list of joined projects, and also enable organizers to contact you conveniently. Even if you do not join the project, all observations from eligible sites during the time period will be included in the bioblitz tally.

2 Participate in the Bioblitz, June 11th-13th Visit FLLT nature preserves from **June 11 through June** 13, 2021. Visit fllt.org/map for a list of eligible sites, and choose a time and location that fits your schedule. Please stay on marked trails at all times and follow social distancing protocols. Take photographs or sound recordings of the flora and fauna you find, then upload your media to iNaturalist, noting the location and date. Click "What did you see?" and select from among the options that iNaturalist suggests or enter your own identification.



) Discover what we found on Tuesday, **J** June 29th at 7:30 p.m.

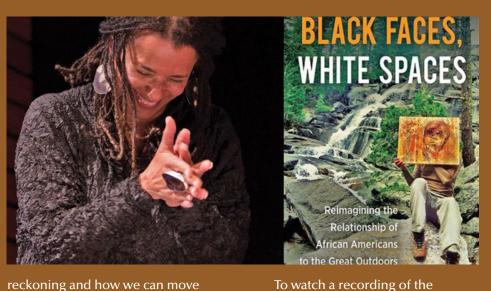
Regroup online with Mark Chao and other expert naturalists to review observations and receive help with identification. Register at fllt.org/events.

Bioblitz is free to participate but donations are welcomed. General donations may be made, or please let the Land Trust know if you would like to make a pledge of any amount per species by contacting us at info@fllt.org or (607) 275-9487. We will keep a tally of the total species count and announce results at the June 29 Recap Event. Gifts can be made online at fllt.org/give. Please click the box that says "This gift is in honor or memory of someone" and type in: June 2021 Bioblitz.

More details about June 2021 Bioblitz can be found at fllt.org/bioblitz2021.

Program Highlights

February 25, the Land Trust co-sponsored an online lecture by Dr. Carolyn Finney titled "2020 Vision: a Black Walden Pond and Other Musings," in partnership with Cornell Botanic Gardens, Ithaca Children's Garden, U.S. Fish & Wildlife Service, and The Learning Farm. With over 1,000 people in attendance, Dr. Finney, author of "Black Faces, White Spaces," shared her work on the intersectionality of race, power, and the environment. Drawing from her book and life experiences, Dr. Finney explained the historical nuances that have led us to this point of racial



reckoning and how we can move forward together to ensure equitable green spaces for all.

SPRING 2021 • 7

lecture, please visit the Land Trust's

web site at fllt.org/news.

Remembering Percy Browning

All of us at the Finger Lakes Land Trust wish to pay tribute to Percy Browning, longtime Finger Lakes Land Trust board member, and dear friend.

Percy was a tremendous woman—a singer and actress, advocate for the arts, dog-lover, world traveler, and an extraordinarily generous supporter of the causes she believed in. She cared about water and land conservation very deeply.

In addition to her role chairing the Finger Lakes Land Trust's first regional capital campaign and her terms on the board, Percy donated two important parcels of land. These gifts of land expanded both the Lindsay-Parsons Biodiversity Preserve and the Stevenson Forest Preserve. She loved to look at the region, and all that the Land Trust was working to preserve, on a map!

We adored Percy and will so miss her mischievous smile, savvy advice, and strong leadership.



Our Forever Work

Our Forever Home

Anonymous Donation Supports Stewardship Efforts

With each new nature preserve or conservation easement, the Land Trust takes on additional responsibilities in perpetuity.

hanks to the recent donation of \$500,000 by an anonymous donor, the organization is making progress toward ensuring sufficient stewardship funds for the ongoing care of the lands we protect.

This latest gift will be added to the Darlington Stewardship Fund, established in 2017 in honor of Land Trust founder and longtime volunteer Betsy Darlington of Ithaca. Each year, the organization draws a modest amount from this fund to cover its stewardship operations while managing the fund so that its principal is protected against inflation and sustained over time. For additional information about the Darlington Fund, please contact Senior Director Kelly Makosch at (607) 275-9487 or kellymakosch@filt.org. Your gift will help us protect the lands and waters of the Finger Lakes region, the special places we call home.

Planned gifts come in many forms and can help you live your values. Learn more at *fllt.org/planned-giving* or call (607) 275-9487.

SCOTT LEV

thank you

While 2020 most certainly presented its challenges, members like you made it possible for the FLLT to continue its critical work of protecting the beauty and integrity of the Finger Lakes. Thanks to you, we surpassed the major milestone of over 25,000 acres conserved forever, and we look forward to working together to accomplish even more in 2021.

We are very grateful for gifts of all sizes and use them wisely to protect land and water across the region. In particular, we wish to acknowledge everyone who generously gave \$100 or more in 2020.* Please accept our heartfelt thanks!

Land and Conservation Easement Donors Cheryl Prince Brotherton • Anatol and Carolyn Eberhard • Estate of Cliff DeMayo \$250,000+ Anonymous (2) • Estate of Thomas R. Ruttledge \$100,000+ Anonymous (3) • David and Amy Allyn • Joshua J. Allyn Fund at the Community Foundation of Collier County • Ann Hinchcliff • New York State Department of Environmental Conservation • US Fish and Wildlife Service \$20,000-99,999 Anonymous (2) • Percy Edwards Browning Foundation • Chris Dennis Environment Foundation, Inc. • Burch and Louise Craig • William Eggers and Deborah McLean • Marty and Cathy Gardner • J.M. McDonald Foundation, Inc. • Park Foundation, Inc. • Pooley Family Charitable Fund • Meg and Glenn Reed • Estate of Tom Reimers • Thomas Snow and Karen Meriwether • Stanley Metcalf Foundation • Tompkins County \$10,000-19,999 Anonymous (4) • Allie and Mark Allyn • Lenore Boris Nancy Briggs
Scott Conking and Tom Wall
Mac and Rochelle Cummings • D.E. French Foundation • Edward and Verna Gerbic Family Foundation • Craig Froelich • Phillip Gioia • Elizabeth P. Gordon • Holland and Patience Gregg • New York's Environmental Protection Fund and the NYS Conservation Partnership Program, as administered by the Land Trust Alliance • The Hannah Fund • Chuck Tauck and Frances Littin • Dorothy W. Rinaldo • David Lee and Marjory Rinaldo-Lee • Robert F. Schumann Foundation • Jason A. Sokoloff • Fred and Susan Van Sickle • Walbridge Family Foundation • Bill and Jennifer Warning • Thomas Kather and Penelope Wickham • YourCause • Marty Taylor and Josie Yunis \$5000-9999 Anonymous (1) • John Alexander • The Lew and Dawn Allyn Family Fund at the Community Foundation of Collier County • Tom Babcock • Betty A. Lewis University Environmental Charitable Trust • John and Louisa Cohlan • Dwight W. Winkelman Foundation • Martha Ferger • Mark Gould • Doug and Kip Hargrave • John and Robin M. Hinchcliff • Dan Karig and Joane Molenock • Jim and Sara Kersting • Keuka Properties/Yunis Realty • Lynn Leopold • May Lum and Steve White • Hadley Lundback • Melvin and Mildred Eggers Family Charitable Foundation • Linne Mooney • Gerald Morsello and Elaine Rees • Sean and Laura O'Keefe • Stephen and Linda Pope Chris Proulx and Varya Siegel
Charles and Nancy Scholes
Elsa Allyn Soderberg Family Fund at the Central New York Community Foundation • The Cayuga Foundation • Amy Yunis \$1000-4999 Anonymous (3) • John and Marilyn Abbott • Barry Adams • Lee and Yolanda Adrean • Ben Alt • Cort Anastasio • Andrew Clark and Barbara Anderson • Roland and Tacie Anderson • Julia Anello • The Arthur Vining Davis Foundations • Ben Arthur • Harry Ash and Rebecca Clark • Neil and Maggie Atkins • Elizabeth A. August • Marilyn N. Baader • Dawn Bahar-Goellner • Irv Beimler and Georgia Stormes • Eric Gay • Paul Feeny and Mary Berens • Mary M. Berk • Big Tree Woodworks, Inc. • Paul Black • Dave and Joanna Bock • Brendan and Mary Brady • The Honorable Phillip Bredesen and Ms. Andrea Conte • Marjory Brooks • Gordon Brott • Douglas Brush • Larry and Laura Buffam • Tom Butler • Richard Buttny • James and Terry Byrnes • Catherine Caneau • Ted and Susan Carman • Roger and Diane Cass • Cayuga Community College Foundation • Mark Chao and Miyoko Chu • Thomas Bersani and Joan Christy • Charles and Nancy Cladel • Joseph and Katherine Compagni • Ed and Paula Conan • John and Karen Confer • Cornell University • Corning Incorporated Foundation • John Coughlin • Douglas Cramer • Tim and Margie Creamer • Bobby and Susan Creed • Bruce and Leslie Cutler • Patrick and Jess Danial • Betsy and Dick Darlington • Peter Davies and Linda DeNoyer • Tom and Patty Davis • Barb Neal and Sarah Davis • Sid and Suzanne Devorsetz • Bob and Terry Dewitt • Blake and Tanya Dillon Justin DiMatteo
Gary and Linda Dower
Jeff and Jane Doyle
Clover M. Drinkwater • Ed and Robin Dubovi • David Duggan and Lynn Cleary • Robert Mains and Amy Durland • Earthshare of New York • Anatol and Carolyn Eberhard • Brad Edmondson and Tania Werbizky • The Tom and Maria Eisner Finger Lakes Land Trust Endowment Fund • Anna and Theodore Endreny • Herb and Connie Engman • Estate of Dalva E. Hedlund • Kevin and Catherine Fager • Rick and Nicky Falck • Mark G. Falcone • Sherman and Anne Farnham • Jack Booker and Cornelia Farnum • David Fernandez and Elizabeth Lawson • Edward Finegan • Finger Lakes Visitors Connection • Dan Fisher and Lori Ruhlman • John and Molly Fitzpatrick • James Flaws and Marcia Weber • Frederik Kaufman and Donna Fleming • Gary Fleming • David Foster and Kathleen Jacques • Mr. John Fox • James and Ellen Fralick • Ron and Rose Ann Gay • Anna Marie and Carl Gerst • Gregory Gibian • Lawrence Glickman • Bradley and Mary Grainger • Steve Green • Phil Greenberg • Greenville Center LLC • Gretchen's Confections LLC • Lorraine J. Gudas • Barbara R. Hamlin •

Tim Hamlin • Chase Hannon • Hansen Family Foundation, Inc. • Happy Earth Tea • Maureen Hier • L. Bruce Higgins • Emily Hinchcliff Warning Drake • Kacy Hinchcliff Warning Witmer • Michael Hoar • Roald and Eva Hoffmann • Roger and Ruth Hopkins • Robert Horn, Jr. and Joan Horn • Jamie R. and Maisie Houghton • Martha Hueter • Isabel Hull • IBM Corporation • Mark Jauquet and Mickie Sanders-Jauquet • Joseph F. Karpinski, Sr. Foundation • Michael and Debbie Kamarck • Kevin and Leann Kanda • Peter and Peggy Kane • Rosalind Kenworthy • David and Sherill Ketchum • Elizabeth Kirchner • Nancy Kleinrock Bill and Carol Klepack
Carl W. Kohls
Chip Block and Leanna Landsmann • James Lassoie and Ruth Sherman • Paul and Kathleen Leone • Lloyd Lill • Howard and Harriet London • Jennifer Loucks • M&T Charitable Foundation • Joanie Mackowski • Daniel and Kirsten Mahar • Robert and Emily Marchenese Peter and Beth Marks
John and Candace Marsellus
David and Linda Marsh John Marshall and Cindy Callahan
Ed Marx and Sherry Nichols
Rick Marx and Alan Grethel • David and Patricia Maule • Douglas and Nancy McDowell • Douglas and Barbara McIlroy • John P. and Elizabeth Y. McKinnell • Thomas Middleton • James and Julie Moore • David Muir • Robert and Sally Neumann Richard and Alexandra Nicklas • Bernd Blossey and Victoria Nuzzo • Deborah O'Connor and Peter Lepage • William Olbricht • John Osborne • Mary Ann Oyer • Mike Ward and Paula Peter • Dr. Plocharczyk and Mr. Callander • Sue Poelvoorde and Don Murray • Montgomery Pooley, III • Lloyd Powell • Bard and Gina Prentiss • Donald and Alice Pulver • Chase Raines • Laurel S. Raines and William Vitek • Andrew and Nancy Ramage • Dennis and Elizabeth Regan • REI Rochester • Dave and Brenda Rickey • Nancy Robbins • Buzz and Gretchen Roberts • Jean and Betty Rowley • David and Susan Ruppert • Greg and Betsy Russell • Perry Dimmick and Lindsay D. Ruth • Linda and Larry Sampson • Nancy Sands • Jeff Saracco • Wade and Joscelyne Sarkis • Stevan and Mary Sayre • Gretchen R. Schauss • Kris Scholl and Brooke Oropallo Stuart and Lucy Schweizer
Sigi Schwinge
Donna Scott
Stephanie A. Sechler • Douglas and Darcy Sedgwick • Myra Shulman and James Morin • John and Bonnie Sirianni • Robert Stathis • Kyra Stephanoff • Alan and Sandy Stone • Nick Salvatore and Ann Sullivan • Douglas B. Sutherland and Nancy Kramer • Jan and Susan Suwinski • Charles and Kristin Swain • Robert Dobbs and Marie Terlizzi • James Terwilliger and Ellen Coyne • The Hovey Foundation • The Kurt and Sarah Fischer Family Foundation • Bruce and Katie Thompson • Ed and Liz Thorndike • Kevin and Sharon Todd • Paul and Glenda Torrence • Charles and Nancy Trautmann • Al and Karen Tricomi • George D. Van Arsdale and Elizabeth Osta • Velmex, Inc. • John and Jean Vincent • Vitreus Foundation • Mark Voigt • Judy and Erik von Bucher Advised Fund at the Rochester Area Community Foundation • Peggy Walbridge • James and Diane Walsh • Jane Walsh • Ann Ward • John Wasileski • Wendell Weeks and Kim Frock • David A. Weinstein and Christina Stark • Patty Weisse and George Thomas • Gillett and Paddy Welles • Jo Werner • Jim and Kris West • Peter White and Mary Socci Nick Whitmer
Donald D. Wilson
Christopher Wirth
Bruce Wood
Mark and Karen Wood • Linda Woodard • Stephen and Janet Wyckoff • Stephen and Amy Yale-Loehr • Paul Yde and Sarah Elder • Sheila Yoensky • Marianne and J.D. Young • Andrew and Rocio Zepp \$500-999 Anonymous (2) • Diane Ackerman • Scott Andrus • Ellen B. Avril • Donald and Roberta Ayling • William and Patricia Ayling • Donald E. Babcock • Richard and Anne Barrett • Grace Bates • Gabriel A. and Wendy P. Battisti, III • John and Diana Bome • Wayne and Denise Borgeest • Robert Brashear and Jan Pople • Jane H. Bronson • David J. and Margaret M. Burns • Buttonwood Grove Winery • Jay and Julie Carter • Edith Cassel • David and Linda Caughey • Brian Chabot and Kathleen Rasmussen • Jim Chamberlain and Karen Dyson • Michael Charnoky • Chemung Canal Trust Company • Jeff Collins • Ann Costello • Edwin A. Cowen Gregory Craig • Jonathan Culler • William and Barbara Dean • Margaret Dieter • Dig Studio • Jane Dunham • Forrest and Sara Earl • Samuel E. Eber • Barbara Egtvedt • Lisa Eisenberg • Michael and Harriet Eisman • Mark Fairchild and Lisa Reniff • Steven Ford and Patricia Lynn-Ford • Scott Forsyth • Rick and Dee Foster • Lindsay France Simanis and Erik Simanis • Karen Gilovich • Laurie Goldsmith-Heitner and Saul Heitner • Wayne S. Gottlieb and Susan Suarez Michael Gow • David Graham and Joan Thomsen • Jane E. Graves • Randy and Meg Green • Charlotte Greenspan • Gregg Family Charitable Fund • Mark Hartsuyker • Jim and Betta Hedlund • Frank and Jeannie Henderson • continued on page 10

donors continued from page 9

Joseph and Mary Ellen Hennigan • Abby, Emily, and Kate Hinchcliff • Eric Hobday • Homer Garden Club • Ted and Joan Hullar • Indian Creek Farm • Inflection Point Agency • Bruce Johnson • Karen Kamfjord • Kip and Sally Keller • Bruce and Linda Kenan • Clark S. Kinlin • Connie Kintner • Bruce and Jen Klein • Gary Kochersberger • James and Kimball Kraus • Judy Krieger • Daniel and Jamie Lane • Laura W. Lee • Neesa Levine • Martha Armstrong and Lois Levitan • Ann C. and Carol A. Livingston • Norman and Laura Loomis • Alan and Elizabeth Lupton • Paul Houston and Barbara Lynch • Jean Mackin • Kenny and Kelly Makosch • Mark Malys • Peter McCracken and Jennifer Germann • Amy McCune • Mary Ellen McDonald • Bob McGuire and Judy Keil • Paul and Jennifer McKinnell • Bruce and Eleanor McLear • Peter Merrill and Mariana Kastrinakis • Miller Mayer, LLP • Nina Miller • James Miller • Todd Miner and Mary Elizabeth Iandoli • Ralph and Sarah Miozzi • Laurel Moranz and John MacAllister • Martin Muehe • Valerie Newell • Mary Beth Norton • Barbara Page • Paper Alternative Solutions, Inc. • Joel and Debra Pasternack • Edward Pearsall • Robert Pierce and Rita Izzo • William A. Plummer • Shawn Porter • Anne Posel • The Rae Family • Lisa Rainey • Red Newt Racing LLC • Beverly Anne Reed • John and Judith Reppy • Robert E. Hansen Family Foundation • Robert J. and Elizabeth A. Symon Family Foundation • Mike Russell • Lawrence Sampson • Kenneth Schmitt and Dorothy Rizzo • Schottland Chosen Spot LLC • John Schroeder • Robert Seem • Sam and Carol Shama • Gregory and Amanda Slisz • Dennis Stein • John Parker and Tracy Stokol • David and Martha Swift • Irene Szabo • T.G. Miller P.C. • The Midvale Foundation • Genevieve Thompson Joan E. Thornton, M.D.
James and Deborah Tifft
Jeff Tonole
Tony and Mary Tripeny • Mary Jane Uttech • Robert VanBrunt • Judy Varney • Charles and Jane Walcott • Cory Ward • Christopher and Beverly Way • Elizabeth G. Weisse • Carol Weldon • David and Heather Wheat • Paula White • Marian Payson and Helen P. Wiley • Scott Wilkerson • Linda Williams • Mark and Alicia Wittink • Michael Yates • Jeffrey and Catherine Youle • Bill and Valerie Yust • Francesca Zaccheo \$250-499 Anonymous (4) • Ferris Akel, III • Marc Album • Richard Allen and Anke Wessels • Britta Anderson • Chip and Wendy Aquadro • Robert Arleo • Alan W. Avery, Jr. • Gloria Baciewicz • Jane Bain • Kevin Bain and Margie O'Jea • Bill Banaszewski and Michele Howland • Aaron and Angela Barbaro • Don Barber and Rita Rosenberg-Barber • Frederick Barken • J. Robert Barlow • Stephen and Patricia Barresi • Ernie and Carol Bayles • Rodney Bent • Gary and Fran Bergstrom • Deborah E. Bilinski • Billsboro Winery • Boeing Company Matching Gifts c/o Cybergrants • Greg Bostwick and Julia Bonney David Breit and Maria Aslani-Breit • Michael Brennen • Anthony and Janice Bretscher • Richard S. Briggs • Paul and Maggie Bringewatt • John and Marcia Browning • Louise Buck • Edward and Louise Bush • Peter Buttrill • William and Ruth Cahn • William and Mary Christine Carpenter • Scott and Mary Case • Tom and Lisa Cavataio • Cayuga Landscape Co. • Johanna Chao • Wayne and Mary Chauncey • Hugh and Barbara Chenoweth • Debra Christein • Christian Clough Robert Cockram • Melissa Cohen • Christine Collins • David and Olivia Cornell • Barbara Cote • Hank and Betsy Dalrymple • Douglas P. Daniels • Beth and Matthew Dann • Jean Darlington and Eduardo Marchena • Brad DeFrees • James DeKay • Bill and Sarah Demo • Mateo Diz • Alan Dolmatch • Nancy and Rick Dorschel • Karin Driscoll • Michele V. Dryer • Michael and Linda Duttweiler • Linda Eberly • William Ellison • Russell and Frances Elwell • Stephen and Natalia Emlen • Chris and Elaine Engst • Alan and Lynnette Eusden • David Evelyn and Jennifer Weinraub • Tracy Farrell and Ronald Chapman • Bill and Nancy Feinstein • Finger Lakes Fire & Casualty Co. at the recommendation of Frank and Polly Garrison • Thomas and Elizabeth Fisher-York • Emily Flagg • Paul and Carrie Floreck • Duncan and Jane Frame • William and Barbara Fry • D. Mark and Judith Fultz • Robert and Louise Ganley • Kenneth Gardner • Kevin and Holly Geary • David and Sharon Gerber • Alvin Schuster and Gladys Gifford • William and Kimberly Gilberti • Karen Gorgonzola • John and Melanie Gorman • Graph-Tex, Inc. • Joe and Marie Grasso • Vickie Greenhouse • Peter and Pat Gregoire • John and Kim Haines-Eitzen • Jason Hall • Dan and Cassie Halton • Douglas and Pamela Hamlin • George and Mary Hamlin • John Oakley and Margaret M. Hammond • Mary and Robert Hanno • David and Anne Hargrave • Mary S. Harris • Richard and Linda Hawks, Jr. • Sue Hemsath • Stuart Heppell • Steve and Mary Hershey • Carman and Sandra Brink Hill Fund at the Community Foundation of Tompkins County • David Holmberg and Kathryn March • Richard D. Hubbell • Margot Hughes • Lyle Hunger • Christopher Husson • Tom Divers and Nita Irby • Ithaca Cayuga Optical Service •

Carolyn Jacobs • Christopher and Melissa Jacobs • David Jacobs • Georg and Lucia Jander • Johnson & Johnson Family of Companies Matching Gifts Program • David Jones • Jeff Katris • Barbara Keeton • Patricia Kehe • Paul Keller • Bruce and Anne Kennedy • John King • Peter Kirchner • Dr. Martin Kleinman • Kurt Jirka and Barbara Á. Knuth • Rick and Mary Jane Kornbau • Raymond and Donna Kurlak • Dan and Grace Labeille • Lakeland Rovers • Lakewood Vineyards • Peter and Betsy Landre • Dale Larnder • Craig and Susan Larson • Helen Launt Donald and Deborah Lauper
Douglass Lee
James LeGro
Donald and Janet Lein • Anne and Ray Leinen • Gene Likens • Norman and Susan Lindenmuth • Teresa Long • Susanne T. Lorbeer • Dr. C. Vivian Lorenzo and Mr. Marek Przezdziecki • Ann Lugbill • Lee and Staffan Lundback • Clifford Macbroom • Gary Mallow • Michael Mancini • Justin Marchuska • Mary Knepper and Susan Mark • Patchen Markell • Marks Engineering, PC • David and Kay Marshall • Marvin and Annette Lee Foundation, Inc. • Rick and Kate Massie • Marilou Masters • James Maxwell • Bill and Shirley McAneny • William McCleary and Maxine Long • Kevin McCormick and Catherine Cantwell Barbara McCutcheon
Andrew McDonald
James McGarry
Joe McMahon and Gail Steinhart • Keith Mercovich • Alan Midura and Spring Buck • Barbara Miller Fox • Andrew D. and Allison Miller • James R. Miller and Chrissie Schelhas Miller • Jonathan Miller and Rebecca Nelson • Mary Miller and Gordon Sheret • Michael Miller • James Minor • Barbara Mitchell • Bill and Kathanne Mitchell • Kelly Nagle • Cory Steckler and Elizabeth Newbold • Beth Newell • Jason and Kristina Nickerson • Frank Nicklaus • Usdansky-Niebuhr Charitable Fund • John Norris • Dan and Jo-Ann O'Brien • Annette Otis and Dan Gastin • Dennis and Justine Page • Larry Palmieri • Dr. and Mrs. Frederick Parker • Taylor Peck • David Plante • Karl Pospesel • Okke and Kathy Postma • Donna Raines and Bruce Clemens . Joan Ramage-Macdonald and Leo Macdonald . Patrick and Anne Reilly • Anonymous • Dennis Riley • Steven W. Rockey • Amy Rolleri and Ronald Butchart • Linda Rossi • David G. Rossiter • Dylan Kuckes and Jeffra Ruesink • Rebecca Ruggles • Joan Ryan • Ronald and Suzanne Rybak • Benjamin Sachs • Lisa Saether • Noreen B. Salerno • Laurent and Cathy Saloff-Coste • Catherine Sankey • Savannah Consulting • Tom and Martha Schwartz • Leslie and Bonnie Schweizer • Emma Lou Sheikh • Brett Shelton • Christopher and Theresa Shortz • Carol U. Sisler • Dan Smalls • James and Janis Smith • Richard and Patricia Smith . Larry and Beverly Snively . Philip Snyder and Patricia Paine • Richard and Judy Sphon • St. Pauly Textile, Inc. • Peter and Betty Stahlbrodt • Stanley Law Offices • Mary Stazie • Robert Steuteville • Bob and Gayle Stiles • William and Carol Stokes-Cawley • Charlie Strohman and Sheila Stone • Amy Storey • Mary Ann Strasser • Kristi Sullivan • Steve and Cheryl Swartout • Walter Śwett • Regi Teasley and Judith Saul • The Harmsen Family Fund • Richard and Christine Thomas • John and Pamela Thompson • Margaret Thompson • William Thompson • Thomson Reuters Matching Gifts Program • Rachel Tigner • Samuel and Mary Tilton • Paul and Mary Torrisi • Tom Tranter • Deborah Trumbull • James and Salli Tuozzolo • Curtis and Amanda Ufford • Deborah Valentine • Jerome and Mary Van Buren • Guido and Nancy van der Ven • Jennifer VanAlstine • Maurice and Janet Vaughan • Thomas and Cheryl Vis • Chris Vitale • Larry and Nadine Walker • Robert Warfield • Ingrid and Brian Watkins • David and Dawn Wayne • Carl L. and Kristy A. Weber • James and Margaret Webster • Paul Weidhaas and Madonna Stallmann • Marc Weinberg • Walter S. Westfall • Alfred and Angela White • Amy White • Margaret White • Diana and Joe Whiting • Eileen Williams • Timothy and Betsy Williams • P.J. and Karen Winkelman • Herbert Winkelmann • Sandy Wold • Mark and Raquel Yacavone • Rich Yarmel • Beverly Zorn \$100-249 Anonymous (7) • Jennifer Abdella • John Abel • Rebecca Abraham • Judith Abrams • Andy Ackerman and Ann Fridland • Catharine Ackerson • Adirondack Mountain Club-Onondaga Chapter • Aetna Foundation, Inc. • Lorraine and Anthony Affuso • Diane C. Albrecht • Jon Allen • Virginia L. Amsler • Lynn Andersen • Kurt and Johanna Anderson • Michael Pinnisi and Paige Anderson • John M. Andersson • Sharon Andrus • David and Lori Angle • Douglas Antczak and Wendy Robertson • Julia Aguadro • Angela Arbach • Gerald and Betsy Archibald • David and Nancy Arkin • Arnold Printing Corporation • Steven Aroesty • Chris Asbury • Carolyn Aslan • Charles and Kathy Babcock • Sandra Babcock • Dale Baker and Maureen Cowen • Jill Baldwin • Dick and Nancy Baranello • Bruce and Rebecca Barney • Edwin Barr • Thomas and Susan Barry • Gail P. Bartlett • Basin Park Marina LLC • Richard and Phyllis Beal • Ronald Beavers and Karen Lewis • Henry and Helga Beck • Robert Beck • Roger Beck • Carolyn Beeman • Avery S. Beer •

Barney and Linda Beins • Alexandra Belinky • Daniel Beniak • David W. Benn • Ashley Bentley • Mary Anne Bergamo • Mary Berkelman • John Thayer and Tracey Bernett • William Berry • Sandra Bierbrauer • George and Nancy Bird • Joseph Bish • Todd and Tonya Bittner • Virginia Bizzell • Samuel Black • Donald and Jane Blake • Deborah Blazey-Martin and Ross Martin • Clarence Blewett • Margot Bliven and Richard Rosenburg • Helen Blohm • Dick and Pamela Bloss • Susan Blumenthal • Thomas and Barbara Blumer • Kenneth and Catherine Bobis • Lisa Bobo • James A. Boglioli • Robert and Carina Bone • J. Seeley Booth • Kathi Borgmann • Borotek, Inc. • Audrey Bowe • David and Amy Bowen • Dennis and Carol Bowler • Jonathan Boyarin • Eve Boyce • Jessica Boyce • Ruth Bradley • Rosemary Brady • Mike Braell • Teresa Braell • Patti Brazill • Sara Breckenridge • Kevin and Vicki Brew • Martha K. Brewster • Leo and Kathleen Brideau • Cynthia and Jim Bright • Joel and Susan Brock • Margaret Brooks • Nancy Brooks • William C. Brothers • Christopher Brown • Ricky and Mary Brown • David and Joan Brumberg • Brian Brundage • Daniel and Dana Buccieri • Denise Buchanan • Maryanne Buckley • Susan Buck-Morss • Anne Buehler • James Bugh • Susannah Buhrman-Deever • Ken and Rose Burdick • Mike and Liza Burger • Jules and Patti Burgevin • John and Midge Burns • Sarah Jane Burton • Amy Butler • Dean and Janice Butts • Philip and Kathleen Byrne • John and Ellen Cain • Elaine Caldarone • Robert and Jane Calkins • Sean E. Callahan • Joe and Rita Calvo • Kenneth Cannon • Jerry Caporaso • Marvin and Patricia Carlson • William and Pamela Caroscio • Susan Carpenter • John and Betsy Carver • Peter Cassebeer • Debra Castillo • Cayuga Bird Club • Allan Chambliss • David Chapus • Russ Charif and Beth Howard • Barbara Chase • Gary and Bonnie Chollet • Lisa and Brian Christopher • Terence Chrzan and Susann Brown • Donna Ciaccio • Alfred and Patricia Clark, Jr. • AnnMarie and Paul J. Clark • Clara Clark • Ted Clark • William Clay • Daniel Clement • Tom and Susan Close • Tom and Linda Clougherty • Edith Cofrin • Paul and Linda Cohen • Phil Davis and Suzanne Cohen • William and Martha Cole • Thomas Cole • Alan and Candace Collmer • Ellen Compton • Dr. John Condemi • David Conley • Richard and Alison Conley • Jim and Sigrid Connors • Stephen and Deborah Conroy • Rob and Anna Cook • Kay Cooke • Ed and Caroline Cope • Bill Coppard • Francis Cosentino and Jane Parker • G. Walton and Jean Cottrell • Laurie J. Cottrell • Donald Court • John and Debra Covell • Hazel Cramer • Irv and Shirley Crane • Kenneth Crawford • Lawrence Creatura • Don Crittenden • Albert and Deirdre Crofton • Robert and Rebecca Culbertson • Norman and Olivia Culver • Robert and Mary Curran • Warren and Christine Currier • David Curtin • Martin Custer • Linda Czop • Joanna Daeschner • Joel Daggar • Raymond Dagostino • Jack and Joan Dailey • Patrick and Mary Dailey • Marya Dalrymple • Dick and Claire Damaske • Lucy Damato • Kimberly D'Amore • George and Alice Damp • Eric and Leigh Dangler • Darling's Tree Farm • Lois Darlington-Rossi • Davey Tree Expert Company • Robert J. Dean • Paul and Annette DeCarolis • Ralph and Cynthia DeFelice • J.C. Dembowski • Jan Dempsey • Mark and Kathleen Dengler • Natalie Denton • Chris and Mike Deschamps • Charles Dewald • Gayle Di Iorio • Kevin Dick • David Dickinson • Ann Diehl • David DiRaddo • Jennifer DiRenzo • Joseph Dlugolenski • Steven Doane and Rosemary Elliott • Martin Dodge • Thomas and Lorraine Donaher • Mary C. Donnery • Ellen Doris • Virginia Dormer • Ruth Dorrough • Peter Dougherty and Dawn Dybowski • David Dowler • Stephen Downing • A. Patrick Doyle and Elizabeth Downes • Diane and Daniel Doyle • Dorothy Drake • Raymond Dreher and Elaine Tunaitis • Lisa and Bob Dreste • Laura Lee and Robert Driscoll • David and Nancy Drum • Elizabeth Kearney and Marjorie Drummond • Bill and Denise Duell • Thomas M. Duncan • Linda M. Dworaczyk and Charles R. Wochele, Jr. • Robert and Beverly Dyer • Nigel and Patricia Dyson-Hudson • Daniel Eckstrom • Larry Blume and Maralyn Edid • Elizabeth S. Ehrlich • Eric Elder • Wayne Elisens • Dominique Elizabeth • Gary and Dorothy Emmick • Michael Engle • Jim Engel and Karen English • Adam and Tonya Engst • Peter and Melissa Enns • Lawrence Epstein • Scott Erbland • Robert Ernst • Mitchel and Robin Evans • Lisa Everts • Susan Eyster • Gregory and Sally Ezra • Anne B. Fairbanks • Jennifer Fais • Laura Falk • Christopher and Camila Faraday Farchione Family Playground 11C Elizabeth Farnham • Barbara and Harold Faulkner • Karen Fausch • Nathan and Frances Fawcett • Charles Fay and Christine Sparfel • Gary and Vivian Fields • Achilles and Candy Filios • John and Roben Findlay • Finger Lakes Trail Conference • John Finnegan • Judith Flagg • Alex Flecker and Alison Power • Ira Goldstein and Tessa S. Flores • Theresa and Nick Fondoules • David and Alanna Fontanella • Michelle Fox and David Crow • Thomas Fox • Katherine K. Frame Linda Frank • John Fredericks • Robert and Mary Ellen Friedman • Patricia Fries

• Gianfranco and Johanna Frittelli • Marianne Furfure • Deborah Fyler • Dr. Gacioch and Mrs. Gacioch • James Gaffney and Louise Raimondo • Lucy Gagliardo • Maria Gaige • Glenn and Cassandra Galbreath • Robert and Holly Gang • John and Lindsay Garrett • Eric Gay and Nicole Marguis • Wolfgang and Amandy Geihe • Eileen Gerace • Bonnie and John Geraghty • German Brothers Marina, Inc. • Cynthia Getchonis • Laurel C. Gibbs • Curtis and Susan Gillette • Carl Ginet and Sally McConnell-Ginet • Natasha Ginzburg • Mitchell and Anne Glass • Steven and Sarah Gleason • Ernest and Jayne Goetz • Joshua and Nicole Goldman • Mike and Janet Goldman • William Goldsmith • W. Lindsay Goodloe • Robert and Lois Gosse • James and Ann Gould • Katherine Graham • Roger and Janet Gram • Garard and Francine Grannell • James and Emily Gregg • Col Greve • Judith Gridley-Riff • Jackie Grimes • Michael R. and Karen R. Grimm • Michael E. and Dianne L. Grome • Tervl Gronwall • Garv and Bonnie Grossman • Mary Gulick • Dorothy Gullotta • Colleen and Christophe Gyr • Laurie and Alan Hahl • Arthur Halbritter • Jerry and Linda Haley • Dana Hall • William Hall • Ben Haller • Christian and Helen Haller • Daniel Hamlin • James Hankin • Patricia Hansen and Roger Hansen • Elizabeth Harausz • Charlie Hargrave • Brian and Maureen Harkins • Tom and Barb Harradine • Scott and Michelle Harris • Lois M. Harrod • Susan S. Hartwell • John Hassett and Judith Crawford • Sarah Hatcher • Dennis Hayes • Louise Hayes • Maurie Heins • Max Heitner • David P. Hempson • Tony and Carol Henderson • John and Susan Herbert • Ilene Herman • Ron Herring and Valerie Bunce • James and Patricia Hertz • John Heslop • Murray and Sarah Hestley • Lynne E. Hewitt and Shashi S. Singh • Neil and Mary Hieber • Bridget Hier • Andrew Hillman • Diane Hillmann • Daniel and Sarah Hincks • Nancy Hitchcock • George and Carolyn Hiza • Kathie Hodge • John and Kathleen Hoff • Dan Hoffman • Louise Holmes • HOLT Architects, P.C. • Paul and Martha Hood • Robert and Jean Hood • Richard and Donna Hooker, III • William and Betty House • Rob and Claire Howard • Rod Howe • Peter Howley • Anne Hoyt • Katya Hrichak • Amy Hughes • Peter and Sally Humphrey • Ken Hutton • Kenneth and Jeanne Hutton • Kenneth Hyde and Nellie Ramsden • Lili Hyland • Caroline Hyneman • Donna T. Incaudo • Peter Isler • Ithaca Garden Club • Christopher and Martha Iversen • Laurence and Katherine Jacobs • Daniel Schwarz and Marcia Jacobson • Jay Janowsky and Joan Tardif • John and Susan Jaquette • Thomas and Gretchen Jeffers • James Jenkins and Kathy Kelly • Lyle Jenks • Jacob Jensen • Charles and Barbara Jermy • Reem Jishi • Carol Johnson • Greg Johnson • Karen Johnson • Marguerite Johnson • Tim and Anne Marie Johnson • Lawrence Jones and Vera Versteeg • Andrew Jordan • Paul and Elizabeth Jordan • Kathryn Jospe • Robin and Joyce Jowaisas • Peter Kahn and Catherine Wagner • Ruth Kahn • Sam Kaiser • Nirmal Kapur • Amelia Kaufman • Arthur Kaufman and Rick Barton • Mary Jacqueline Keady • Meg Keady • James Keegan • The Kelly Family • Mary M. Kelsey • Thomas and Joan Kennedy • Richard and Barbara Kent • Janet Kerr • Karl and Leslie Kieburtz • Jeffrey Kirshner and Lorraine Rapp • William and Nancy Kline • Stephen and Terry Kline • Tom Klish • Michael and Lynn Klotz • Ann Knauer • Charles Knauf • Heinz and Judy Koch • Edward and Lena Kochian • Fritz Koehler • Richard and Mary Lee Kokosa • Leo Tohill and Irene Komor • Susan L. Koon • Phil Koons and Kathy Earnest-Koons • Benjamin Kornblum • KPB Holding Company LLC • David and Susan Kramer • Scott Kreher • Mike Kehoe and Kate Kressman-Kehoe • John A. and Barbara J. Krout • Jeff Roberts and Carol Krumhansl • Karen Kudej • Isadora Kunitz • Harold and Christine Kurland • Jennifer Kwiatkowski • Lloyd and Carol Kylis • Karen Lacey • Mark and Suzanne Laese • Patricia Lallas • Victor and Sheri Ann Lamoreaux • Carolyn Lange • William Lange • Larry Lanpher • Bert and Henny Lasley • Benjamin Lavery • Mitchell and Linda Lavine • Cody Leach • Ron LeCain and Sara Pritchard • Jim Leonard • Anthony J. and Norma Leone, Jr. • Hayden and Leonora Letchworth • Antoinette S. Levatich • Gilbert and Ilma Levine • Scott Levine • Jack and Barbara Lewis • Craig Little • Deborah Littlejohn • James and Susan Locke, III • Judith Lockwood • Dennis and Ashby Longwell • Marianne Lont • Brita Lorentzen • Nancy Lorr • Lois Lounsbery • Donald Low • Jonathan and Cynthia Lunine • Paul Luyben • Michael Lynch • Anne M. Lynn • Merrill and Lydia Lynn • Lee Macbeth • Sharon E. Mace • Timothy and Julie Macko • Robert and Elizabeth Madden • Maguire • Martin Mahoney • Ann Mallozzi • Laura Mann • John D. Manna • Kenn Marash and Holley Russell • Mr. and Mrs. Trelawney Marchant • David Marchena • Richard and Darlene Marino • Lawrence S. Marks • John Marshall • Alyson Martin • Frank Marullo • Michael Masica • Marc Mason and Lisa Bartlett • Dorothy Matsui • Max and Eileen Maxwell • Jennifer Mayo • Karyn Mazzeo • Brad McAllester • James and Jean McCabe • Melissa McCabe • Keith McCafferty • Linda and Sol McCall-Motola continued on page 12

donors continued from page 11

• Bill and Cynthia McCauley • Steven K. McCauley • Peter and Scobie McClelland • Larry Hirschberger and Saoirse McClory • Diana McCloskey • Padraic McConville • Patrick and Ann McCormick • Roger and Darlys McDonough • Richard and Sandra McGavern • Edward and Charlene McGraw • Paul McGurn • Jeffrey McKee • Megan McLaughlin • Patrick and Noreen McLaughlin • Mr. and Mrs. Gardner H. McLean • Tracy McLellan • Jeb and Christina Mead • Nancy Medsker • Chris Meehan • Adrian Melissinos • Robert and Linda Meredith • Tom and Janet Mettee • Mr. and Mrs. Gordon M. Metz • David T. Middleton • Jeffrey Milder and Nina Kohn • Julia Miller • Kaitlin Miller • Robert C. and Kathryn Miller • Stephen Miller • Debra Minnock • N.B. and Virginia Mistry • Martin Moll • James and Deborah Monaco • Patrick Monahan • Zachary Montague • Russell Moodie • Robert Morello • Robert Morgan • John and Carol Morris • Ken Kemphues and Diane Morton • Richard Moyle and Joan Shoemaker • William and Anna Murphy • John R. Myer • Sheila Myers • Louise Mygatt • Judith Nadal • Rick and Mayumi Naro • Rocco and Melissa Natale • Hugh Neeson and Andrea Messina • William Neilsen • Anna Nelson Richard Nelson • Stasia Newell • Ann Newman • George and Jill Newton • William and Sandra Nichols • Ann and Barry Nicholson • Joanne Nicholson •

Ruth Nix • Wendell A. Norvell • Dr. Jerome Nosanchuk • Val Nostrand • Dr. Eugene Notz • Barbara Nussbaum • Conor O'Brien • Terry and Ginny O'Connell • David Odell • Michael and Pamela Odlum • Frieda O'Hanlon • Charles O'Neil Molly O'Neill
Mitchell Orenstein
Joe O'Rourke • Thomas and Maureen O'Rourke • Patricia Orr • Dan and Ellen Osborn • Bruce and Margaret Osborne • Bernard J. Oseroff • John and Elizabeth O'Sullivan • Ken and Graham Ottoson • Marc Overdyk and Joanne Mahoney • John and Sharon Paddock • W. Jeffery and Kathryn Page • Ashley Palmer • Carol S. Palmer • Ronald Palmquist • Gary and Brooke Palumbo • Jeffrey Panara • Larry and Nan Pardee • Sol Gruner and Rosemarie Parker • Thomas and Brenda Parkes • George Parsons • Mary Ella Passage • Jerry and Marilyn Passer • David and Michelle Pastel • Stephen Pattarini • Nancy E. Pegues Michelle Pellegrino
Amy Pendleton Simrell Peregrine Properties of Skaneateles • Douglas and Karen Pereira • James Perkins • Mary Anne Perks and William H. Perks, Jr. • Greta and Aara Perl • Sally Perreten • Ellen Perry • Matthew and Joy Perry • Pamela Perry, D.V.M. • Robert and Penelope Peterson • John and Jennifer Petosa • Marita Petrera • Katherine Phillips • James and Nancy Piastuch • Vic Piatt • Marigrace Piazza • Stephen and Stephanie Piccone • Kenneth Pickens and Mary Kaszyca •

Alphonse Pieper and Betsy Shrier • Preston Pierce • Amanda Piha • Doug and Georgina Pinckney • Robert Pine • Robert and Mabelle Pizzutiello • Alice Ploss • James D. Plumb • Sandra L. Polakow • Brian Dennis and Anna Polimeni • Ellen Polimeni • Katherine Potter • Mark and Anne Potter • R. Scott Price • David Priester • Joan Procopio • Judd and Carole Prozeller • Kathleen Prozeller • Steven Purcell • Joel Rabinowitz and Dorothy Pomponio • Eric Alani and Esther Racoosin • Enid and Gabor Racz • Dave and Claudia Radin • Naomi Raimon • Shaynee Rainbolt • Liz and KK Rajamani • Don M. and Carol Randel • David and Debra Rasmussen • Paul Ray • Kathy Rayburn • Marie Read • Amy Reading • Martha Reddout • Timothy Reed • John and Kimberly Reedy • Michael Regelski • Joseph Schwartzel and Ann Reilly • John and Sharon Riccio • Thomas Richards • Bernard Riemer • Kirsten and Tim Riemer • William Riker Christopher Riley
Thomas and Susan Riley
Gary Riopko
Thomas and Mary Ann Rishel • Susan Ritter • Mary and Bill Roberts • David Robertson • Steve and Martha Robertson • Nancy L. Robinson • Susan Robinson and Martha Fischer • Ben Rockey-Harris • Holly Rockwell • Susan Rockwell • Gary S. and Elizabeth B. Roe • Mary Romano • Richard and Romaine Rood • John and Laura Rooney • Andrew Root • Zev Ross • Christopher Rossi • Kathleen Roth • Judith Rothenberg • Douglas Rowe • Gordon Rowland and Anne Stork • Paul Ferraro and Kristin Rowles • Eric Ruckert • Jack and Joan J. Rueckheim • Gregory and Rebecca Rury • Laurence Russell • Donald Rutledge • Frank and Rosanne Ruva • Patrick and Barbara H. Ryan • Jean Ryon • Al and Vicky Sabin Victor and Eileen Salerno
James Salk
Eugene and Janet Sarbou
Peggy Savlov • Daniel and Linda Scaia • Katherine Scalise • Herbert Schiele • Marty Schlabach and Mary Jean Welser • Sara Schlageter • Schmitt Real Estate • Paul and Pamela Schmitt • Donald Schneider • Tom Schnorr and Ed Donnelly • John and Brenda Schouten • Lisa Schreiner • David Schwaner • David I. Schwartz • Joseph Schwartzel • Paul and Lauren Schweizer • Christopher Scibelli • Danny Scott • Walt Scott • Jane Segelken • Bruce and Judith Seidberg • Scott and Lillian Serafine • Gina Seyfied • John and Janet Seymour • Bill Shafer •

Gail N. Shaw • Scott and Marcia Sheavly • Sally Sheehan • Robert Shephard and Sandra Keith • Sloan and Heather Sheridan-Thomas • Carol Sherwood • Carol and Michael Shields • Jerald Shing and Duane Diviney • Mrs. Tarry Shipley • Fred and Alice Shoemaker • Ralph and Svetlana Short • Robert and Connie Short • Mike and Karen Shuler • Steve and Anne Sierigk • Nick and Cyndi Signorelli • Mark and Deirdre Silverman • Robert and Annie Simunek • Mr. and Mrs. Christopher Sinton • Kevin and Betsy Sio • Skaneateles Rotary Foundation • Megan and Dylan Slater • John and Karen Slechta • Thomas Smallman • Robert Camp and Marjorie Smart • Charles R. Smith • Lynn and Corinne Smith • Janet Smith • Michael and Ann Smith • Sandra Smith • Susan A. Smith • Terry and Carolyn Smith • Thomas Smith • Jeffrey and Suzanne Snedeker • Jeff Sobal • Judy Sobczak • Donna Sokol • Elaine and Lee Sorenson • South Hill Cider • Robert and Susan Spahn • Patricia and Duncan Sparrell • Alex Specker • Caroline Spellman • Chris Sperry and Karin Suskin • David St. George and Lisa Wood • Jeffrey Stannard • Raymond and Carol Stark • Jack and Patty Starke • Paul Stearns and Sarah Gowin • Joseph and Robin Steencken • Chelsea Steffes • Steven Stegman • Peggy Stella • James Stephens • Mary J.

Alice and Don Shardlow • Doug and Kathleen Shaw • William R. Shaw and

Stiffler • Richard Stiggins and Nancy Bridgeford • David and Patricia Stone • Jeanne Stopyro • Steven and Susan Stork • Andrew Strait • David and Grace Strong • Elizabeth Strychalski • Greg Subtelny • Roy and Nancy Susskind • Mark and Ellen Sussman • John and Natasha Suter • Jennifer Sutherland • John and Anne Sveen • William Sykes • L. Szanc • Doug Taylor and Patricia Reid • Philip and Diane Tennant • The Progressive Insurance Foundation • The Rosamond Gifford Foundation Charitable Corporation • David Theiss and Catherine Feyerabend • Elizabeth and Robert Thomas • Jacqueline Thompson and Fernando de Aragón • Robert H. Thompson and Bonnie DeVinney • Amy and John Thorsen • Nancy E. Tiedemann • Jack and Glenys Tobin • Joyce Toher • Danny Tourance • Stephen Tourje • Mary A. Tracy • Diane Traina • Margaret Tranbaugh • Travis Hyde Properties • Treetops Tree Service • Gail Tremblay • Charlie Trevor • Karen Trible • Ralph and Patricia Troisi • Joseph Trombley • James and Jane Trondsen • Robert J. Tuite • Michael Turner • David and Lucia Tyler • Francis J. Uhlir • George H. Urich • Linda Van Buskirk • Martin and Linda van der Grinten • Marjolein van der Meulen • Alison Van Keuren • Janet VanEtten • Robbert VanRenesse and Lesley Greene • Barry VanRiper • Jeanne Varney • Jill Vaughan • Thomas Vecchi • David Verrone • Donn Vickers and Sharon Sachs •

William Vincent • James and Racquel Vlassis, D.D.S. • Joanne Vogel • Volker Vogt and Carla Marceau • Wagner Vineyards • Ann Wall • Charlie and Susan Wallace • Marian Walrath • Kevin Walsh • William and Kathleen Walsh • Benjamin Walters • Lois Warlick-Jarvie • Rudolph and Margaret Warren • Robert Waters and Linda Pietroski • Rick and Cindy Weakland • Jeremy Weaver • David Weber • Kathryn Wegman • Aaron Weinberg • Judy Weiner • Rick and Donna Weinstein • Tom and Maureen Welch • Jeffrey Wells • David N. Werier • Gabrielle Whately • Steve and Beverly White • Carolyn Whitfield • Andrew Whiting and Roberta Ripberger • Christa Whitney-Miller and Matthew Miller • Geoffrey and Virginia Wickwire • Charles and Nancy Williams • Lee and Cindy Williams • Cynthia Williams • Kathleen Williams • David and Marilee Williams Shirley Williams
Dean and Aleta Williamson
Tom and Colleen Wilmot Marion Wilmot • Joseph and Maureen Wilson, III • Michael and Janet Wilson • Don and Mary Anne Winfield • Joan M. Winters • Donald and Kendra Witter • Peter Clark and Katherine Wolf • Jim Rothenberg and Mariana Wolfner • Judith Woll and Ron Bernard • Jim Wood • Linda and Roswell Wood • Charles and Kathleen Woodcock • Robert Woodhouse • Jim and Marsha Wooster • Duncan Wormer and Barbara Benedict • Lee and Julie Wortham • Andrew Yale and Brenda Kuhn • Margaret Yeater • Ray Yelle • Michael Yolen and Dominique Petoud • Jack Young and Susan Barnett • Karen Yuhas • Mark and Ingrid Zabel Neal and Ellen Zaslaw • James and Jeanette Zavislan • Melissa and Thomas Zell • Alison Zepp • Martha Zettel • Paul Zorovich and Karen Dixon We gratefully acknowledge the following donors for their generous in-kind gifts Auto Wash • Pioneer Printing Pro bono attorneys Peter Miller • Jim Miller and the law firm Miller Mayer, LLP • Aaron Mullen and the law firm Mullen Associates, PLLC • Karianne Polimeni and the law firm Harter Secrest & Emery, LLP • William Shaw and the law firm Shaw & Murphy, PLLC

*Every effort has been made to ensure the accuracy and completeness of this list. If we have made an error, please accept our apologies.



Our appreciation for gifts in honor of...

Jason Barrett FROM Richard and Anne Barrett

Bob and Beattie Bock and the Bock-Harvey Forest Preserve FROM Tom and Shirley Itin

> **Bob and Jan** FROM Max Brashear

Patti and Jules Burgevinn FROM Peter Burgevin and Margo Alexander

Thomas "Joe" Cartwright FROM Carol Lord

> **Cian Chambliss** FROM Allan Chambliss

Betsy Darlington FROM Anonymous Tom Babcock Lois Darlington-Rossi Michael and Carrie Koplinka-Loehr David Marchena Sally Perreten Alphonse Pieper and Betsy Shrier

The Davies Family FROM John Harwood

Tim and Julie Dean FROM Michael Culotta

Shannon Divers and Reuben Kamp FROM Tom Divers and Nita Irby

> Katy Dunlap FROM Kevin Dick

Phil Edgerton FROM Bill and Valerie Yust

Leslie Ehrlich FROM Gary and Vivian Fields

Martha Fischer FROM Stephen Goggin and Kate Potteiger

> **Ophelia Gallow** FROM Deidre Gallow

Jason Gorman FROM

Megan McLaughlin

John Greenly FROM Lynn Leopold

Amanda Hamilton FROM Maurie Heins

Tim Hamlin FROM Mary Ann Strasser

David and Sue Hanselman FROM Schmitt Real Estate

Muriel and Richard Heptig FROM Ed and Robin Dubovi

> **Michael and Linda** Hoffmann FROM Ed and Robin Dubovi

Joan and Bob Horn FROM Glenn and Sandy Galbreath, Paul and Barbara Eshelman, and Jean Reese

> **Edward Hower** FROM Jonathan Miller and Rebecca Nelson

Kathryn Hughes FROM Erin Sterner

Suzanne Hunt and Matt Kelly FROM Art and Joyce Hunt

Rhoda and Ralph Janis FROM Ed and Robin Dubovi

> **Ralph Janis** FROM Roberta Walcer

Arlene Katris FROM Jeff Katris

Kevin McGowan FROM Diane Traina

Ruth Knuth FROM Kurt Jirka and Barbara A. Knuth

Rick Lightbody and Carol Johnson FROM Anonymous James Loomis FROM Chris Loomis

Robin and Luke Lorenzo FROM Peter Merrill and Mariana Kastrinakis

> Elaine Mansfield FROM Cameron Ware

Edward C. Marx FROM Steve and Martha Robertson

Mary Ellen McDonald FROM Andrew McDonald

Barbara McDowell FROM Jim and Lydia Eldridge

> **Chris Miller** FROM Ellen Miller

Laura Miller and Mike Cook FROM James R. Miller and Chrissie Schelhas Miller

> Patrick and Alexandra Mitchell FROM Daniel Beniak

Diane Morton and Ken Kemphues FROM Ranjita and David Morton

Jim and Karol Mroczek FROM Chase Hannon

Chris Olson and Dennis Miller FROM Ed and Robin Dubovi

Ethan Ong FROM Anthony Ong and Carri Marschner

Gary and Melanie Popick FROM Dan Popick

> Scott Purdy FROM Kelly Doolittle

Sue Robinson and Martha Fischer FROM Nancy L. Robinson Roberta F. Robinson Dixon Katherine Scalise **Daniel Salm** FROM Rebecca Salm

Kristopher Scholl FROM Sharon M. Blowers

Wendy and John Sinton FROM Mr. and Mrs. Christopher Sinton

> **Sam Siple** FROM William Riker

Suz and Jeff Snedeker FROM Jane Segelken

> David Stipanuk FROM Rachel Melnick

Stokes Family Solstice FROM William Berry

Steve and Susie Stork FROM Richard and Kathleen Bowles

Jan and Susan Suwinski FROM Judy Sobczak

> Regi Teasley and Judy Saul FROM Alyson Martin

Genevieve S. Thompson FROM Hugh and Barbara Chenoweth

Paula and Michael Twomey FROM Ed and Robin Dubovi

> Christina Stark and David Weinstein FROM Peter Carroll and Nancy Skipper

Andy Zepp FROM Alice and Don Shardlow Charles and Nancy Trautmann

Our deepest gratitude for thoughtful gifts in memory of...

Richard "Dick" Abbott FROM

Lee Macbeth Kathy Anastasio

FROM Cort Anastasio

Dr. Doug Ayers FROM Rose Alaimo

John B. Bacher FROM Beverly Anne Reed

Douglas P. Bates FROM Grace Bates

Charles R. Belinky FROM Alexandra Belinky

> **Jason M. Bell** FROM Ann Kaminski

Lois Bingley FROM

Amy Hradnansky

Antonie W. Blackler FROM Shelley Blackler

> Joe Briggs FROM Mary S. Harris

Sherry Brothers, DVM FROM William C. Brothers

Percy Browning FROM Clare Fewtrell Thomas Snow and Karen Meriwether Stu and Lucy Schweizer Patty Weisse and George Thomas

Clair and Helen Chamberlain

FROM Jim Chamberlain and Karen Dyson

> Alfred E. Coon FROM Nancy Coon

Norma Coye FROM Matthew Gordon

Connie Currier FROM Warren and Christine Currier

> Phil Dello Stritto FROM Jeffrey Babad Margo Buckingham John and Mary Farrell Kathleen Farrell Matthew Frahm John Hardy Lara Lai

14 • THE LAND STEWARD

Bob and Nancy Lewis Dennis Lewis Ellen Polimeni Charles and Sarah Reutlinger Paul Barron and Leah Weinberg

> **Judith Doucet** FROM Camille Doucet

Lewis H. Durland IV FROM Amy Durland and Robert Mains Chris Jolluck

Gayle Edgerton FROM Bill and Valerie Yust

Dr. Julius Fabricant FROM Laura Stenzler and Karel A. Schat

Susan Feldman FROM Ed and Robin Dubovi

Linda Folley FROM

Christopher and Camila Faraday

Alexander Frazier Fuld FROM Ruth Meyburg

> Rona J. Goldberg FROM Mary Faber

Kenneth Gordon FROM Suzanne Albert Holly Brookstein Barbara Cote Charles Cote June Elaine Cuthbert Denise Erenstone Tom and Vicki Finnefrock Cheryl Gioia Ken Graci Stephen Lewandowski James Millington Timothy and Marabeth Nally Andrew Ragan Carol Tomson

MacKenzie "Mac" Hargrave

FROM Kim Lansdowne

> **Gary Hunt** FROM Mike Worth

Carl Leopold FROM Cyrus J. Umrigar

Alison Lurie FROM John and Holly Bailey Charlotte Greenspan, Lisa Eisenberg, Neesa Levine, Diane Ackerman, Nina Miller, Ann Costello, Margaret Dieter, Karen Gilovich, Jean Mackin, and Elizabeth Regan Jonathan Miller and Rebecca Nelson Garry and Connie Thomas

Milton and Marjorie Lynch FROM Erin Guild

Dr. Richard A. Malecki, PhD FROM Sue Poelvoorde and Don Murray

> **Catherine Mancini** FROM Michael Mancini

Walter McAllester FROM Brad McAllester

David McComb FROM Nancy Palvino Mary J. Stiffler

Fred Mohn FROM Lisa Dahl

Shelley Mulvaney FROM Kate McKee

> **Al Muscari** FROM John Coughlin

Steve Nemec FROM Lee Macbeth Patricia Orr Kris Scholl and Brooke Oropallo

Ray Oglesby FROM Lawrence Jones and Vera Versteeg

Charles Pearman FROM David W. Benn

Albert "Tad" Perry FROM Pamela Perry, D.V.M.

George H. Prentiss FROM

Bard and Gina Prentiss

Skippy Raines FROM The Harmsen Family Fund Raymond Terepka and Nancy Stewart Bert and Henny Lasley

Richard C. Randall FROM Douglas Randall

Bob and Marion Raymond FROM Dorothy Matsui **Tom Reimers** FROM Steve and Cindy Lamb

> **Richard B. Root** FROM Barbara Page

Don Runyon FROM Kellie Hummel

Herbert F. Schryver FROM Erik Schryver

Horst Schwinge FROM Sigi Schwinge

Nancy Sholl FROM Chip and Wendy Aquadro

Spencer Silverstein FROM Arthur Kaufman and Rick Barton

Doris Jane Simmonds FROM Paul and Ellen Grebinger

Ora and Laura Lee Smith FROM Sarah Jane Burton

> **Dr. Paul H. Steen** FROM *Kyra Stephanoff*

Margaret and Rodney Stevens FROM Cynthia Stevens

> Abby Stone FROM Karen Shockey

Jon Shreve FROM Linda Frank

Rick Turner FROM

111 Grand Street Corporation Michelle Fox and David Crow Paul and Sonia Kleinman Steven Stegman

> **Michael J. Walsh** FROM James and Diane Walsh

> > **Brendan Wilcox** FROM Kathleen Wilcox

Aleksander William Bunting Travis FROM Steve and Cindy Lamb

> Peter Winants FROM Edith Cofrin

Sally Winkelman FROM John and Louisa Cohlan

A CLOSER LOOK

Rev, Hover, Pump, Zoom: The High-Performance Hybrid Powertrain of the Ruby-throated Hummingbird

own past the second meadow at the Lindsay-Parsons Biodiversity Preserve, an old snag rises above a dense expanse of successional shrubs. For years now, lucky passersby on sunny spring days have regularly seen a male Ruby-throated Hummingbird here, perching like a little red-badged sentinel at the tip of a branch, zinging away to resume his rounds, then faithfully returning to his post.

Scenes like this will play out in many other preserved lands and feeder gardens throughout our region in coming weeks. Given their familiarity, endearingly diminutive proportions, and distinctive habits, it's no wonder that Ruby-throated Hummingbirds are among our most iconic and beloved birds. And beyond the features that we can readily see, recent advances in science and technologyaided imaging shed further light on just how amazing their adaptations are.

Hummingbirds are unique among birds in their ability to hover without a headwind, and even to fly backwards and upside down. They achieve these aeronautical feats via distinctive wing mechanics, documented in the past two decades using laser stroboscopy. Unlike other birds, which open their wings on the downstroke and fold them on the upstroke, hummingbirds keep their wings open on both strokes. They twist their wings on flexible shoulder joints in a figure-eight pattern, creating vortices that in turn generate lift.

All this happens far too fast for the unaided human eye to see – about 50-60 wingbeats per second. What's more, hummingbirds' hearts thrum at up to 20 beats per second, and even at rest they breathe 250 times per minute. When hummingbirds fly, their oxygen consumption relative to muscle mass is approximately 10 times higher than for top human athletes.

Therefore fueling up is another vitally important, highly evolved aspect of hummingbird life history. Rubythroated Hummingbirds feed primarily on flower nectar, modestly supplemented by tiny insects and spiders. They have bifurcated tongues with feathery tips and two grooves down the middle. It was long believed that capillary action drew nectar into these grooves passively, but scientists have recently demonstrated via high-speed videography and flow modeling that the tongues actually expand when they touch nectar in a flower, creating forces that actively pump the nectar through the grooves into the bird's body, up to 20 times per second. The tongue contracts again when it passes back out through the narrow bill tip, ensuring that the nectar remains inside.

Male Ruby-throated Hummingbirds in the breeding season drink nectar every 15 to 20 minutes, alternating feeding sessions with moments of rest and high-intensity flights, courtship displays, and battles with other males. They maintain a very precise energy balance during these times, quickly burning through the sugar that they take in. At night, without blood sugar replenishment, hummingbirds can slow their metabolisms to a profound torpor, allowing their body temperatures to approach ambient air temperatures. The nest of the Ruby-throated Hummingbird is about the size of a ping-pong ball. The female builds the nest out of plant fibers, scales of buds, and spider silk with lichens for camouflage, on branches 10 to 90 feet above the ground. She lays two eggs, each the size of a small bean. The nests have a distinctive ability to stretch to accommodate growing young. Indeed, fledgling Ruby-throated Hummingbirds are much larger than their parents, reaching around 4.5 grams as opposed to 2.5 to 3 grams for typical breeding adults.



Toward the end of the breeding season, adult Rubythroated Hummingbirds change their routines and metabolic activity, doubling their body fat percentage and approaching the size of the fledglings. Then, during southward migration, their finely-tuned reliance on frequent sugar intake becomes a total dependence on stored fat. The journey to wintering grounds in Central America can be as long as 2,000 miles, including a nonstop trip of 500+ miles across the Gulf of Mexico.

The closest living relatives of hummingbirds are swifts. Scientists believe that the first hummingbirds evolved about 42 million years ago. Surprisingly, the earliest fossil records of hummingbirds are from Europe, where no hummingbirds remain today. This evidence, combined with DNA analysis, suggests that hummingbirds expanded their range to the Americas, then died out in Eurasia. They became established in South America and radiated into many new species starting around 22 million years ago. Now there are more than 300 hummingbird species. Evolution is thought still to be ongoing. But the Ruby-throated Hummingbird remains the only hummingbird species that regularly occurs in eastern North America.

Thus, the Ruby-throated Hummingbird is much more than a charming little curiosity or a spark of glittering color. It's a high-revving fuel-switching hybrid hovercraft-rocket offering short-range and long-range settings, plus "economy mode" on demand – the culmination of millions of years of engineering refinement through evolution, revealed by modern science. —*Mark Chao*

Finger Lakes Land Trust

Officers:

Dave Birchenough, President Kristin Swain, Vice President Patty Weisse, Secretary Bill Eggers, Treasurer Lindsay Ruth, At-Large

Board Members:

David Fernandez Maria Fernandez-Gaige Holland C. Gregg, III Hadley Lundback Karen Meriwether Sean O'Keefe Kevin Parker Marjory Rinaldo-Lee Wade Sarkis Myra J. Shulman Fred Van Sickle Jim Walsh

Staff:

Andrew Zepp, Executive Director Meghann Andrews-Whitaker, Director of Operations

Julia de Aragón, Development Associate Jason Gorman, Nature Preserve Manager Max Heitner, Director of Conservation Edie Jodz, Assistant Director of

Development

Jillian Kreitman, Administrative Assistant Kelly Makosch, Senior Director Eric Mastroberti, Land Steward Cat Massa, Annual Fund Manager Chris Olney, Director of Stewardship Chris Ray, GIS Projects Manager Annabel Roberts-McMichael,

Conservation Easement Steward Gretchen Salm, Land Conservation Support Specialist

Becky Sibner, Land Protection Specialist

Kris West, Senior Field Representative

Newsletter Editor: Edie Jodz

Newsletter Layout: Leigh Dezelan

Advisors:

Forestry Consultant: Michael DeMunn Stewardship Advisor: Betsy Darlington



GOFINGERLAKES

gofingerlakes.org

- instagram@gofingerlakes
- instagram@fingerlakeslandtrust
- facebook.com/FingerLakesLandTrust
- 🕒 @FLLandTrust

Ph: 607-275-9487 • email: info@fllt.org



NIGEL KENT



Finger Lakes Land Trust

202 E. Court Street Ithaca, NY 14850

Return Service Requested

NON-PROFIT U.S. POSTAGE **PAID** TRUMANSBURG, NY PERMIT NO. 1

Spring 2021 Calendar

Tuesday, June 1 at 7:30 pm Birding for Beginners

Interested in learning a new hobby enjoyed around the planet by millions of people? Join Jason Gorman, FLLT Nature Preserve Manager, to learn the basics of birding at this online event. Registration required. Visit fllt.org/events to learn more.

Wednesday, June 2 at 7:00 pm Filling the Gap: Conservation Easements for the Finger Lakes Region

Max Heitner, FLLT Director of Conservation, will provide a brief overview of the organization's work within the Canandaigua Lake watershed, and describe available conservation tools for landowners with a focus on conservation easements. Hosted by the Canandaigua Lake Watershed Association. Registration required. Visit fllt.org/events to learn more.

See details about our June 2021 Bioblitz on page 8 or visit fllt.org/bioblitz2021.