



**2023
ANNUAL REVIEW**



Great Hollow
Nature Preserve & Ecological Research Center

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Staff

Chad Seewagen, Ph.D.
Executive Director

Tara Ewers
Education Coordinator

John Foley
Naturalist & Preserve Steward
(outgoing)

Ben Lee
Naturalist & Preserve Steward
(incoming)

Wales Carter, Ph.D.
Post-doctoral Research Fellow

2023 Seasonal Staff

Tallulah Comaskey
Assistant Camp Director

Samantha Baud
Eco-Discovery Camp Counselor

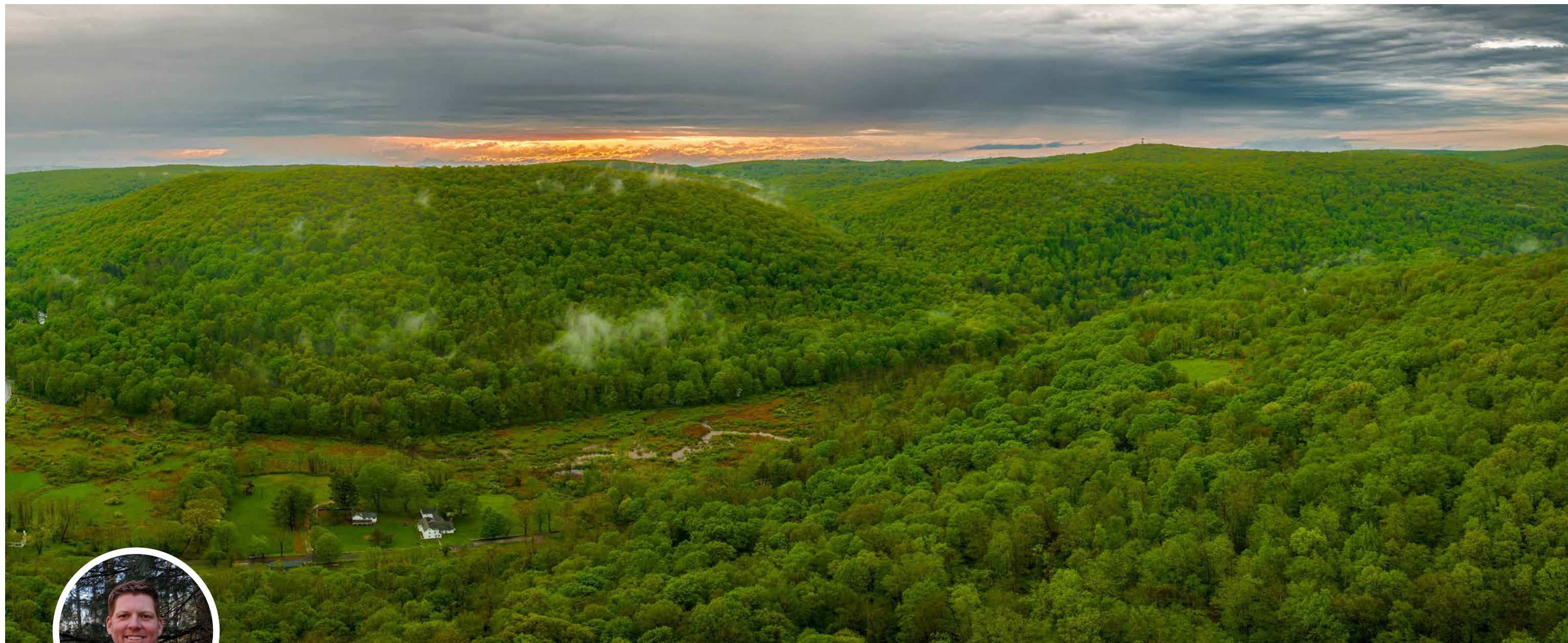
Zach Nichols
Research and Stewardship Intern

Board of Directors

Gary Goldring
Chair

Meredith Cleary
Treasurer & Secretary

Chad Seewagen
Executive Director



From the Executive Director

As we close the book on another year, I am reminded of what a privilege it is to work at Great Hollow every day to help provide top-notch environmental education program-

ming for local communities, manage 825 acres of land for biodiversity and outdoor recreation, and tackle pressing research needs in wildlife conservation. What could be better? The enthusiastic support of people like you is what makes our work as rewarding as it is, and for that, we can

never thank you enough. This past year Great Hollow continued to break new ground in conservation science, publishing first-of-its-kind research on the effects of light pollution on bats, the effects of invasive plants on forest food webs, and the factors associated with bird collisions with city

buildings. We also launched an ambitious long-term study to evaluate the benefits of Japanese barberry removal to native plants, insects, and birds in our ongoing efforts to improve science-based decision-making about invasive plant management. Invasive species were also a consistent theme in this year's outreach programming and Eco-Discovery Camp, which grew yet again in size and popularity. Many new campers (and parents) got to discover what all the fun is about while many familiar faces returned for their second, third, or even fourth consecutive summer. The excitement with

which our campers devour the days' activities and immerse themselves in the nature around them at Great Hollow never fails to leave us with a sense of optimism for the future. This year we bid a fond farewell to our longtime steward and naturalist, John Foley, while welcoming in Ben Lee as our newest staff member and guardian of Great Hollow's grounds, trails, and facilities. Ben has been a wonderful addition to our team and has Great Hollow looking and running better than ever. Inside you'll also meet and read about the handiwork of some of Great Hollow's most dedicated volunteers,

who give their valuable time to our organization's needs. We are so lucky to have such supportive communities around us and appreciate everyone who took part in Great Hollow this past year. Thank you for helping make 2023 such a success.

Chad Seewagen

Conservation Science

Reducing the Toll of Bird Collisions with Buildings

Most people are familiar with the startling thud of a bird hitting a window, but few are aware of the cumulative toll that these collisions have on bird populations around the world. The most rigorous

science to-date estimates that more than **1 billion birds per year** are killed by collisions with glass in the U.S. and Canada alone. This makes window collisions the third-greatest human-related source of bird mortality on earth, behind only habitat loss and predation by domestic cats. Glass is an indiscriminate killer of birds of any species, age, sex, or health status,

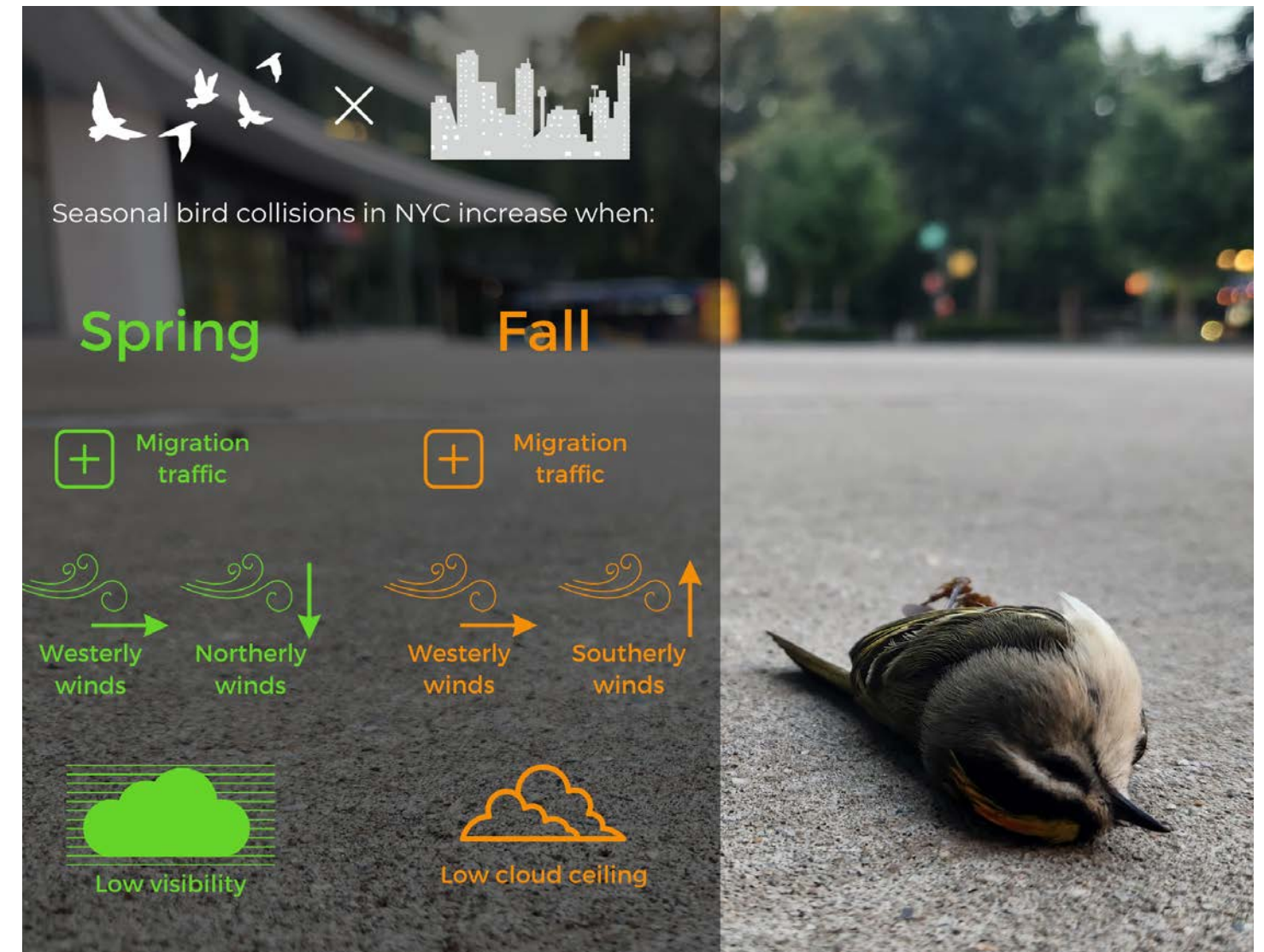
wherever and whenever the two occur together.

A popular misconception is that the vast majority of collisions are attributable to brightly lit skyscrapers that protrude into the airspace through which migrating birds fly at night. While mass-mortality events at tall city buildings sometimes occur and often make the news when they do, the reality is that most collisions in both urban and non-urban areas occur during the daytime and near ground-level. These daytime collisions are most often the result of glass reflecting images of trees or open sky that birds cannot distinguish from the real thing.

As awareness of this issue has rapidly grown in recent years, there is new urgency to understand the risk factors underlying collisions so practical, science-based solutions can be identified. To that end, Great Hollow's executive director and ornithologist, Chad Seewagen, has been working with a team of researchers from Columbia University, Cornell University, and New York City Audubon to identify the conditions under which birds are at greatest risk of colliding with windows in Manhattan during spring and fall migration. Led by Columbia graduate student, Katherine Chen, the team used NEXRAD radar to detect and count the number of birds migrating over the city at night and then examined correlations of night-



Photo credit: NYC Audubon



Left: New York City Audubon volunteer conducting a transect survey for birds killed by window collisions. Above: Risk factors associated with high collision rates in NYC during spring and fall migration.

ly migration intensity and weather conditions with the number of dead birds counted by citizen scientists on standardized survey routes along city sidewalks. The effort involved dozens of volunteers, five years of surveying, and two years of data analysis and interpretation, making it the first collision study of this scale. The findings, published in the *Journal of Applied Ecology*, show that northerly and westerly winds, low visibility (e.g., fog), and high migration traffic rates lead to increased collisions during the spring, and southerly and westerly winds, low cloud ceiling height, and high migration traffic rates lead to increased collisions during the fall. Low visibility alone was associated with a

three-fold increase in springtime collisions. When migrating birds encounter these inclement weather conditions over the city, they are more likely to terminate their flight and descend into the city's greenspaces to rest, which, in turn, increases the potential for collisions with windows during their layover.

"Lights Out" campaigns, which encourage building managers to limit outdoor lighting during migration, are one of the most effective tools for decreasing bird collisions by reducing the attraction of migrating birds to urban areas in the first place, but it is unrealistic to expect lights to be turned off throughout the entire spring and fall. The results

of this study, combined with weather forecasts and models developed by Cornell to forecast nightly migration intensity days ahead of time, will allow Lights Out efforts to instead focus only on the subset of nights in the migratory period that are predicted to have relatively high collision risk. This targeted approach will make building managers more likely to participate in Lights Out campaigns since it will require them to reduce light emissions only for days instead of weeks or months each migration season. If you would like to make the windows on your home bird-friendly, we recommend visiting BirdSavers.com for an inexpensive, effective way of reducing collisions.



Investigating the Effects of Invasive Plants on Forest Food Webs

Since 2016, Great Hollow has been studying the effects of the invasive shrub, Japanese barberry, on habitat quality for forest wildlife. One of the first things we discovered is that the insect community is different in barberry-invaded patches of forest than where native plants are still dominant. This could have important ramifications for insectivorous animals, such as songbirds, that depend on healthy invertebrate communities with which to feed themselves and their young. As such, we began studying whether

barberry influences the diet composition of birds by changing the relative abundance of different invertebrate species available to them. Our results, published this year in the *Canadian Journal of Zoology*, show that the diet of a common forest songbird, the ovenbird (pictured above), does not simply mirror changes in the menu of insects available to them in barberry-invaded habitats. By matching carbon and nitrogen isotope signatures in the birds' blood to those in different species of insects, we were able to

determine what the birds were eating and found the birds' diets to be nearly the same regardless of whether their nesting territory was loaded with barberry or native plants. This suggests the birds are adjusting their foraging behavior to find preferred prey items in response to changes in the relative abundance of different invertebrate groups caused by barberry. From previous research of ours, there do not appear to be energetic costs associated with any such compensatory change in foraging effort, so the oven-

birds seem to be easily obtaining their preferred prey in barberry-invaded forests despite barberry's effects on the invertebrate community. These latest findings join a growing body of evidence that Japanese barberry may not be having major impacts to native birds, despite how invasive and prevalent it is, and conservation resources intended to improve habitat quality for birds should perhaps be directed at other invasive plants instead.

In the next phase of our Japanese barberry research program,

begun in 2023, we are experimentally testing whether there are any short- or long-term benefits to native plants, insects, or birds from large-scale barberry removal. Funded by a generous grant from the Schumann Foundation, the experiment involves repeatedly surveying birds, insects, and plants before and after barberry is removed from six 1-acre study plots at Great Hollow. Led by Great Hollow post-doctoral fellow, Wales Carter, and research intern, Zach Nichols, the first surveys were conducted

throughout the summer of 2023 to collect baseline data on the species composition and diversity of plants, insects, and birds in the plots. The next steps will be to remove the barberry over the winter of 2023/2024 and then repeat the surveys the following summer and beyond to look for responses among the plant, insect, and bird communities.

Helping our Partners in Conservation Science

Great Hollow serves as a biological field station, meaning its land and facilities are available to external researchers to use for their work. Our staff sometimes also lends a helping hand to these scientists from other institutions by assisting them in the field or otherwise contributing to the research. In 2023, we were delighted to host researchers and conservation partners from Virginia Tech, the University of Connecticut, Wesleyan University, and the New York-New Jersey Trail Conference.

Going Batty

This summer, Great Hollow welcomed bat biologist, Dr. Mark Ford, and his graduate students from Virginia Tech as they traveled to Connecticut to cap-

ture bats for several ongoing studies. Their main goal was to capture little brown bats, a once-common species whose populations have been decimated by the disease, white-nose syndrome. Dr. Ford and his students are attempting to find and capture little brown bats at various sites throughout the eastern U.S. to collect DNA samples and assess the amount of genetic diversity remaining within the overall population. After a more than 90 percent crash from white-nose syndrome in recent years, scientists are concerned about genetic diversity loss and possible inbreeding effects that could hinder the species' ability to recover. They are also interested in finding out if there is anything genetically unique about the surviving bats that distinguishes them from the mil-

lions that have died from the disease. Dr. Ford's team captured little brown bats at Great Hollow using mist-nets set up near our bat boxes and a few suspected foraging areas around the preserve. After safely removing them from the net, the researchers collected a skin biopsy from the wing to analyze for DNA, recorded their sex, weight, and signs of reproductive activity, marked them with a small tag, and then released them unharmed. The data collected at Great Hollow will help the team understand the genetic diversity of the little brown bat population in western Connecticut/southeastern New York as they continue to fill in the blanks across the species' entire eastern U.S. range.

Below and right: Virginia Tech biologists and students collecting data from Great Hollow's bats for a population genetics study.





Can Amphibians Take the Heat?

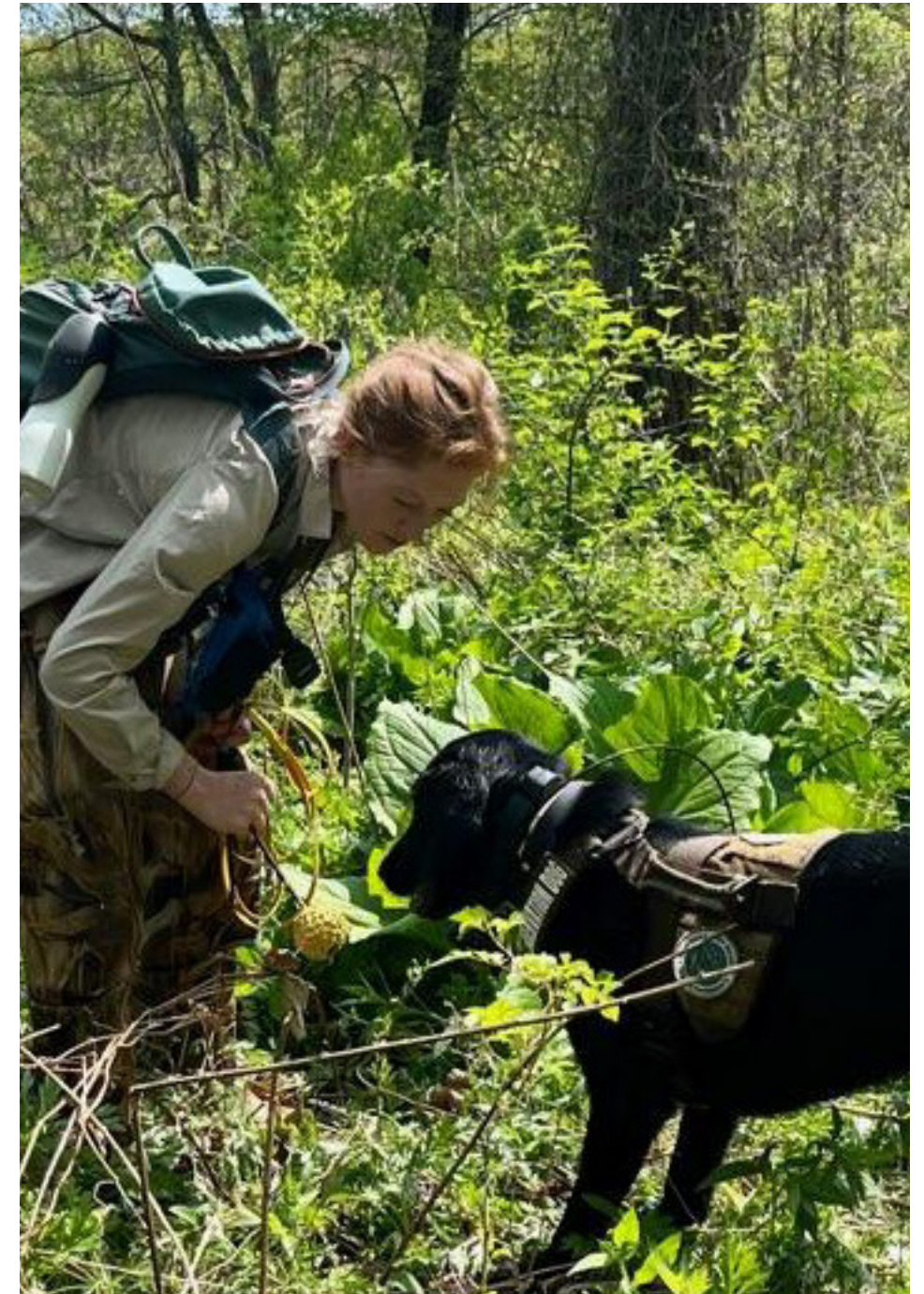
Climate change is causing increasingly severe temperature extremes around the world, exposing wildlife to unfamiliar thermal conditions. Recently discovered links between an animal's physiology and the beneficial bacteria and other "microbiota" in their gut suggest an animal's ability to cope with future climates may be partly dependent on the effects that environmental temperatures have on their gut microbiota. "Cold-blooded" animals, like amphibians, may be particularly sensitive to climate change because their body temperatures are

dictated by the temperature of their environment. To investigate potential effects of climate change on the gut microbiota of amphibians, Great Hollow participated in a collaborative study led by UConn doctoral student, Grace Vaziri, that tested whether the gut microbiota of wood frogs are resilient to the high temperatures to which frogs will be exposed under projected climate change scenarios. Using wood frogs sampled from South Carolina to Vermont to represent populations adapted to various local climates, Grace and the team

exposed frogs to a range of predicted future temperatures in mesocosms at UConn and then examined changes in the species composition and diversity of the frogs' gut microbiota. Regardless of the local climate from which the frogs came, the study found high temperature exposure to have no effect on the frogs' microbiome. These encouraging results suggest amphibian gut microbiota and the myriad benefits they provide to their hosts may be tolerant of future temperature extremes associated with global climate change.

It's a Dog's World

Conservation dogs have become an increasingly common and powerful tool in the effort to protect rare and endangered species. Much like their canine counterparts at police departments and search and rescue agencies, conservation dogs are trained to use their powerful sense of smell to track down species of wildlife that are too elusive for people to reliably find with traditional survey methods. When the New York-New Jersey Trail Conference needed to find wood turtles with which to train their new conservation dog last summer, they knew just who to contact. Great Hollow has been studying and monitoring wood turtles at various sites in the Hudson Valley for years, so we knew where they could be reliably found. Trainer, Arden Blumenthal, and her 2-year-old Labrador retriever "Peat" spent a day in the field with Great Hollow's then-naturalist, John Foley, who was able to track down wood turtles for Peat to smell and then practice finding. Peat can now search new sites for possible wood turtle populations in a fraction of the time and with much greater accuracy than human surveyors. She's also trained on eastern box turtles, New England cottontails, and several other species of conservation concern that can prove very difficult for researchers to find. We're pleased to have aided in her training so she can now help identify occupied wood turtle habitats to prioritize for conservation.



Left: Mesocosms set up at the University of Connecticut to study the effects of climate change on the gut microbiome of frogs. Above: Conservation dog and trainer, Arden Blumenthal, learning to find wood turtles with help from Great Hollow.

What's Killing All the Beech Trees?

In the summer of 2022, Connecticut's American beech trees became widely infected with a parasitic worm-like nematode that was first observed in North America in 2012 in Ohio and has since spread to several eastern states. Most of Great Hollow's beech trees suddenly showed signs of se-

vere infection, including withered, crinkled leaves. Termed "beech leaf disease," the infection limits the ability of leaves to photosynthesize, which can cause poor regeneration and even tree death. Because beech leaf disease is so new to our forests, little is known about the long-term effects

it will have on forest composition and wildlife. To begin monitoring the effects of beech leaf disease on Great Hollow's forest, Wesleyan University professor, Dr. Helen Poulos, undergraduates, Paul Kraut, Maxwell Mae-vus, and Hannah Gorevic, and Great Hollow's post-doctoral research fel-



Infected beech leaves

low Dr. Wales Carter collected data on the infection status and nematode load of our beeches, measured photosynthetic capacity of infected leaves, and measured canopy cover, total basal area, and beech seedling and sapling density in several study plots in the summers of 2022 and 2023. They also surveyed birds in the same areas. These data represent a valuable baseline for future comparison so the researchers can track the effect of the nematode on individual beech trees as well as the composition of the forest as a whole, over time.

2023 SCIENTIFIC PUBLICATIONS

Chen, K., S.M. Kross, K. Parkins, **C.L. Seewagen**, A. Farnsworth, and B.M. Van Doren. 2023. Heavy migration traffic and bad weather are a dangerous combination: bird collisions in New York City. *Journal of Applied Ecology*, in press.

Carter, W.A. and **C.L. Seewagen**. 2023. Alteration of a temperate forest invertebrate community by invasive Japanese Barberry (*Berberis thunbergii*) has limited influence on the diet composition of territorial Ovenbirds (*Seiurus aurocapilla*). *Canadian Journal of Zoology*, in press.

Seewagen, C.L., J. Nadeau-Gneckow, and A.M. Adams. 2023. Far-reaching displacement effects of artificial light at night in a North American bat community. *Global Ecology and Conservation* e02729.

*Great Hollow staff in bold

Birds of Great Hollow

Great Hollow frequently surveys birds at our preserve for various research projects and monitoring efforts. Sometimes they sit just long enough to grab a great picture. These are some favorites from the past year.

Eastern phoebe



Pine warbler



Red-winged blackbird



Bald eagle



Red-shouldered hawk



Ruby-throated hummingbird



Black-and-white warbler



Rose-breasted grosbeak



Eastern bluebird



Great blue heron



Northern mockingbird



Tree swallows



Pileated woodpecker



Common grackle



House finch



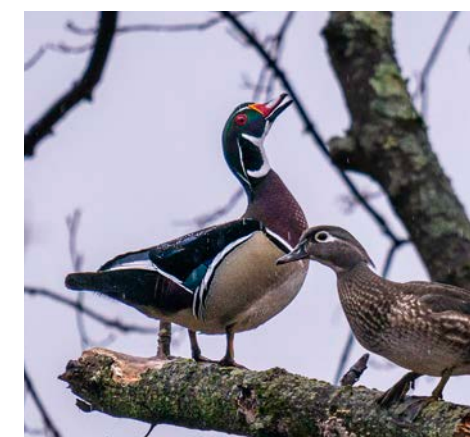
Baltimore oriole



Yellow warbler



Wood ducks



Common yellowthroat



Eco-Discovery Camp

Great Hollow's Eco-Discovery Camp has grown from the humble beginnings of a handful of local children in 2017 to a nine-week program serving one hundred children from five states in 2023. From the start, our camp has been focused on providing children with quality outdoor time exploring our trails, wading through Quaker Brook, playing games, forming friendships, and making lasting

connections to nature.

Each year camp director Tara Ewers and her staff strive to make the summer even better than the one before. In the years since our camp began, we have added staff, expanded curricula, increased hands-on activities, built in more self-directed play, and installed a five-senses vegetable garden that campers learn to maintain themselves. The last couple of years have seen every week of camp at or near capacity. We're happy to say that 2023 was no exception, and

in fact, was our busiest summer yet. This summer also saw the addition of a couple of new weekly themes, Pollinator Pals and Budding Artists, as well as the return of a few perennial favorites, such as Survival Week and Water Exploration Week. Believe it or not, preparations for the 2024 camp season began only two weeks after the 2023 season concluded. We are already looking forward to seeing our returning families and welcoming in many new ones. See you next summer!





Meet Our New Naturalist

This year we were pleased to welcome Great Hollow's new steward and naturalist, Ben Lee, to be our lead on land management, trail and grounds maintenance, and community outreach. Ben brings a range of experience with land management and strong knowl-

edge of northeastern wildlife, plants, and ecosystems. His primary area of expertise is insect ecology. Ben received a B.S. in Conservation Biology from the State University of New York College of Environmental Science and Forestry (SUNY-ESF) in 2016 and then worked as a biological technician for Cornell University and the Centers for Disease Control, respectively assisting

with research on insect-pest management and mosquito transmission of malaria. Prior to joining Great Hollow, he also led environmental outreach programs for SUNY-ESF and a local summer camp, and looks forward to offering many interesting and engaging programs for the public at Great Hollow. Welcome, Ben!



Volunteer Spotlight



Volunteers are an invaluable part of Great Hollow's workforce, and we are fortunate to have had so many people from our local communities offer their time and skills to our needs over the years. Here, we recognize two of Great Hollow's longest-serving volunteers, Claudia Henry and Jen Andrews, for their unparalleled level of commitment to caring for our education animals, and Scout Troop 137 of New Fairfield for their seemingly endless stream of outstanding service projects.

Claudia and Jen (pictured bottom right) have been helping care for our non-releasable birds of prey for nearly three consecutive years. Multiple days a week, regardless of whether it is a holiday or snowing, freezing, hot and humid, or raining, they show up with incredible reliability to feed, water, and clean up after our resident hawks and owls. Disposing of half-eaten carcasses of mice and rats, prepping the next day's meals of said mice and rats, and hosing down messy enclosures is nowhere near as glamorous and fun as it sounds, and yet Claudia and Jen tackle the tasks day-in and day-out with the utmost professionalism. Thank you, Claudia and Jen, for your years of dedication and tender loving care of our winged ambassadors.

Great Hollow has also been the beneficiary of outstanding volun-



Above: Liam Hearty and fellow Scouts installing nest boxes for wood ducks. Left: Rohan Venugopal and other Scouts from Troop 137 making bird collision deterrents for Great Hollow's windows.

teer service projects by Scout Troop 137 of New Fairfield every year since our founding, and 2023 was certainly no exception. We are always amazed by the myriad skill sets exhibited by the Scouts every time they undertake a new project. This year, for their Life Projects, Liam Hearty built and installed nest boxes in Great Hollow's wetland to attract wood ducks while Connor Welsh gave our pollinator garden a much-needed makeover, laying down new mulch and clearing out weeds and debris. The pollinator garden was looking better and fuller than ever during the 2023 growing

season and will be full bloom again in the spring. Matthew Crisci, Jacob Mattiace, and Blu Arbesman worked hard to help us keep up with trail maintenance this summer while we were understaffed, cutting back overgrowth and building some well-crafted boardwalks over wet areas. For his Star Project, Ryan Hearty re-landscaped the area around our birds of prey signage, getting things looking like new again. As a Life Project, Rohan Venugopal designed and installed bird deterrents on the many large windows of Great Hollow's Merritt House to reduce fatal collisions. Normally we

witness or find evidence of numerous birds dying from collisions with the building's windows over the course of the year, but we have yet to experience a single collision ever since Rohan installed the deterrents. Rohan's design makes the deterrents not only highly effective, but easy to remove during the summer and winter, when collision risk is low (for information on how you can easily create something similar for your home, please visit BirdSavers.com). Thank you, Scouts, for your terrific work and outstanding service this year!

Raptor care volunteers Jen Andrews and Claudia Henry (left to right)



Seasonal Staff

A key part of Great Hollow's workforce is our seasonal staff, who provide critical support to our full-time educators and scientists during the busy summer season. This year, we were pleased to have Zach Nichols join us as a research and stewardship intern, and Tallulah Comaskey and Samantha Baud return as camp instructors. Zach had recently graduated from Western Connecticut State University with a B.S. in Biology and was looking for opportunities to gain hands-on experience with field research before applying to graduate school. As our 2023 summer research intern, Zach played an important role collecting data for our new study of the effects of Japanese barberry re-

moval on native plants, insects, and birds. In addition to assisting with field research, Zach took on many other tasks involving trail maintenance, groundskeeping, facilities maintenance, and animal care while our full-time steward position was vacant for much of the summer. He really stepped up and was happy to help in any way help was needed. Zach is currently working as an education assistant in the Biology Department at Naugatuck Valley Community College and planning to soon pursue a graduate degree in biology. We wish him great success in his future endeavors.

We were thrilled to have Tallulah Comaskey return for her second summer at Great Hollow and serve as our assistant camp director. Tallulah recently received her B.A. in Art from Western Connecticut State University

and wasted no time injecting her artistic talents into our camp's arts and crafts program. She inspired campers to keep a nature journal throughout their time at Great Hollow and oversaw the creation of mini masterpieces all summer long. Sam Baud joined us this year as a new counselor and quickly became an integral part of the Eco-Discovery Camp staff. Sam is currently working towards a degree in Elementary Education from SUNY Oneonta and has used her time at Great Hollow to gain some hands-on experience with science and outdoor education. Sam was loved by this summer's campers for her organization of daily games and the exploration of our trails and streams. We thank Tallulah and Sam for their hard work and dedication to giving our campers a summer they will never forget.

Left to right: Sam Baud, Tallulah Comaskey, Zach Nichols



Fare Thee Well

This year we said farewell to our longtime naturalist and steward, John Foley, as he set off on new adventures in the Virgin Islands to start his own nature guide and photography business. John was Great Hollow's first employee, hired upon our founding in 2016 to restore the property's former trail network, blaze new trails, beautify the campus grounds, and repurpose the historic houses and

barns for use as program rooms, research space, offices, and staff housing. The Great Hollow you see today is largely the result of John's hard work over the past seven years. All the while, he developed and led countless outreach programs that attracted a loyal following of regulars as well as a constant stream of newcomers. He also conceptualized and coordinated many of the community events that have become so popular over the years, such as the concert on the lawn series, Jazz Night on the Patio, and our

fall festival, HollowFest. For anyone familiar with our social media outlets (and these annual reports), you know John routinely captured some of the most amazing photographs of the wildlife and landscapes of Great Hollow. While we were sad to see him go, we are equally excited about the possibilities the future holds for him and wish him the best in his new ventures. Thank you, John, for so many years of dedication to Great Hollow and the communities we serve.

With Thanks and Acknowledgment

Great Hollow is grateful to the donors, members, local businesses, volunteers, and program participants whose support in 2023 furthered our efforts to advance environmental science, education, and conservation in Connecticut and beyond.

Donations were generously made by Julie Burnett-Toscano, Allison Crow, Valerie Fernand, Friends of the Great Swamp, Jaime Garamella, the Gerow Cemetery Association, the Goldring Family Foundation, the David M. Gropper, MD Charitable Giving Fund, Marisa Guthrie, Fred Jacobs, the Ada Howe Kent Foundation, Jeffrey Kilberg, the Amy McIntosh/Jeffrey Toobin Charitable Foundation, Alice McCaleb, Suzanne Murdock, HelenAnne and Bob Ostrosky, Carol Paterno, Ariana Pavon, Renee Rhodes, Shari Rosenberg, Donald and Cindy Tanenbaum, and many anonymous supporters. Symbolic adoptions of our non-releasable birds of prey were kindly made by Allison Crow, Alice

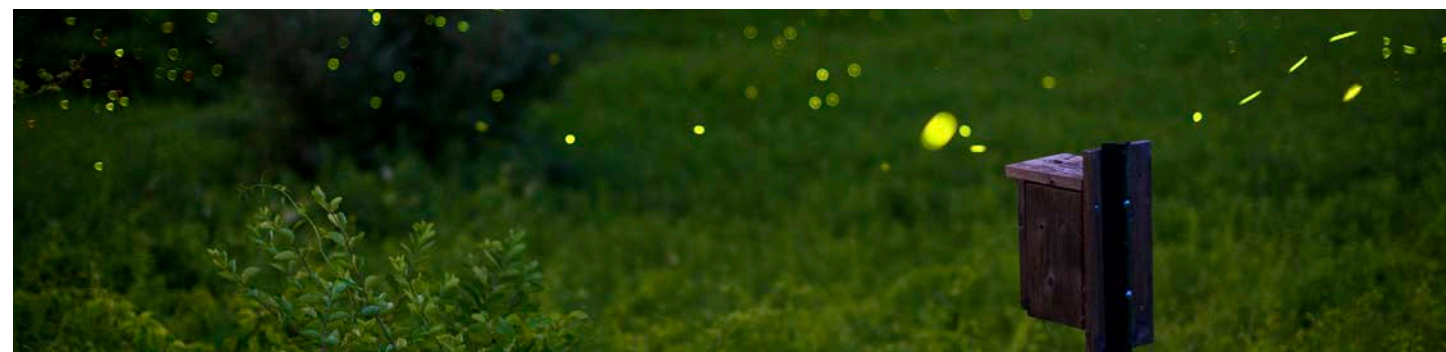
McCaleb, Shari Rosenberg, Renee Rhodes, Brady Shields, and Marcia and Hugh Anderson in loving memory of their son, Tom. Grants were received from the Schumann Foundation for our research on the responses of plant, insect, and bird communities to Japanese barberry removal, and the Connecticut Department of Energy and Environmental Protection for our research on the effects of light pollution on bats. We also received a generous grant from the New Fairfield Economic Development Commission to support operations.

We thank Christy Bonaiuto, Phyllis Chadwick, Carolyn Cohen, Jeff Ginsburg, Justin Goodhart, Lisa Hickey, Linda Hubbard, Susan Locke, Mary Jane Magoon, John O'Donnell, Masumi O'Donnell, and Gary Sanford for organizing the 2023 Juried Art Show, Betty Ann Medeiros and Candi Valeri for serving as jurors, Friends of the Great Swamp for loaning their panels and burlap covers, and the Sherman Artists Association for financial support of the show. Art Show prizes were kindly donated by New Milford Tennis and Swim Club, Visual Impact,

Agway of New Milford, Claire's Garden Center, The Sherman IGA, American Pie Restaurant, Bank Street Theater, Barn Gallery & Frame Shop, Biscotti's, Bruno's Pizzeria, Fairwood Wines & Liquors, Haviland Hollow Wine, LAND Gallery, New Fairfield Liquors/Sherman Wine and Spirits, New Fairfield Yoga & Wellness, New Milford Fitness and Aquatics Club, Painted Lemon Restaurant, Pappadella's Restaurant, and Sacred Grounds Coffee.

Additional friends of Great Hollow who volunteered their valuable time to help with events, stewardship, research, or raptor care included Jennifer Andrews, George Buck, Claudia Henry, Ella Liebel, Francesco Miniello, and Alton Spencer. We also extend our sincerest thanks to Dr. David Gropper for volunteering as our camp physician for the 7th straight year, and Phoebe McCartney, Izzy Bova, Katie McMorrow, Sarah Lippman, Anne Johnson, Raymond Malanga for their help with camp as counselors-in-training. We thank Boy Scout Troop 137 for all of the great service projects they completed this year (pages 20-21).

Time-lapse photograph of fireflies



2023 Members

Merritt Club

Gary Goldring | Henry and Sabine Renard | Amy McIntosh and Jeffrey Toobin

Quaker Brook Club

Jaime Garamella | Donald and Cindy Tanenbaum

Sponsor

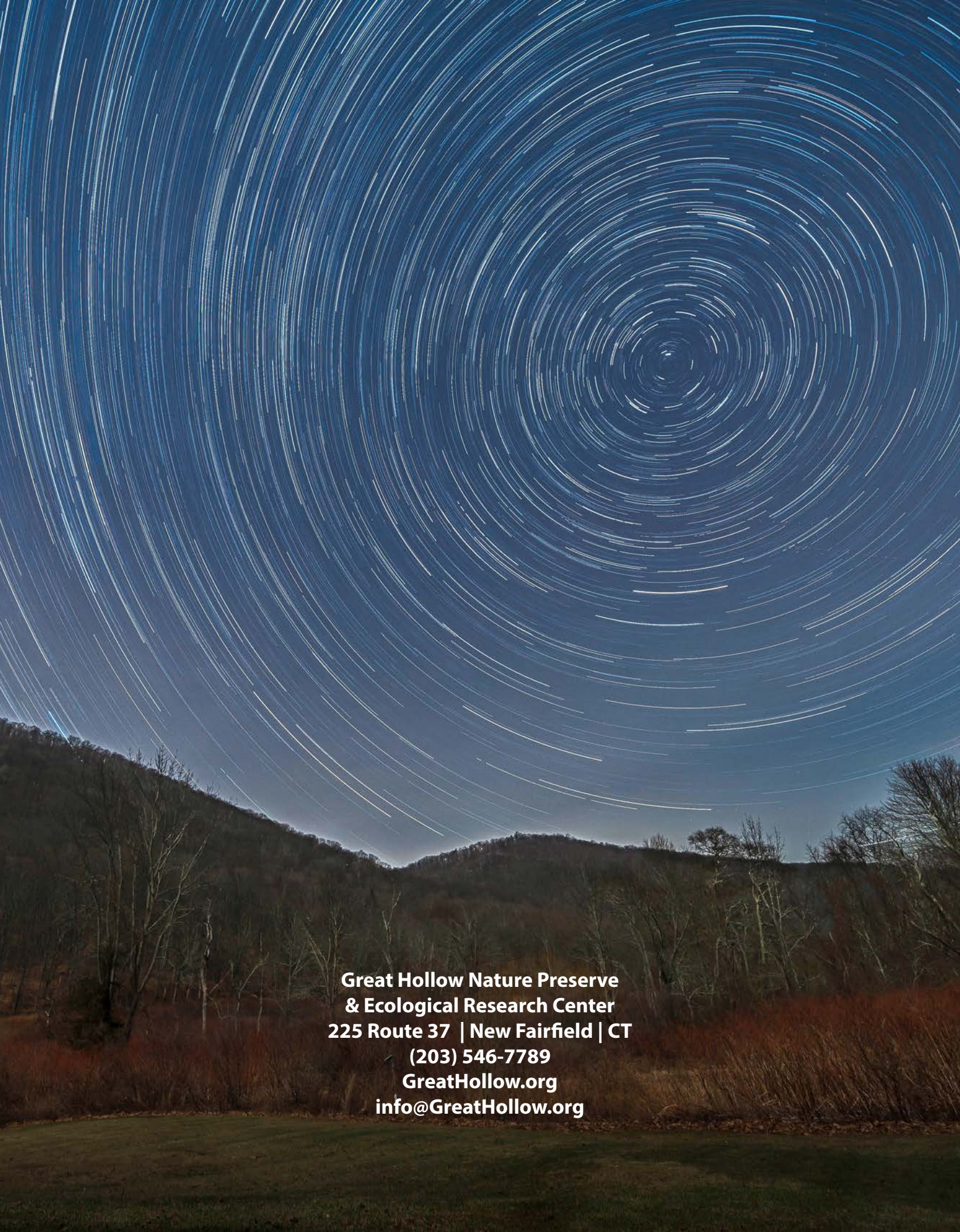
Carol Paterno

Family

Andrea Barry | Adeline Carey | Natasha Ciminello | Fleur Fairman | Katie Firth | Aine Fitzpatrick | Jaime Garamella | Christina Guffee | Linda Hubbard | Winsome Jeffries | Jeffrey Kilberg | Brittany Kozlenko | Kim Laughlin | Kristina Leonetti | Jessica Lincoln | Dawn Lippman | Dawn Maguire | Tara O'Brien | Steven Pitt | Anita Raja | Michelle Ravich | Andrew Wallach | Karen Zeilhofer

Individual

Ann Arbeit | Alice Beltran | Julie Burnett-Toscano | Sue Carbone | Margaret Cook | Melissa Cook | Michael Damici | Margaret Ditullio | Robert Doscher | Jeanne Farewell | Carol Frey | Owen Gaston | Jeff Ginsburg | Karen Golden | Susan Goldsmith | Justin Goodhart | David Gropper | Cathy Hagadorn | Kathleen Harpster | Mark Harpster | Michael Horowitz | Becky Hrdy | Cliff Jensen | Madhavi Kanetkar | Parag Kanetkar | James Kingry | Gwen Leibel | David Lowenherz | Jeanne Maloney | Melanie McCarthy | Christina McCartney | Jane Moloney | Sharon Nakazato | MaryAnn Naughton | Cynthia O'Connor | HelenAnn and Bob Ostrosky | Steven Purtle | Brendan Quinn | Mary Ann Raph | Mark Savoia | Laurie Schultz | Michelle Sikorski | Suzanne Telsey | William Toffey | Tee Vozella | Stephanie Warren



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