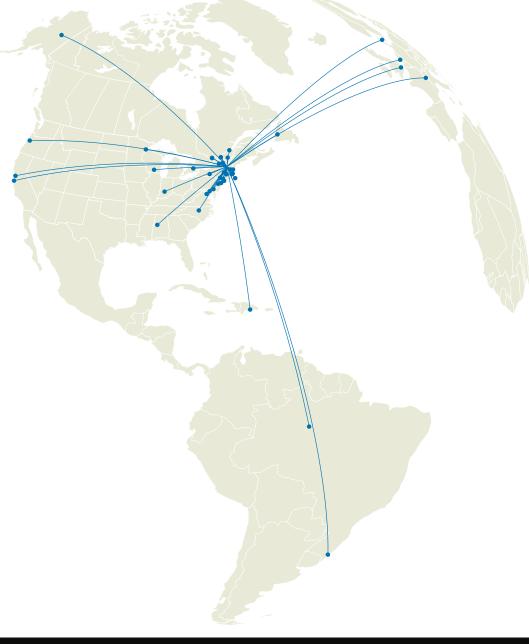


Our Collaborators

and Yours

**VCE** promotes biodiversity conservation through collaborations that span state and national boundaries. Every year we join forces with government agencies, universities, and other nongovernmental organizations on both short-term research projects and long-term initiatives, such as the **Shorebird Collective,** the Automated Insect Monitoring Group, the International Bicknell's **Thrush Conservation** Group, and the Status of Insects Research Coordination Network. Your involvement in our work, as community scientists and financial supporters, makes these partnerships possible. That's why we think of you as part of our international network of collaborators.



#### **BOARD OF DIRECTORS**

Flavia Barros
Peter Brooke, Chair
Celia Chen
Nan Cochran
Bill Hayes, Treasurer
Bob Holley
Stephanie McCaull, Vice Chair
David McKenna
David Mears
Alanna Ojibway
Jennie Savage, Secretary

Cover photos:
Front: © ELEXA PHILLIPS
Back: © FIONA LEE MACLEAN

Writing: TOM CLYNES
Design: WENDY MCMILLAN

#### **STAFF**

EXECUTIVE DIRECTOR
Susan Hindinger

ASSOCIATE DIRECTOR
Dan Lambert

ADMINISTRATION Mistie Boule Toni Luff

DEVELOPMENT Laura Prothero Alyssa Fishman Elexa Phillips COMMUNICATIONS Emily Anderson Alexandra Johnson Rachel McKimmy

CONSERVATION SCIENCE Ryan Rebozo Steve Faccio Eloise Girard Jim Goetz Mike Hallworth Eric Hanson Spencer Hardy Jason Hill Amber Jones Brian Kron
Jason Loomis
Megan Massa
Kent McFarland
Desirée Narango
Onome Ofoman (ECO

AmeriCorps)
Anna Peel
Allison Radin
Juno Stahl
Kevin Tolan
Dana Williams
Sara Zahendra





#### Dear VCE friends and supporters,

2024 was a year of remarkable evolution for the Vermont Center for Ecostudies. Thanks to you—our steadfast volunteers, donors, and partners—we've scaled up our ambitions and our capacity intentionally and decisively. The result is a more impactful VCE, ready to meet this moment of urgent conservation need with renewed energy, deeper expertise, and a larger, more inclusive community of collaborators.

The year also marked a significant milestone as Peter Brooke retired from the VCE board. Chair for 12 of his 13 years of service, Peter led VCE through significant growth, the pandemic, the retirement of our founding director, and our first major fundraising campaign. We are so grateful for his thoughtful and passionate dedication to our mission.

With your support, we completed our \$5 million capital campaign in 2024, enabling us to add key staff positions, improve our internship program, and create new opportunities for mentorship and leadership among the next generation of ecologists. Our research continues to inform conservation, this year through a nationwide collaboration to conserve wild bees and a new study about the interactions of native plants and pollinators.

This growth reflects a shared belief across our entire constituency that

VCE's work matters—and that it must continue even as traditional sources of public conservation funding falter. In this landscape, your private support is more critical than ever. It allows our scientists to pursue promising ideas before grant dollars are available, sustain long-term studies, and lead where others follow. For example, our moth and tick studies, which began as curious explorations, are now yielding essential insights into biodiversity loss and climate change. This kind of agility is only possible because of you.

Our expanded capacity has also positioned us to play a larger role in public policy and the national conversation around biodiversity. We are now collaborating with a growing network of policy-facing partners to bring our data and your voice to the places where decisions are made.

Whatever challenges we meet in 2025, we know that VCE is made for this moment. Our collaborative spirit and enduring commitment to conservation science are more vital than ever. With your continued partnership, we'll keep redefining what's possible.

With deep gratitude,

Susan HINDINGER

SUSAN HINDINGER Executive Director Dalken

DAVID MEARS

Board chair

The result

is a more

of urgent

need with

expertise.

and a larger,

renewed

impactful VCE.

ready to meet

this moment

conservation

energy, deeper

more inclusive

community of

collaborators.

## Peter Brooke Explorers Fund Honors Legacy, Inspires Future Naturalists

VCE is proud to honor a leader who has helped shape our growth, mission, and spirit over the past decade. As Peter Brooke steps down after 13 years on our board, we've launched a new initiative to carry his legacy forward.

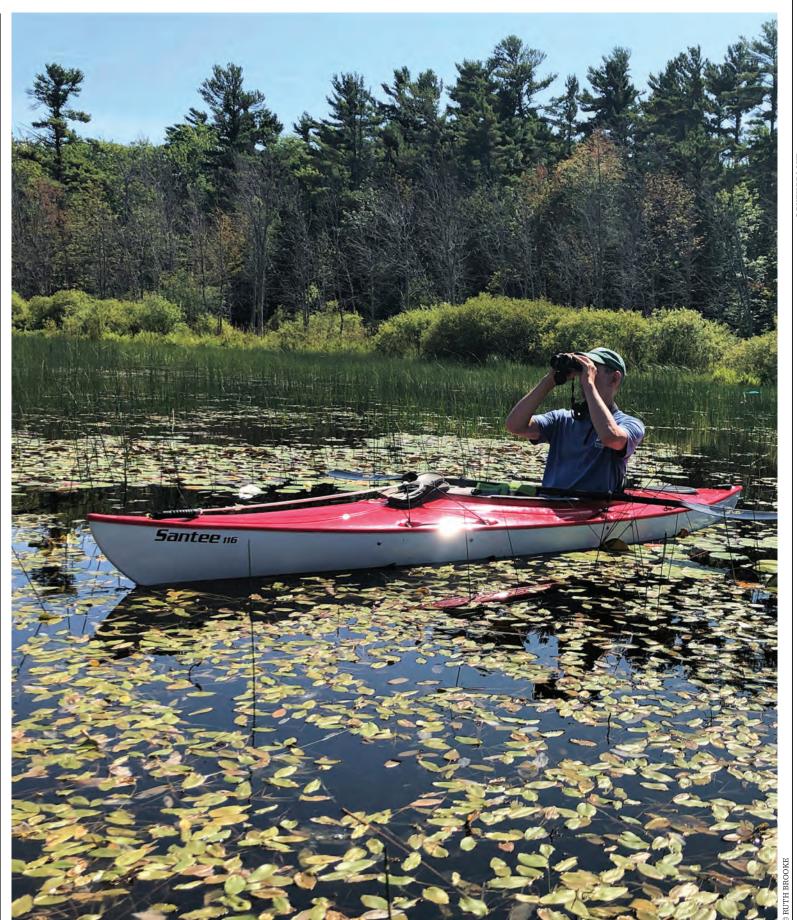
When Peter Brooke first tagged along on a VCE visit to Mount Mansfield in 2010, no one could have predicted the impact he'd have. But in the years that followed, he brought not only steady leadership, but also boundless enthusiasm, strategic clarity, and a deep reverence for nature.

The Peter W. Brooke Explorers
Fund will support the next generation of
naturalists through internships, youth
science awards, and community science
projects that reflect Peter's passion for
wild places and the people who protect
them

"Working with Peter in common cause ranks among the most satisfying and exhilarating board experiences I've had," says Jared Keyes, another former board member whose legacy endures.
"The best thing I ever did for VCE was to pull Peter onto the board."

The fund has already raised \$350,000 and is poised to power a decade or more of inspired exploration. To contribute, please contact Susan Hindinger or Laura Prothero.

peter's passion for wild places (right) and the people who protect them inspired the launch of a new initiative in his name that will support future naturalists.



## A Conversation with Peter Brooke



## VCE has benefited in many ways from your leadership. What has your involvement in the organization given you?

It's given me a sense of hope. VCE is one place my mind can go that doesn't spiral into despair. Even when the data aren't encouraging, VCE shines light on what's happening and how we might make things better. That's a rare and valuable thing—and I think many supporters, whether they give time or money, feel the same way.

## Is your passion for the outdoors and the natural world what drove you to get involved with VCE?

Yes—and once I got involved, that passion only deepened. My childhood friend Jared Keyes, an early board member, introduced me to VCE. Growing up together, when his brother was blasting Jimi Hendrix in the next room, we were listening to "A Field Guide to Bird Songs." I've always been drawn to bird migration and birdwatching, which initially attracted me to the organization. But once I became more deeply involved, I discovered things like dragonflies and vernal pools even a vernal pool on my own property, which I monitor for VCE's Vernal Pool Monitoring Project.

One of VCE's summer trips sparked a fascination with moths. Now, I'm fully immersed in "moth world." I set up my black light nearly every night I'm home, observing and documenting what shows up. It's not just fun—it's nourishing. Some people wind down with TV or a book; I end the day under the moth light. It calms me and engages my curiosity in a way that feels deeply sustaining.

## You've seen VCE grow significantly during your tenure. Has the organization been able to retain its personality and some of the early attributes that attracted you to it?

When I started, there were just seven employees. It was the little engine that could—tight-knit, mission driven, and all hands on deck. That spirit hasn't changed. What's changed is that VCE has grown thoughtfully and progressively, without losing its soul

I've always admired how VCE stays committed to long-term monitoring, even when other organizations might chase more fundable trends. That kind of work isn't always flashy, but it's essential—it gives us the high-quality answers we need to understand and respond to complex challenges.

#### How do you feel about the fund that has been established in your name and the endeavors it will support?

It means a lot, and I credit the board for the idea. I'm thrilled that this fund will support the next generation. I've seen young scientists come in with fresh ideas and tremendous energy. If we can attract and support more of them, it gives me real optimism for the future.

#### Any parting words?

Serving with VCE's board—past and present—has been one of the great pleasures of my life. These are thoughtful, committed people. Add in the ambition of the staff, and the generosity of donors and volunteers, and it's an amazing team.

|4|



## Building Conservation Capacity in the Caribbean

With Bicknell's Thrush populations down 50% over the past 15 years, it's more important than ever to understand causes of decline and strengthen the capacity of local leaders to protect critical habitat. This year, we made major strides on both fronts. We continued our conservation research and offered innovative learning experiences to our Caribbean partners and their professional networks.

Boosting conservation capacity in the Caribbean took the form of three online courses and two in-person workshops at biodiversity conferences: one in Santo Domingo, Dominican Republic, and one in Quito, Ecuador. More than 80 students and conservation professionals from across Latin America and the Caribbean received hands-on experience using the Conservation Standards adaptive management framework.

"As important as field skills are," says
Caribbean Coordinator Jim Goetz, "real
impact comes when conservationists know
how to work with partners to design and run
projects from the ground up. That means
finding a common vision, securing funding,
developing workable strategies, setting goals,
evaluating success, and sharing what they
learn so that everyone can build on it."

According to Goetz, many participants immediately start using the principles and practices to improve their current projects. To leverage and expand the gains even further, he is fostering a network of local practitioners

"As important as field skills are, real impact comes when conservationists know how to work with partners to design and run projects from the ground up."

JIM GOETZ
CARIBBEAN COORDINATOR

use binoculars and locate birds during a Conservation Standards workshop at Reserva Zorzal in the Domincar Republic in January 2025.

**▲** Participants

learn how to

who have already begun to share ideas and experiences to accelerate their learning.

Meanwhile, our research team continued critical fieldwork with support from the U.S. Forest Service International Programs, deploying solar-powered radiotelemetry tags on Bicknell's Thrushes in the Dominican Republic. In past years we had collected more data on male thrushes than on females—simply because they tend to be more aggressive and thus easier to capture. In 2024 we increased our focus on capturing female thrushes to better understand their ecology throughout the full annual cycle.

Using the expanding Motus receiver network and transmitters that last for years allows us—for the first time ever—to track females throughout their lives, helping to reveal where in the annual cycle female survival is lowest and where conservation work can help most. Early results point toward a survival bottleneck for females during migration between the mid-Atlantic region of the U.S. and Hispaniola.

## WHAT'S NEXT IN 2025

- ➤ Collecting high-resolution Bicknell's Thrush migration data from a new Motus station in the Dominican Republic, which will help estimate rates of overwinter survival
- Expanding in-person and online training in adaptive management and conservation leadership
- > Fostering a Caribbean conservation network through regular practitionerled learning activities
- > Continuing migratory bird research at Reserva Zorzal, including an investigation into diet differences between female and male Bicknell's Thrushes

#### Training Tomorrow's Leaders in Caribbean Conservation



Professional development has always been central to VCE's mission—whether through internships, fellowships, or informal mentorships. During the summer of 2024, we advanced that commitment through our Caribbean program, which focuses on strengthening avian conservation in the Greater Antilles. With support from the U.S. Forest Service International Programs, we continued training international collaborators, welcoming Dominican colleague Hodali Almonte to Vermont. Her visit deepened her expertise in Bicknell's Thrush conservation by connecting her with the species' full annual cycle and fostered stronger partnerships and brainstorming with VCE scientists Jim Goetz, Desirée Narango, and Mike Hallworth.

|6|

#### **Loons on the Rise:**

### Vermont's 2024 Season Breaks Records

Vermont's loons are making headlines—and history. Once nearly gone from the state's lakes, these iconic birds have rebounded thanks to decades of coordinated conservation work by scientists, volunteers, lake communities, game wardens, and dam operators. The 2024 season marked a new milestone in what has become one of Vermont's greatest wildlife comeback stories.

Four decades ago, the haunting cry of the Common Loon was rare on Vermont's lakes. Today, thanks to a remarkable conservation effort, loons have made one of the state's most inspiring wildlife recoveries.

In 2024, biologist Eric Hanson and the Vermont Loon Conservation Project—a partnership between VCE and the state's Fish and Wildlife Department—had reason to celebrate. "This year, we identified 157 territorial pairs and 123 nesting pairs—the most ever recorded," says Hanson. Loons are now found on nearly every large lake in the state.

Of the 123 nesting pairs, 85 successfully hatched chicks, producing 125 hatchlings. Yet the season was not without its challenges. For the second consecutive July, heavy rains flooded nests, and 12 were lost. Chick survival dipped to 65%—below the two-decade average of 76%.

"Even with the lower chick survival, Vermont's loon population is growing," Hanson says. "A decline in chick survival is natural as loons compete for the best territories."

Flooding isn't the only threat. Lead poisoning from lost sinkers and jigs remains deadly. This year, VCE's loon program rescued three loons, including one adult female poisoned by lead. "It's a heartbreaking but important reminder of why getting lead tackle out of lakes is crucial," says Hanson.

The foundation of the project's success has been an extraordinary network of people. "We have thousands of loon-aware volunteers, boaters, and lake residents who have dedicated themselves to helping loons thrive in Vermont," Hanson says. The effort shows no signs of slowing as the project approaches its 50th anniversary in 2027.

Beyond protecting nests, the work carries broader meaning. "In the short term, we're helping loons hatch chicks," Hanson says. "In the long term, I hope loons inspire action on bigger issues—like water quality, protecting riparian areas, and climate change."

Vermont now has one of the continent's most detailed loon datasets, and VCE's loon biologists collaborate with three continental working groups to share research and strategies. Each working group has published reports and peerreviewed publications that have informed threatened and endangered species listings, loon recovery plans, and other conservation measures across the northern states and Canada.

"There's still so much to learn,"
Hanson says. "But we have learned that
creating a recovery plan and supporting its
implementation can make all the difference
for the loon population."

#### **WHAT'S NEXT IN 2025**

- Improving our ability to obtain and process toxicology samples from rescued birds
- > Streamlining our necropsy protocols when loon mortalities occur
- > Completing a five-year effort to upgrade nesting rafts, deploy nest warning signs, and collect lead tackle

"Even with the lower chick survival, Vermont's loon population is growing."

> ERIC HANSON VCE LOON BIOLOGIST



A Eloise Girard, a seasonal biologist with VCE's Vermont Loon Conservation Project, cradles a rescued loon after her first icy rescue mission.

➤ A nesting loon checking out the work of Eloise Girard and volunteers as they place loon nesting signs



2024

BY THE NUMBERS

COMMUNITY SCIENCE PROJECT VOLUNTEERS



MOUNTAIN BIRDWATCH

111

BUTTERFLY ATLAS

1,187

VERMONT LOON CONSERVATION PROJECT

350

WHIP-POOR-WILL PROJECT

25

VERNAL POOL MONITORING

125

FOREST BIRD MONITORING

29

EASTERN MEADOWLARK MONITORING

45

9

|8|



**Plant Provenance:** 

### VCE's Boost to Pollinator Conservation

Six experimental gardens are sprouting across Vermont and New Hampshire, marking the start of a pioneering study by VCE in partnership with the Native Plant Trust. With more than 1,000 native plants from three different U.S. regions—the Northeast, Midwest, and Southeast—this project tackles a longstanding question in conservation: Does a native plant's origin affect its ability to support insects?

"This is the first experiment of its kind in the U.S.," says VCE Conservation Scientist Desirée Narango. "We're asking whether pollinators and herbivorous invertebrates prefer plants that are locally adapted. Until now, no one's really tested that in North America."

The initiative comes at a critical moment. Insect populations, and pollinators in particular, are in decline globally due to habitat loss, pesticides, invasive species, climate change, and disease. Planting native plant species can help—but much of the stock sold in nurseries is grown from seed originating from distant places. Scientists have long suspected that local ecotypes (plants sourced from the local ecoregion) might better support local insects, but studies testing this idea have been lacking.

In September 2024, VCE's plant provenance research team, with the help of many volunteers, planted gardens in six Upper Valley communities. Each garden contains 36 plots with five plants apiece, ▲ VCE Field Ecology Technician Onome Ofoman collects data at Cedar Circle Farm & Education Center, one of six sites hosting experimental gardens.

"We're asking whether pollinators and herbivorous invertebrates prefer plants that are locally adapted."

DESIRÉE NARANGO
CONSERVATION SCIENTIST

arranged in a randomized block design. "We are so thankful for the fantastic volunteers who came out to help us with our gardens!" Narango says.

VCE researchers will track differences in plant growth, flowering time, and insect visitation. To go even deeper, they are using cutting-edge techniques: testing the nutritional content of plant nectar and pollen and tagging bumble bees with tiny QR codes. Cameras installed around the gardens will scan these codes, allowing researchers to track individual bees' flower choices across different ecotypes. "These sorts of data are rarely collected," Narango notes. "It's an exciting new frontier in pollinator research."

Ultimately, the project will inform smarter choices about which plants to grow, where to plant them, and how to restore healthy ecosystems.

An unexpected bonus emerged when the team realized they had a surplus of more than 1,200 plants. In response, Narango and the plant provenance team launched Adopt a Plant, a new community science program involving members of communities across Vermont, New Hampshire, and Massachusetts. They've been asked to plant and monitor the project's excess

➤ Desirée Narango and Ryan Rebozo running an Adopt a Plant pick up in Montpelier



native plants in their own yards. More than 700 people signed up, many of whom had never participated in a conservation project before. By expanding the study beyond the experimental gardens, these volunteers are helping scientists scale up their findings to see how these plants perform in a variety of realistic residential settings.

#### **WHAT'S NEXT IN 2025**

- Collecting and analyzing data from the experimental gardens
- Collecting data and volunteer feedback from Adopt a Plant community scientists
- Partnering with the New Hampshire Academy of Sciences to analyze nectar and pollen samples

▼ Onome Ofoman and VCE biologists plant garden plots at Sunrise Farm, where VCE researchers will track plant growth and insect visitation.



#### Field Ecology Technician Onome Ofoman

Onome Ofoman didn't start out in ecology. She earned a degree in electrical engineering from Stanford and worked in software development before deciding she wanted something different—work that got her outside and aligned more directly with her values. After arriving at VCE as an AmeriCorps member, she became a staff technician and managed the community science arm of the Native Plants and Pollinators Ecotype Experiment under the mentorship of Conservation Scientist Desirée Narango. With energy and strategic insight, Ofoman recruited more than 700 volunteers to participate in the project. "Nature doesn't exist in a vacuum," she says. "Humans have shaped it for generations. Conservation has to reflect that."

From volunteer recruitment and app creation to coordinating seven plant pickup events across Vermont, New Hampshire. and Massachusetts. Ofoman has helped turn a complex scientific study into a community-powered movement. She finds joy in connecting people with the natural world just outside their doors—and in the messy, hopeful process of restoring it. When she's not in the field, she's usually on a trail, at the beach, or spending quiet time with family and friends. It's a long way from software, but for Ofoman, it's exactly where she's meant to be.

|10| |11|

#### **Vermont Atlas of Life:**

## Revealing the Green Mountain State's Wild Secrets

In the digital age of conservation, the Vermont Atlas of Life (VAL) stands as one of the most ambitious and impactful biodiversity projects in the country. Initiated by VCE in 2012, the atlas has grown into a powerhouse of community science and conservation data, and now houses 10 million species records contributed by more than 30,000 naturalists.

"This project gives us a whole new lens on Vermont's biodiversity," says Kent McFarland, VCE co-founder and conservation biologist. "We're seeing patterns we never could before—hotspots of life, shifts driven by climate, even new species we didn't know existed here."

Here are just a few of VAL's 2024 milestones:

- ➤ 10 million records and counting. VAL surpassed a major benchmark in biodiversity tracking, consolidating data from birds to butterflies to fungi.
- **New fungi atlas.** In partnership with the Vermont Fungi Scientific Advisory Group, VAL launched the state's first comprehensive fungi atlas. With nearly 4,000 species already logged, it's shedding light on a largely unknown part of Vermont's ecosystem.
- > New species discoveries. Dozens of species not known to exist in Vermont and one species previously unknown to science—the Appalachian Tiger Swallowtail butterfly—were documented, expanding Vermont's known biodiversity.
- > Species distribution modeling. A postdoctoral researcher began modeling species distributions using VAL data to inform land use and climate resilience efforts through Vermont Conservation Design, a framework for prioritizing lands and waters that sustain biodiversity and ecological function.



- > Digitized historic data. VAL preserved and published massive legacy datasets, including 28 years of bird records from naturalist Guy Waterman and more than half a million aquatic biomonitoring records in collaboration with the Vermont Department of Environmental Conservation.
- > Continued butterfly atlas. Year two of the Second Vermont Butterfly Atlas was completed, using expert and volunteer observations to map every butterfly species in the state and measure change since the first atlas conducted 20 years ago.
- birding milestones like the Vermont 250 and County 150 awards, motivating birders to count birds statewide. With more than 750,000 complete checklist surveys submitted in Vermont, we now have abundance and population trends since 2007 for 320 bird species that occur in the state, including nearly all breeding species.
- > 71+ scientific publications. VAL-sourced data informed at least 71 peer-reviewed studies this year, influencing everything from endangered species listings to habitat protection plans.

By combining modern technology, grassroots science, and historical records, VAL is not just cataloging Vermont's biodiversity—it's actively shaping Vermont's conservation future. As McFarland puts it, "We're not just saving data—we're saving the story of life in Vermont."

#### **WHAT'S NEXT IN 2025**

- Continuing to rescue 125+ years of bird records through digitization efforts that help shed light on changes in avifauna in the past, present, and future
- Applying climate models to more than a million insect occurrence records to understand the velocity of future range and natural community changes in Vermont
- > Releasing the State of Vermont Lady Beetles report to highlight the status of this beleaguered group and map a path forward for their conservation
- > Working with the Vermont Fish and Wildlife Department to determine Species of Greatest Conservation Need and complete the Vermont Wildlife Action Plan, a guiding document updated every 10 years

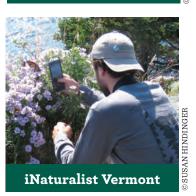
 ✓ Laura Prothero, Megan Massa, and Emily Anderson iNatting at Windsor Grasslands The Vermont Atlas of Life has grown into a powerhouse of community science and conservation data, and now houses 10 million species records.

## CROWD-SOURCED COMMUNITY SCIENCE TOOLS





eButterfly



|12| |13|

#### **eButterfly Mobile App Takes Flight:**

## A New Era for Butterfly Conservation and Discovery

Launched through a collaboration between VCE, the University of Ottawa, Espace Pour la Vie in Montreal, and Mila (a Montreal-based AI research institute), eButterfly is creating the first truly global network for butterfly observation. Since the launch of the eButterfly mobile application, participation has soared. In 2024 alone, more than 57,000 checklists were submitted, adding nearly 125,000 new records from across the Americas and beyond.

In fields, forests, and gardens around the world, butterfly watchers are quietly fueling a scientific revolution. At the heart of it is eButterfly—a platform powered by community scientists, AI, and a shared love for some of nature's most vivid creatures.

"Every butterfly watcher experiences amazing moments," says VCE co-founder Kent McFarland. "With eButterfly, we're turning those moments into a powerful tool for conservation, science, and education."

Users can track sightings, organize photos, explore range maps, and discover new species. In 2024, improved AI tools made identification faster and more accurate—one day, they may even flag unusual sightings for expert review.

International partners also helped drive eButterfly's expansion. An outreach coordinator based in British Columbia and funded in part by VCE extended the project's reach into Colombia and Panama. The app's availability in Spanish and French continues to make it accessible to users around the world.

But eButterfly's impact goes well beyond personal checklists. Each submission adds to an open-access archive scientists use to monitor species ranges, population trends, and climate-driven shifts. The project's dynamic mapping and graphing tools allow users to explore data in real time.

"This has never been done at this scale for butterflies before," says McFarland. "Over time, these data will spotlight species in decline and guide conservation efforts."

As more people take to the outdoors, eButterfly offers a simple but powerful invitation: Pay attention. Record what you see. And help protect the fluttering heartbeats of the natural world.



Helping Shape Vermont's Conservation Future

In 2024, VCE scientists did much more than fieldwork and species monitoring—they helped set the course for conservation across the state for the next decade. By serving on Vermont's key science advisory groups, VCE professionals are making sure

that hard-won scientific knowledge directly informs decisions about species and habitat protection.

VCE experts currently hold seats on four of Vermont's major scientific advisory groups—

VCE experts currently hold seats on four of Vermont's major scientific advisory groups—Flora, Invertebrates, Birds, and Reptiles/Amphibians—giving them a powerful voice in shaping the state's next Wildlife Action Plan. This 10-year plan, slated for renewal in 2025, sets priorities for how Vermont will deploy its limited conservation resources and decides which species and habitats get the focus they urgently need.

"Our scientists donate a great deal of time and effort to these advisory groups—not just showing up for meetings, but preparing, reviewing proposed actions that affect endangered and threatened species, and providing detailed comments," says Ryan Rebozo, VCE's director of conservation science. "We do it because we recognize the value of sharing our expertise to shape effective conservation policies."

The influence of VCE's contributions is already clear. Our groundbreaking State of Vermont's Wild Bees report identified 12 important bee areas and revealed that 55 bee species warrant designation as Species of Greatest Conservation Need. And thanks to the Vermont Atlas of Life, scientists had richer data than ever to guide the action-plan update.

"When the state government commits to recovery plans, like those for Common Loons and Bald Eagles, we see real success," Rebozo says.
"It's exciting to know we're helping shape the blueprint for conservation in Vermont for the next 10 years and beyond."

|14| |15|

#### **Backyard Battles:**

## What Vermont's Tick-Spraying Boom Means for Insects—and You

As more Vermonters turn to pesticides to fight ticks, a new study reveals the trade-offs: fewer ticks, but also fewer caterpillars, beetles, and spiders. The findings raise big questions about whether the cost—ecological and financial—is worth the results.

In the quiet lawns of the Upper Valley region of Vermont and New Hampshire, a hidden battle is underway. As more property owners turn to commercial spraying to fend off disease-carrying ticks, our quantitative ecologist Jason Hill wanted to know: Is it working—and at what cost?

To find out, Hill and his team surveyed more than 200 properties over the past two summers, half of them sprayed and half left untreated. For Hill, accustomed to studying remote montane forests where few people live, the research offered a rare window into a different kind of wild. "Backyards are the most intimate outdoor spaces in people's lives," Hill says. "To be invited into them is humbling because they're trusting you with the place they probably care most about."

Ticks may be small, but they are no small matter. As climate change drives tick species northward, Lyme disease—the most common vector-borne illness in the U.S.—is on the rise. Efforts to control ticks are booming, with the tick-spraying business growing in the Upper Valley by about 60% per year over the last decade, according to Hill. Yet, as Hill found, the promises many pesticide companies make often don't hold up under scrutiny.

"Some pest control companies have unsupported and highly unlikely statements about the effectiveness of their services on ticks and the lack of harm to beneficial insects," Hill



says. "There's some really clever marketing—logos with green on them to make products look healthy and environmentally friendly. But there's very little regulatory oversight and a lot of inaccurate information."

The team's findings—submitted for publication in a peer-reviewed journal—raised tough questions. Yes, spraying reduced tick densities—by more than 50%. But about half the properties, whether sprayed or not, didn't have ticks in the first place. Even more concerning, the treatments didn't kill just ticks; after spraying, insect and spider counts dropped too, with 20–30% of caterpillars and beetles wiped out.

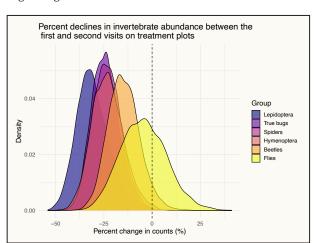
"Let's say you have a large, half-acre yard," Hill says. "Our models estimate that you likely have five or six ticks in the lawn. If pesticides kill half, you've spent roughly \$40 per dead tick and you've lost a quarter of your caterpillars and beetles too—the very organisms that our backyard birds depend on for food."

What's more, the study found that ticks quickly recolonized sprayed yards. "Whether you pay to have your yard blanketed with pesticides every month, you still have to behave as if you have ticks," Hill emphasizes. "You should still be doing a full-body tick check every single day you're outside."

The findings also intersect with our growing concern about how widespread pesticide use affects pollinators and other invertebrates. These small creatures form the base of many food webs—and their loss may ripple upward, limiting critical food sources for birds and other wildlife.

Hill's work, featured twice on Vermont Public, has already opened eyes—and he's not stopping there. He's applied for funding to expand the research, including new studies on how backyard birds might be helping ticks spread disease.

Ultimately, Hill hopes the research will empower landowners to make informed decisions based on science, offering clarity about competing claims regarding tick-control measures.



#### Staff Biologist Amber Jones



Amber Jones joined VCE in 2023 as a tick technician and now supports multiple projects as a staff biologist. She holds a degree in resource ecology with a minor in wildlife biology from the University of Vermont, where her deeprooted passion for nature blossomed into a particular interest in insect ecology. At VCE, she contributes to research on pollinatorpreferred ecotypes and is deeply involved in Vermont's second statewide butterfly survey.

"I love helping people connect with the natural world right outside their door," Jones says. "I've realized how much I still have to learn and that I'll be learning for the rest of my life. That's what makes this work so meaningful—it's never finished, and it's never boring."

|16| |17|

## From the **Amazon Basin** to Urban Spaces, **VCE** Scientists **Produce Results**

Our biologists have worked across the Americas for decades to understand and conserve biodiversity, using innovative methods and tools. By reporting their findings in peer-reviewed journals, they not only help develop solutions to pressing problems, they also contribute to the advancement of ecology as a research discipline. Here are some results that our scientists shared with the world in 2024.

#### **Shorebirds | Amazon Basin**

Jason Hill and a group of international collaborators found that 74% of shorebirds fitted with satellite transmitters in North America stopped to rest for up to two weeks in the Amazon basin during their southward migration (Linscott et al. 2024. The Amazon basin's rivers and lakes support Nearctic-breeding shorebirds during southward migration. Ornithological Applications 126:4 duae034).

#### **Bicknell's Thrush | Cuba**

Director Emeritus Chris Rimmer and colleagues

reported that Bicknell's Thrushes rarely overwinter in Cuba, but when they do, it's in generally well-protected high-elevation cloud forests (Rimmer et al. 2024. Overwinter status of Bicknell's Thrush [Catharus bicknelli] in eastern Cuba. Journal of

Caribbean Ornithology 37:1-11).



Mike Hallworth contributed to a team effort that estimated moose survival rates across the Northeast-



part of a groundbreaking project to develop a new demographic modeling method using camera trap data (Sirén et al. 2024. Monitoring animal populations with cameras using open, multistate. N-mixture models. Ecology and Evolution 14:12 e70583). He also collaborated with Kent McFarland, Hill, Rimmer, and others on a study showing that conifer masting cycles strongly influence red squirrel distribution, which in turn affects nest predation rates (Hallworth et al. 2024. Boom and bust: The effects of masting on seed predator range dynamics and trophic cascades. Diversity and Distributions 30:8 e13861).

#### **Pollinators | United States**

Spencer Hardy and McFarland joined other biologists working at the frontier of pollinator conservation to show how many states have sufficient data to rank the conservation status of pollinators in 2025 state wildlife action plans (deMaynadier et al. 2024. Insect pollinators: The time is now for identifying species of greatest conservation need. Wildlife Society Bulletin 48:3 e1537).

"The time is now for identifying species of greatest conservation



#### **Swainson's Thrush, Tennessee Warbler | Urban Spaces**

Desirée Narango co-authored a study of Swainson's Thrushes and Tennessee Warblers migrating through Montreal that showed how green spaces should be managed to supply both native berries for actively migrating birds and protein-rich insects for molting migrants (Blanc-Benigeri et al. 2024. Diet of moulting Swainson's Thrushes [Catharus] ustulatus] and Tennessee Warblers [Leiothlypus peregrina] at a stopover site during fall migration measured with fecal DNA metabarcoding. Scientific Reports 14: 9913). In a separate paper, she and her collaborators described how urban forests and residential yards differ from natural or unmanaged forests in species richness, prevalence of introduced species, and drought tolerance. Their findings will help planners properly evaluate the services that urban forests provide (Mejía et al. 2024. How do urban trees vary across the US? It depends on where and how you look. Frontiers in Ecology and the Environment 22:7 e2777).

For a full list of 2024 publications, visit

**Science Meets Strategy:** 

## **How VCE Is Bringing** Biodiversity to the Policy Table

In 2024, VCE opened a bold new chapter by hiring a science to policy manager to lead an initiative aimed at turning cutting-edge biodiversity research into real-world policy change. Rather than allowing critical discoveries to remain siloed in reports and journals, VCE is working to ensure that we inform the laws that protect Vermont's wildlife, landscapes, and communities.

One of the year's biggest legislative victories for biodiversity was the successful passage of Act 182, making Vermont only the second U.S. state to restrict the widespread use of neonicotinoid-coated seeds-pesticides long known to harm bees and other pollinators. Our State of Vermont's Wild Bees report helped catalyze the effort, and bee biologist Spencer Hardy, along with members of the Pollinator Working Group, provided the scientific backbone for the bill.

Meanwhile, VCE staff helped to guide implementation of Vermont Act 59, the state's "30 x 30" conservation bill. It outlines a bold vision: conserve 30% of Vermont's lands by 2030. VCE is analyzing the Vermont Atlas of Life's biodiversity data to help ensure that Vermont's conservation priorities are as data driven as possible. A new donor-funded postdoctoral researcher, Brian Kron, was brought on in September to guide this work.

Emily Anderson became our first-ever science to policy manager in late 2024. Her mission: to bridge the gap between scientific discovery and legislative action. "We're living through a time when skepticism of science is directly undermining solutions to our biggest challenges," Anderson says. "By making our research accessible and engaging, we enable better decisions for people, wildlife, and the places we call home."

From protecting bees to conserving landscapes to advising on the threats wakeboats pose to lake ecosystems, VCE is proving that good science, when strategically communicated, can drive sound policy.

#### WHAT'S NEXT IN 2025

- > Sharing scientific insights and evidence in discussions of shifting federal policy
- ➤ Participating in developing Vermont Conservation Voters' Common Agenda
- > Examining other biodiversity policy opportunities in Vermont

need."

vtecostudies.org/scientific-publications.

#### **Resurrecting the Past:**

# How Historic Wildlife Records Can Shape Vermont's Ecological Future

A long-forgotten trove of nature sightings has found new life—and new relevance—thanks to VCE's Project Phoenix team. With the help of dedicated volunteers, decades of wildlife observations by legendary alpinist and naturalist Guy Waterman have been rescued from obscurity and transformed into a scientific resource.

Tucked away in a corner of the Dartmouth College archives, Guy Waterman's handwritten records sat quietly for years—until VCE staff and volunteers launched a mission to bring them back to light. Waterman, a homesteader and keen observer of the natural world, spent 24 years documenting the birds and other animals he encountered daily on his property in East Corinth, Vermont. From 1974 to 1998, he chronicled more than 5,000 days of life in the woods.

"It's kind of incredible," says VCE Data Manager Megan Massa. "He was out there every single day, exploring and recording, long before we had platforms like eBird or iNaturalist."

An initial effort to bring Waterman's observations to light had focused only on bird sightings—missing the true breadth of the meticulous hand-drawn spreadsheets that recorded everything from foxes and snakes to salamanders, and even stray cats. Seeing their wider value, Massa and Conservation Biologist Kent McFarland initiated a full-on rescue operation.

Over three months, about 10 volunteers—including several who had known Waterman personally—painstakingly typed in the records by hand. "There's so much data being generated now, but we have very little historical coverage," says Massa. "That's why projects like this are so exciting—we're rescuing this amazing snapshot of the past."

The completed dataset has now been uploaded to



the Global Biodiversity Information Facility (GBIF), where researchers around the world can access it. It offers a new lens on how Vermont's landscapes—and its wildlife—have changed over the past half century.

The implications are significant. When combined with modern climate and land-use models, observations like these could help scientists predict how species ranges might shift in response to warming temperatures or habitat loss.

The Global Biodiversity Information Facility is an international network and research infrastructure funded by the world's governments. Its aim is to provide anyone, anywhere, open access to data about all types of life on Earth. VCE's Vermont Atlas of Life has been an official GBIF biodiversity data publisher since 2018.

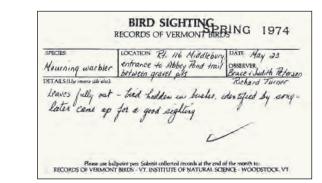
#### WHAT'S NEXT IN 2025

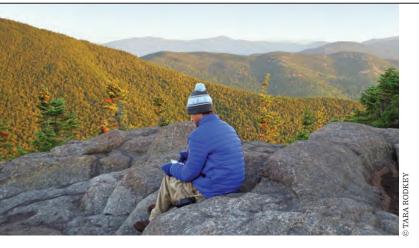
➤ Unearthing more archival records and putting them to work for the future of biodiversity

▲ 1976: Guy and Laura Waterman at their kitchen table in Vermont

> A 1974 bird sighting reported to the Vermont Institute of Natural Science and digitized as part of Project Phoenix "He was out there every single day, exploring and recording, long before we had platforms like eBird."

> MEGAN MASSA DATA MANAGER





A SAMPLING OF VCE'S COMMUNITY SCIENCE OPPORTUNITIES



#### **Mountain Birdwatch**

Each June, volunteers hit the trails to complete bird survey routes on 123 mountain ridgelines across the Northeast.



#### **Vernal Pool Monitoring**

In April, May, and September, volunteers visit and collect data to monitor "adopted" vernal pools following protocols and using VCE-provided equipment.



#### **2nd Vermont Butterfly Atlas**

Join us as we search fields and fens, mountains and meadows—even your own backyard—to document the status of Vermont butterflies.



#### **Loon Conservation**

Whether you live alongside a lake or only occasionally visit your favorite pond, VCE offers several options for interested loon volunteers.



#### Whip-poor-will Project

On moonlit nights in early summer, volunteers set out on 17 roadside survey routes to listen for Eastern Whip-poor-wills and record conditions.



#### **Forest Bird Monitoring**

Each June, volunteers monitor breeding birds on 31 sites across Vermont in one of the continent's longest-running studies of forest bird population trends.

## Outstanding Community Scientists:

## Honoring Terri Armata and Ava Purdy

Amateur naturalists form the backbone of many VCE projects, including the Vermont Loon Conservation Project and the Second Vermont Butterfly Atlas. Here we honor two stalwart volunteers—from different parts of the state and at different stages in their community science careers—who've made meaningful contributions to conserving loons and butterflies.

During the 2023 and 2024 field seasons, Ava Purdy of Greensboro, Vermont, traveled much of the state helping Loon Biologists Eric Hanson and Eloise Girard search for loon nests, build nesting platforms, and deploy warning signs to protect sensitive breeding areas. According to Girard, Purdy brought to the work some of the essential ingredients of science-based conservation: curiosity, initiative, and an instinct for making positive personal connections.

A 2024 graduate of St. Johnsbury Academy, Purdy now studies environmental science and other subjects at Middlebury College. After being honored as the Youth Community Scientist of the Year, she joined several VCE staff members at the Northeast Natural History Conference in Springfield, Massachusetts, where she was able to explore a wide range of topics, including herpetology, pollinator ecology, and innovative ways to teach ecological science.

Terri Armata has steeped herself in engaging approaches to ecology education since before Purdy was born. She began studying butterflies in 2002 as a participant in the First Vermont Butterfly Atlas and is among the most productive contributors to the second atlas, launched in 2023. Between the two atlas generations, Armata tallied thousands of eButterfly checklists and helped others make more than 11,000 identifications on iNaturalist from her home in Bennington, Vermont.

Armata's work with eBird, the Vermont Vernal Pool Atlas, and other community science projects has earned her the 2024 Julie Nicholson Community Science Award—an honor that celebrates individuals who embody Nicholson's passion for conservation and



- ▲ Terri Armata, 2024 Julie Nicholson awardee, with Kent McFarland and Susan Hindinger
- > VCE Youth
  Community Scientist
  of the Year Ava
  Purdy and Loon
  Biologist Eloise
  Girard install a
  tube for collecting
  hazardous lead
  tackle from anglers.

At VCE, we're inspired every day by the passion and knowledge of volunteers.



public engagement. Just as remarkable, says Butterfly Atlas director Kent McFarland, is that Armata's dedication has made her one of Vermont's leading butterfly experts.

At VCE, we're inspired every day by the passion and knowledge of volunteers like Armata and Purdy. When community scientists like these join us in our mission, it's hard not to feel like we are the real winners.



#### **CAMPAIGN DONORS**





In 2024, we went all in—for wildlife, wild places, and the people who care for them—with the final phase of our ALL IN for Biodiversity campaign. Hundreds of generous supporters contributed to this multiyear fundraising effort that raised more than \$5 million to carry out the ambitious priorities outlined in our strategic plan.

It began with a simple realization five years ago: to meet the moment for biodiversity, we needed to grow faster than our annual budget allowed. Thanks to our community's generosity, we've done just that. Supporters like you have already fueled a period of transformational growth—our staff has expanded from 16 to 25 scientists, educators, and conservation leaders. This investment has allowed us to hit the ground running, implementing the strategic plan's goals without delay.

Your support is already making a difference. We're collecting and sharing vital data with landowners and policymakers, empowering conservation decisions grounded in science. We're building capacity to respond to climate threats, habitat loss, and species decline—not in the future, but right now.

And we're not stopping. With your help, the next five years will bring even deeper engagement, new research initiatives, and stronger partnerships to protect biodiversity across Vermont and far beyond.

"This campaign is an affirmation of everything we believe about our community—that people are not only generous, but passionate about science, conservation, and the future of the natural world," says VCE Executive Director Susan Hindinger. "Together, we're shaping what comes next."

We extend our heartfelt thanks to the campaign's architects and supporters. The future of conservation in Vermont is brighter because you chose to go ALL IN.

#### Staff Leaders

Susan Hindinger. Executive Director Chris Rimmer, *Director Emeritus* 

Tere Gade Scott McArdle **Planning Study** Nan Cochran **Oversight Committee** 

David Grant Brian Dade Dan Lambert Laurie Danforth Betsv McGean

**Campaign Consultants** 

#### **CATALYSTS**

\$1,000,000+

Anonymous (2)

#### **CHANGEMAKERS**

\$500,000 to \$999,999 Annette Gosnell\*

#### **LUMINARIES**

\$250,000 to \$499,999

Anonymous

#### **VISIONARIES**

#### \$100,000 to \$249,999

Anonymous (2) Peter W. and Ruth H. Brooke\* Birgit N. Deeds^ Dextra Baldwin McGonagle Foundation Emily Landecker Foundation, Inc. Gale Hurd The Jack and Dorothy Byrne Foundation Charlotte Metcalf\*

#### CHAMPIONS

#### \$50,000 to \$99,999

Anonymous Concrete Giving Fund at Fidelity Charitable Danforth Fund Gillette Hill Fund Carolyn B. Jackson David Roby **Ruth Stewart\*** Carter and Lissa Winstanley

#### **INNOVATORS**

#### \$25,000 to \$49,999

Anonymous (2) Richard Bowe and Karen Nemeth Charitable Gift Fund John F. Brooke Gary and Nancy Meffe Gail Osherenko and Oran Young Samuel and Missy Palmisano Ruml Leithner Family Fund Stan and Jenny Williams Family Fund of the New Hampshire Charitable Foundation William and Joanna Wright

#### **STEWARDS**

#### \$10,000 to \$24,999

Anonymous (2) Jonathan Gibson and Eliza Mabry Susan Gillotti^ Paula A. Gills\* Mary and Steve Gorman Robert and Lisa Holley Warren and Barry King Stephanie and Philip McCaull Hidden Hill Giving Fund Chris and Leslie Rimmer\* The Wildwood Foundation

#### GUARDIANS

#### \$5,000 to \$9,999

Anonymous (2) Celia Chen George Clark\* Donald Graham and Carol Barr Drs. Karen and Peter Hanson Bill and Roseann Hayes Martha McDaniel and Stephen Plume Sean Lawson Nancy Osgood

#### **PROTECTORS**

#### \$1,000 to \$4,999

Anonymous Jiggs Blackburn and Judy Lam\* William Chester^ Nancy Cochran and Elliott Fisher Katherine Coppock Gerrit Crosby Steve and Charlotte Faccio Henry Fair Family Fund for the Environment of Coastal Community Foundation of SC Emily Fisher and John Alexander Jim and Susan Ford Carolyn and Milton Frye Gade McArdle LLC Jim Goetz David and Nancy Grant Paul and Veronica Guyre Sandy and Edward Hack\* Norm and Jane Hanson Janet and Doug Hardy Susan and Todd Hindinger

Gregory Kaufman and Ellen Seidman Robin and David Key The Jonathan Keyes Fund at Fidelity Charitable Steve Leach and Kathy Kirkland Dan Lambert

Lubbe Family Fund at New Hampshire Charitable Foundation Kent and Clare McFarland

Roger F. Pasquier Judy Peterson Frederick Pratt^

The Robert K. and A. Joyce Jones Foundation, Inc.

Susan Stillinger Georgena Terry Susan Tiholiz

Kathy Van Der Aue loel Wood

#### **CONSERVERS** \$500 to \$999

Anonymous Liz and Clay Adams Mistie Boule Barbara Butler Rev. Davida Foy Crabtree John and Lucy Douglas Dowell Charitable Account at Schwab Charitable Louis duPont and Ellen Spring Mollie and Henry Fair Feiss West Fund at Fidelity Charitable Marcia Gnagey and John Hueber David Goudy John and Judy Graham Donna and Peter Hollinger Mollie and Tom Hoopes JMM Fund of the Vermont Community Foundation Mary S. Landon Sally Laughlin\* Sally Leighton Jason T. Loomis and Micaela Tucker Gail and Mark McPeek The Nancy and Jonathan Olmstead Charitable Fund at Vanguard Charitable Paris Family Gifting Fund Nicki Pfister Ned and Cathie Redpath Clare C. Rimmer\* Mike and Jean Smith David and Sue Taylor Ann S. Wittpenn, M.D.

#### **SUPPORTERS**

#### \$100 to \$499 Anonymous (4)

Peg Ackerson Theresa A. Armata Charles and Diana Bain Leslie Baker-Brown and Cam Brown Elizabeth Bassett and John A. Pane Jon Binhammer and Linda Garrett Tom Bjorkman and Roxanne Donahey Michael Blust

Picard Karen Bourgue and Robert Horton LeBaron Briggs Margaret Briggs Peter Briggs Kevin and Lucinda Brown Amanda Cannell-Boone and Peter

MaryJane Boland and Daniel

Boone Deb and John Caulo Micki Colbeck Nancy Conant Jean Ćondon Laurel Copeland Rene and Christina Cotnoir Roy W. Pilcher\* Bruce and Cheryl Cox Tina Herrick Culver

Polly Darnell Ann B. Day\* Jan and Jennifer Dembinski Randy Dettmers

Courtney Dobyns Julia Dodge and Barney Hildreth Kate Donahue Marvin and Susan Elliott Wallace Elton Dr. Brian Farrell Kathy and Dan Field David and Julie Filiberti Anne Fines Lionel and Ardys Fisher Charles and Jerrine Gangas Mackenzie Goldthwait and Doualas Kibbe Ms. Christing Goodwin Billi and Bobby Gosh Green Blossom Painting

Janet Green Dean Greenberg\* Amy Haak Julié Hand Anne and Eric Hanson

Doug and Janet Hardy Spencer Hardy lason Hill and Katie Mann Nathan and Monica Hill

David Hoag Richard Holmes Kit Hood

Lisa Hoopes and Phil Gutowski Dave Houston Susan and Ned Houston

Dr. and Mrs. Robert J. Johnson Kyle Jones Tom and Linda Kahl James Kennedy

Henry Keutmann and Ilene Gipson Kathleen and William Kruesi Lucie Lehmann

Tom and Karen Leo Yolanda Leon Jared Lindahl and Willoughby

Britton Larry Master Bob McGuire Charlotte Metcalf\* Larry Morris

Holly Nash Wolff Martha Nelson Roxann Nickerson Elinor Osborn

Yosef Osheyack and Annie Ashley Ann B. Owen

Darlene and Ernest Palola Robert G. Parker Worth Parker and Mary Margaret Andrews Vicki and John Peiffer

Carol Pinney Jim and Faith Pivirotto Laura and Phil Prothero Alan Quackenbush

Quebec Labrador Foundation Carol and George Ramsayer

Ioan Randall\* Ann and Tip Ray Ryan Rebozo Rosalind Renfrew

Zoe Richards and Joshua Brown Judy Richardson

Alvssa Rimmer and Matthew Henderson Andrew and Tish Rimmer Ben and Maggie Rimmer

Dave and Mary Rimmer Jennie Robbins Pat Robins and Lisa Schambera

Richard Ruben Fred and Mary-Em Saar

Michael Saraent Molly P. Scheu Jody and Jim Schubert Jerome and Diana Senturia

Nathaniel Sharp Peter and Anne Silberfarb

Carla Skinder\* Richard Slosbera Marisa Smith

Arnold and Priscilla Spahn Gus and Cameron Speth John and Nomi Stadler Fund at

Schwab Charitable Anthony and Jill Stout Joan Strachan Ann Suokko

Jim and Francie Tolan Jack and Ellen Travelstead

Erin and John Tunnicliffe Steve Voiat

Amy and Tom Wagner Howard and Patricia Wagner Sean and Vicki Walker

Marianne and Michael Walsh\* Chris Warsaw Kathy Weaver

Scott C. Weaver Allon and Marianne Wildgust Kathy Wilkerson

Reeve Williams and Sandie Anderson

Sunny and Mark Wright Barbara and Mike Zimmermann

#### CONTRIBUTORS

#### Up to \$99

Anonymous (11) J'Amy Allen and Bob Tudek Blake and Nancy Allison Katie and Bob Bateson Sarah Beebe Larry and Marsha Booker Martina F. Breed Dave Caffry Judy Carpenter and Karl Stein Josette and Steve Carter Silvia Cassano Nicole Conte and Matt Stevens Margaret Corso

Matt Darrow Donna Dauphinais Susan DeWind Domus, Inc. Charles J. Dutelle Emme Erdossy Paul Erhard and Susan Tomases Ms. Patrice Favreau Karen Fiebia\* Bruce K. Flewelling Dawn and Bernard Fov Linda Gionti Mark and Carol Goodwin Georaene Grover Taylore Grymonnt Trish Hanson Svlvia Hartmann Laurie-Helise and Ronald Heijn

Jo Ann Hendricks Ann Hicks

Rob and Doris Humphries Craia and Susan Hunt

Kearney & Son Carpentry Brian Kelly and Ioan Harlowe

Maeve Kim Kateri Kosek

Flo Levin Col. and Mrs. Craig Llewellyn Trevor Lloyd-Evans and Linda Leddy

W. Scott MacLachlan Jackie and Rich Menge

Susan Mills Elizabeth Morse Susan C. Morse

Erik Nielsen Joanne C. Norton

Peter Pappas Martha Pfeiffer Joshua Phillips

Stephen and Rebecca Powell Jose and Lea Ramirez

Margaret Ramsdell Len and Denise Reitsma

Wanda Rice Carl and Deb Runge

Mary Russ Louise Salant

Lisa Schukei Scott Schwenk and Roxanne Bogart Ronald and Lisa Smith

Robert Stymeist and Martha Steele Scott Sutcliffe

Beth Taylor Dart Thalman

Peter and Thelma Thompson Kevin Tolan

Rebecca Trudeau Susan W. Tucker Kate and Rick Vanden Bergh

David L. Webb Laura Weickert

Ben Williams and Meg Darrow Williams

25

\* Bicknell's Legacy Society ^ Deceased

#### VISIONARIES

#### \$100,000+

Anonymous Dextra Baldwin McGonagle Foundation

#### **CHAMPIONS**

#### \$50,000 to \$99,999

Anonymous Annette Gosnell\* Hidden Hill Giving Fund One Hive Foundation Jennie Savaae

#### **INNOVATORS**

#### \$25,000 to \$49,999

Anonymous (2) 3H4 Charitable Fund Peter W. and Ruth H. Brooke\* John F. Brooke Birait N. Deeds^ Ruml Leithner Family Fund

#### **STEWARDS**

\$10,000 to \$24,999 Anonymous (3) Samuel Brooke and Gail Weiss Charitable Gift Fund Celia Chen Concrete Giving Fund Will and Laurie Danforth Fund at the Vermont Community Foundation Emily Landecker Foundation, Inc. Gale Hurd Martha McDaniel and Stephen Plume **Ruth Stewart** Joanna Sturm The Tow Foundation

#### **GUARDIANS**

The Wildwood Foundation

Mascoma Bank Foundation

Jonathan Gibson and Eliza Mabry \$5,000 to \$9,999 Jim Goetz Anonymous (2) Alan and Kris Graham Charles and Jill Agnew Donald Graham and Carol Barr Allan B. Roby and Frances M. Roby Paul and Veronica Guvre Charitable Trust Haak Family Trust The Averill Fund at FJC Sandy and Edward\* Hack Kyle Bajakian Drs. Karen and Peter Hanson Bio X Cell Fund at New Hampshire Norm and Jane Hanson Charitable Foundation Bill and Roseann Haves Chay Fund at New Hampshire Patricia Highberg Charitable Foundation Robert and Lisa Holley Georae Clark\* Donna and Peter Hollinger David Greenewalt Charitable Beth Hunton Trust Barbara M. Jordan Gillette Hill Fund Susan Gillotti\*^ Janice Jorgensen Gregory Kaufman and Ellen Great River Hydro Seidman Carolyn B. Jackson Louise M. Kelly Warren and Barry King

The Nashawtuc Charitable Fund at The Chicago Community Foundation New Hampshire Charitable Foundation Wellborn Ecology Fund Oaks and Acorns Fund Clare C. Rimmer\* Clive Wood and Stella Martin William and Joanna Wright

Karen Fiebig\*

Veer-Tess Frost

Jim and Susan Ford

Cyrus and Joanne Gibson

Lawson's Finest Liquids

Northeast Wilderness Trust **PROTECTORS** Samuel and Missy Palmisano Darlene and Ernest Palola \$1,000 to \$4,999 Judy Peterson Anonymous (11) Renfro-Pihut Family Lee Allen Chris and Leslie Rimmer\* Awesome Possum Fund at New Hampshire Charitable The Robert K. and A. Joyce Jones Foundation Foundation, Inc. Clint Baiakian Roostina Raven Fund James Barry and Mary Quinton-Tina Scharf and James Dolan Roger Schoenbeck Barry Charles and Ann Stebbins Fund Birds & Beans, LLC Susan Stillinger linx Bloom The TAG Philanthropic Foundation Sean Brown and Laura Filkins Charitable Gift Fund Carolyn S. Tager Butterfly Weed Fund at The Vermont Tamarack Fund Community Foundation Thomas Sargent and Allison Ijams Rich and Ann Chalmers Charitable Foundation Georgia D Valentine Charitable Jeremy and Stacey Coleman Concept2, Inc. Account Kathy Van Der Aue Gerrit Crosby Basil Dobbin and Jena Wood Wendling Fund of Berkshire Charitable Fund Taconic Community Foundation Stan and Jenny Williams Family John and Lucy Douglas Philip and Deborah Edmundson Fund of the New Hampshire Fund Charitable Foundation Ann S. Wittpenn, M.D. Marvin and Susan Elliott

Gail Yanowitch

Joel Wood

Sean Lawson

LOTS Family Fund

Foundation

Grace Nelson

Winifred McDowell

Lubbe Family Fund at New

Hampshire Charitable

David and Nancy Mears

Gary and Nancy Meffe\*

Stephanie and Philip McCaull

#### \$500 to \$999

Alexander Ellis III

Anonymous (5) Lee and Carmen Anderson Theresa A. Armata Amy Bodwell Barbara Butler Mike and Anne Cassidy Rev. Davida Foy Crabtree Nikolas Crosbý Judy Davis Ann B. Day\* Randy Detimers John and Kathy Dick New Hampshire Charitable Foundation Matthew and Monica DiMagno Dowell Charitable Account Ruth Einstein

Friends of Wolcott Pond Carolyn and Milton Frve Tim Gibson Kate Gillis Marcia Gnagey David Goudy John and Judy Graham Growald Climate Fund Amy Haak Doug and Janet Hardy Elizabeth Hasen Charitable Fund Hesler Family Fund Richard and Michelle Hicks Mollie and Tom Hoopes Peter Isakson and Helen Hamman Hypertherm HOPE Foundation Bruce and Anne lames Sherman and Laura Kent Krupp Donor Advised Fund Dan Lambert Mary S. Landon Sally Laughlin\* Sydney Lea and Robin Barone Sally Leighton Tita and Oliver^ Manice John and Carolyn Marsh Gail and Mark McPeek Will Melton and Eliza Childs The Richard B & Alice B Morse Giving Fund

**CONSERVERS** 

Marylane Boland and Daniel Picard Whit and Closey Dickey Fund at

National Life Group Charitable Foundation The Nancy and Jonathan Olmstead Charitable Fund Nancy Osgood Paris Family Gifting Fund Patterson Family Fund at New Hampshire Charitable Foundation Chris and Nissa Petrak Nicki Pfister Charles and Elizabeth Phillips Nicholas Rodenhouse S&S Charitable Fund at The Vermont Community Foundation Kim Seward Nancy<sup>^</sup> and lim<sup>^</sup> Stead Marianne and Michael Walsh\*

**SUPPORTERS** \$100 to \$499 Anonymous (17) Pea Ackerson Joan Allen and Michael Binder Steve Antell and Barbara Leaf Becky and Stew Arnold Cheryl Asa Ascutney Mountain Audubon Society Averill Lakes Association Babbott Ward Charitable Gift Fund

Woodstock Gift Account

Sunny and Mark Wright



Jim and Betsy Bahrenburg Charles and Diana Bain Tom and Jean Barber Steve and Sallie Barker Tina Barney and Sara White Christine and Donald Bartlett Robert Bast and Laura Carlsmith Fund Elizabeth Bassett and John A. Pane The Bauerfeld Family Charity of the Ayco Charitable Foundation Beau Beaulieu Dale and Jeri Bergdahl Berger Family Fund at the New Hampshire Charitable Foundation Thomas Berriman Jack Beusmans Nicholas Biddle Jon Binhammer and Linda Garrett Tom Bjorkman and Roxanne Donahey John and Ćindy Blackburn Marilyn Blight Jann and Jim Block Jinny and Clay Block

Dr. Colleen Bloom

Ruth and William Botzow II

Karen Bourque and Robert Horton

Michael Blust

Jon Bouton Josh and Deborah Bovce Bill and Julia Boysen LeBaron Briggs Margaret Brigas Peter Briggs Eleanor Brown Jim and Judy Brown Kevin and Lucinda Brown Chess Brownell Larry and Susan Bruce Holly B. Bull Susan Bumpus Shepard Butler Annie Campbell and Lyle Blaisdel Amanda Cannell-Boone and Peter Boone John Cannon Chris Cano David and Barbara Capen Patricia Capra Simon Carr and Lynn Adams Josette and Steve Carter Penfield Chester Allen and Claudia Clark Brenda Clarkson Micki Colbeck Nancy Conant Jean Condon Laurel Copeland

Jim and Monique Corven

Tim and Sarah Cowan Bruce and Cheryl Cox Jim and Mally Cox-Chapman Cynthia Crawford and Wayne Cripps Frederik and Sophia Crawford Tina Herrick Culver Anne Cumminas Duke Daloose Polly Darnell Matt Darrow Pamela Darrow Charles and Ann Davis Marilyse de Boissezon Dave Deciucies and Betsy Perez Carol Dell Jan and Jennifer Dembinski Dewey Family Fund Linda Di Sante and Jim Schweithelm Joe and Linda Diamond Courtney Dobyns Julia Dodge and Barney Hildreth Penelope Doherty Kate Donahue

Heidi Douglas

Judith Dunnan

Kathleen Duclos

Bill and Ginger Cotten

▲ Jason Hill shows participants in workshop how to use an illustrated kev.

a 2024 bumble bee identification

Louis duPont and Ellen Spring David Eberly Lisa Eby Lois Eby Echo Lake Protective Association Gordon and Joni Elicker Peg Elmer Hough Wallace Elton Ben Emory and Karin Tilberg Peter and Nancy Engels Sabina Ernst Gilda Faccio Family Gift Fund Jim and Cindy Faughnan Sarah Fellows Ethan Fenn Jeffrey and Nancie Fernandez Kathy and Dan Field David and Julie Filiberti Ken Finch Anne Fines Lionel and Ardys Fisher Brian T. Fitzgerald Gerry Fitzgerald William Fitzaerald



\* Bicknell's Legacy Society ^ Deceased

Soryun and Howard Fitzpatrick Scott Fleischer Gary Fletcher Polly Foley Denis and Eli Fortin Michael and Susan Foster Tina Foster C.J. Frankiewicz\* Victoria Fraser Conrad and Lea Frey Friends of Green River Reservoir Friends of Waterbury Reservoir Tom and Holly Fulton Tere Gade Marty and Cathy Gardner Fund Louis and Nancy Gaudreau Keith and Laurie Gee Aliena Gerhard Barbara Gibbs Seth Gibson Ed and Sue Gilbert Lou and Cathy Gilbert and the Brownington Pond Loons Paula A. Gills\* Louise Giovanella Giving Fund Mackenzie Goldthwait and Douglas Kibbe Kathleen Golmont Raymond Gonda Alice Goodwin Christina Goodwin Ann Gormley and Richard Wallace Billi and Bobby Gosh Wayne and Deborah Granquist Clive Gray Peter Greatrex lanet Green Jeffrev B. Green Green Blossom Painting Mark Greenberg and Karen Pushee Terri Gregory and Milford Cushman Bob and Suzanne Griffiths Dean and Nancy Grover Georgene Grover Paul Ğruhler Taylore Grymonnt Richard and Marcia Haas James and Cynthia Hall Jeffrey Hall Phyllis and Richard Hampton Julie Hand Handler Kaminsky Charitable Fund Hapke Family Charitable Gift Fund Mari Harter David Hathaway and Carolyn Greene David Hawkins Haynes & Garthwaite Architects Hebble Giving Account George and Jill Helmer Robert and Kathleen Hendel



Ann Hicks Nathan and Monica Hill Susan and Todd Hindinger David Hoag Judith Hobbs Richard Holmes Kit Hood Robert Hoppe Dave Houston Susan and Ned Houston Susan Howard Becky Howe Brucie Hubbell lim and Sharon Jackson Susan James Theodore and Kathy Jastrzembski Helen Johnson Peter Johnson and Claire Lyon Rita and Win Johnson Dr. and Mrs. Robert J. Johnson Roxane Johnson De Lear Gilliam Johnston and Cathleen Morrow Kyle Jones Hank Kaestner

study. Lucie Lehmann Flo Levin Britton Tom and Linda Kahl leannie Lindheim Robert and Sue Kancir Heather Karlson and Bill Leeson Scott Lonatin Gloria and Timothy Katsiff James Kennedy Toni Luff Ruth A. Kennedy Henry Keutmann and Ilene Gipson Margaret Lyons Christopher Kibbe Kathleen and William Kruesi

A banded Bicknell's Thrush is released from VCE's banding station on Mount Mansfield after providing data to our long-term

Sharon Laderman Lake Groton Association Lake Harvey Association Lake St. Catherine Association Lucinda Lang Donor Advised Fund Denis and Nancy LaPointe Margie and Tom Latham Linda and Rodman Leehv Linda and Steve Lembke Peter and Kathy Leonard Community Fund Sheryl and Fred Lerner Fund John and Diane Liccardi Brian and Sandi Lincoln Jared Lindahl and Willouahby Robert and Dorina Link Jennifer Lucas and John Schweizer Deborah and Peter Luguer Gordon MacFarland\* Linda Machiz

Bob Malbon James and Nancy Malcolm Ellen H. Malonev Katherine Marshall Peter Marshall Kat Masback Larry Master David and Roxanne Matthews Kay McCabe and Rod Griffin Robert and Gloria McEwen Betsey McGee and Mark Pecker Mark and Mary McGrath Bob McGuire Meadow Bee Deodorant Jennifer Megyesi\* David Merker and Sharry Baker Haylee Messing Mark Milazzo Donald and Annette Miller Jeanne and Michael Baer Miller Jacqueline and Gilles Molleur Cathy Mollov Martha Molnar Eric and Jane Molson Jack and Karen Morgan Kat Morgan Susan C. Morse Ronald and Denise Mura Kathleen Murphy Holly Nash Wolff Nathan Family Charitable Fund Frederick Nelson Martha Nelson Catharine and David Newbury Amy Newell Roxann Nickerson Blair Nikula Louise Nunan Taylor Timothy and Diane O'Donoghue Alanná Ojibway Karen Anderson Oliver Kevin Omland Ashlev Orton Elinor Osborn lames E. Osborn III Otter Creek Audubon Society Ann B. Owen Robert G. Parker Worth Parker and Mary Margaret Andrews Jan Parsons Michael Perner and Caroline Soter Dr. Robert Perrin and Jane Perrin Laurel and Patrick Persico Dave and Ellie Peters Matthew Peters Thomas Peterson Joshua Phillips Jane and John Phipps Ann Pibal and Colin Brant

Rov W. Pilcher\*

Laura and Phil Prothero Lisa and Van Purcell Alan Quackenbush Carol and George Ramsayer Jeffrey Rand Joan Randall\* Nancy and David Ratner Jeanne and Jonathan Raymond Bruce M. Read Byron Reed Dee Reever and Henry Busetti Abigail Reifsnyder Virginia Renfrew Rhode Charitable Fund Zoe Richards and Joshua Brown Judy Richardson Alyssa Rimmer and Matthew Henderson Dave and Mary Rimmer Christina and Ézra Ripple Jennie Robbins Pat Robins and Lisa Schamberg Rochat Jickling Charitable Fund Barbara Roggeveen Valerie Rooney Kathryn S. Roosa Richard Ruben Mr. and Mrs. James W. Runcie Carl and Deb Runge Connie Russell Sarah Russo Fred and Mary-Em Saar Jessica and Gary Sachs Susan Saferstein Michael Saraent Micah and Sachin Saste Helen and Guerrino Savio James Sawver Sara Scarp Jonathan Schechtman and Karin Davenport Molly P. Scheu Mark and Jennifer Schiffman Tai Schottland Katherine Schubart Jody and Jim Schubert Bill Schults and Betsy Maislen Andrew Schulz Sarah Schwaegler David Scott Jerome and Diana Senturia Kent Shaw and Jean O'Conor Nancy Shepard SHG Foundation Shrewsbury Outing Club Peter and Anne Silberfarb Scott Sillett Peter and Jacqueline Sinclair

Carol Pinney Jim and Faith Pivirotto

Frederick Pratt^

Michael and Barbara Powers

Paul Prappas and Carolee Colter



Susan M. Taylor Peter and Thelma Thompson George and Linda Thomson Jacqueline Thong Doug Tifft and Bonnie MacAdam Charles and Katherine Tipper Laura and William Tobin Patty and Jim Tobin lim and Francie Tolan Frederic Torzs Jack and Ellen Travelstead Erin and John Tunnicliffe Jacquelyn Tuxill Upper Valley Food Coop Rod and Betty Vallee Kate and Rick Vanden Bergh Karen and Tom VanDoren Casey Villard Fund Steve Voiat George and Patricia von Trapp Amy and Tom Wagner Howard and Patricia Wagner Kit Walker and Rob Hofmann Sean and Vicki Walker Richard and Sally Warren Chris Warsaw Jim and Tricia Wasserman Mary and Bernie Waugh\* Kathy Weaver John Weeks Peter Weston Sally Whaling and Mary Berner Jack Widness Ron and Norma Wiesen Allon and Marianne Wildgust

▲ Kent McFarland leading a 2024 Butterflies and Brews field trip in Brownsville

Ben Williams and Meg Darrow Williams Reeve Williams and Sandie Anderson Sandy and Tim Wilmot Sally Wilson Anthony Witte

Kathy Wilkerson

Charles Wohlers Lin Wolff Christina and Willis Wood Emilie Woodward Henry Woolsey Michael D. Wormser Paula Yankauskas and Dale Martin Steve Young and Jan Roy Connie and Mark Youngstrom Bruce and Michele Zanca Barb Zander and Dennis Casev Barbara and Mike Zimmermann leff and Anastasia Zinkerman

#### **CONTRIBUTORS**

Thomas Ziobrowski

Up to \$99

Anonymous (28) Skip and Ila Abelson Emilie and Stuart Alexander Heather Alexander Judy Allard

#### BICKNELL'S LEGACY SOCIETY

J'Amy Allen and Bob Tudek Blake and Nancy Allison Drs. Elizabeth Moen Alton\* and Raymond D. Barnes^\* Julia Alvarez and Bill Eichner John Anderson Nancy Archibald Carolyn Armenio Cheryl and Jim Arney Tom Áversa David Bailey Karen Baker Cheryl J. Barkley Fred and Lana and Graham Bates Katie and Bob Bateson Cassandra Beauvais Sarah Beebe Sheila Bergin Goss and Duncan Goss Seth and Melva Bigelow Lindy Biggs and Stephen Knowlton Charlotte Bill Svlvia Binaham Clint and Peggie Bissell Marcy Blauvelt Carol and Bob Bois Larry and Marsha Booker Mistie Boule Martina F. Breed Colleen and Vinnie Brennan Katharine Britton John Brodhead and Gina Campoli Carol and Will Brooke-deBock Tulio Browning Dave Caffry John and Marion Campbell Bodo Carev and Betsy Gladdina Silvia Cassano Charles and Kathryn Chamberlain Rob and Jan Chapman Jessica Chatfield Claire Chomentowski Lauri Christiansen Wegener Circle of Friends Ginger Clammer Deb Clark Clattenburg Family Fund Martha Cochran Alan Cody Ambrosia Collier Jane and John Conner

Nicole Conte and Matt Stevens

Walter and Carol Cottrell

Anne Cary Dannenberg

Ken Copenhaver

Jeff and Lisa Crouse

Margaret Corso

Ellen Cronan

John Crowther

Ed Cuoco

**Emilie Daniel** 

Shannon Cunniff

VCE's legacy giving program includes those who have designated a planned gift to VCE. Such gifts include bequests, beneficiary designations for life insurance policies or retirement funds, planned gifts of real estate, and life-income gifts such as annuities. VCE staff can help facilitate these choices and provide guidance as needed. Although the types and scales of their planned gifts vary greatly, these donors share an abiding commitment to ensuring that VCE's wildlife conservation work will continue long into the future.

Anonymous (9) Drs. Elizabeth Moen Alton and Raymond D. Barnes^ Peter W. and Ruth H. Brooke George Clark Colm Darcy and Carol Radic Ann B. Day Karen Fiebia C.J. Frankiewicz Cate Garvey Anna Gerretson Barbara D. Gerstner Al^ and Susan^ Gillotti Paula A. Gills Annette Gosnell

Donna Dauphinais

Elizabeth Davis

Victoria DeWind

Donna Dickerson

Charles J. Dutelle

Doug and Vicki Domin

Paula Duprat and George Ostler

Paul Erhard and Susan Tomases

Fairfield Pond Recreation

Association, Inc.

Ms. Patrice Favreau

Bruce K. Flewellina

Mary Freihofner

Amanda Frisken

Edward Gaine

Edwards

Dawn and Bernard Fov

Tulle Frazer and Rob Bryan

Sue Fritz and Jim LaBelle

Kalanani Gallas and Dave

John Echternach and Judith

Elizabeth H. Edgerton

Raven Davis

Mary Dodge

Domus, Inc.

Lisa Dreher

Beckie Eakin

Enalander

Beverly Emmons

Everareen Erb

Emme Erdossy

Allyson Evans

Pat Folsom

Anne Frey

Amelia Fritz

Jo-Ann Ecker

lean Elliott

Lynda Graham-Barber and David Hunter Susan<sup>^</sup> and Dean Greenberg Edward Hack Linda Huebner Jared and Songmei Keyes Karen Kluge Judy Lam and Jiggs Blackburn Sally Lauahlin Dan and Jave Lindner Gordon MacFarland W. Scott MacLachlan Gary and Nancy Meffe Jennifer Megyesi Charlotte S. Metcalf

Roy W. Pilcher Joan Randall Chris and Leslie Rimmer Charles Jr. ^ and Clare C. Rimmer Elizabeth Ruml Carla Skinder Anie Sklar Jen Stamp and Thomas Anderson Peter and Mary Stangel **Ruth Stewart** Marianne and Michael Walsh Mary and Bernie Waugh

Cate Garvey\* Bonnie Geisler Allison Gergely Trudy Gerlach Anna Gerretson\* Giersch Family Charitable Gift Fund Valerie Gillen Linda Gionti John and Christine Glade Leah Goat Jim Gold and Penny McConnel Mark and Carol Goodwin **Emily Gordon** Andrea Gould and Charlie Barasch Roberta Gowina Jim Graves and Kathy Dovle Greenwood Lake Association Greenfield Highland Beef Cindy Grimes Dr. Thomas Gutheil Barbara Hamilton Jim and Marilyn Hand Grea Hanisek Trish Hanson Mary Harry Svlvia Hartmann Nick and Connie Harvey Laurie-Helise and Ronald Heiin Don and Bev Heise Jo Ann Hendricks Lynne Higbie Holly Higinbotham Jason Hill and Katie Mann Beth Hindmarsh Sarah Hofmann

Deborah Holmes Tom Honigford and Sharon O'Connor Charles Hulse Rob and Doris Humphries Ann Hunsicker and Peter Bestenbostel Craig and Susan Hunt Catherine Hunter Bill and Joan Janssen Jerremy Jones Kathryn Jorgensen Karol Jane Josselyn Ken and Karen Kaliski Nelson Kasfir and Liz Blum Virae Kask Kearney & Son Carpentry Ron Kelley and Ann Spearing Brian Kelly and Joan Harlowe Matt Kelly Susan Kelly Howard and Linda Kelton Elizabeth Kennedy Maeve Kim Kintner Chiropractic Mary and Bess Klassen-Landis Paula Kleinties Neff and Terry Neff Ron and Janet Kolar Kateri Kosek Peter Kowalski Bill and Dianne Kudrez Deborah Laramie Peter Larsen Sheri and Richard Larsen Fuat Latif Armelle and Mitchell LesCarbeau Rob and Linda Libby

Dan and Jaye Lindner Marcia Liotard Col. and Mrs. Craig Llewellyn Trevor Lloyd-Evans and Linda Leddy Jane MacKugler Jeff MacQueen Wally Malley and Garet Allen-Mallev Elaine Manghi-Buck and George Buck Shona Marston Edward and Louise Mathews Edgar and Nancy Matthews Lisa McCullough Mark and Margaret McDonough Linda McElvany Ken and Cheryl McEwan Daniel and Patricia McKibben Elisabeth McLane Jackie and Rich Menae Leo Mierzwicki Christy and Marc Mihaly Joan Milam and David Kina Caroline Miller Frin Burke Mills Susan Mills Bill and Sue Minard Joanna Mintzer and Donald R. Ferrell Tom Moran and Becky Purdum Barbara Motvka Karen Murphy Molly Murray Candace and Eugene Nattie Jeannie Marie Nicklas Erik Nielsen Craia Nolan Joanne C. Norton Nancy Nutile-McMenemy Marty and Linda Nutter Rodney and Meghan Olsen Bruce Olsson Bill and Hannelore Overgard Chris Owen and Patricia Hazouri Peter Pappas Rick and Susan Paradis Dian Parker Thomas Parker Roger F. Pasquier Martha Pfeiffer Pat and Sue Phillips Carlos and Christine Pinkham George Plumb Stephen and Rebecca Powell Spencer Putnam Öwen Rachampbell Jose and Lea Ramirez Margaret Ramsdell Susan and Martin Reiter Len and Denise Reitsma Wanda Rice

Carolyn Rich

Suzanna Liepmann

Kenneth Rich Pip Richens Eileen Rilev Laura Robertson and Kurt Behrens Christopher Rohan Alana Ruprecht Mary Russ Christina Ryan Richard Saalfeld John Sabotka Louise Salant Anne Sargent Walker Gary and Penny Sawicki Karen Schabot and Walt Garner Pat Schroeder Lisa Schukei Scott Schwenk and Roxanne Bogart **Ruth Sessions** Dennis Shaffer and Amy Emler-Shaffer Heather Shand Tracy and Victor Sherbrook Edie Shipley Mimi and Michael Simpson Ann Slavton and Merrill Leffler Emily Sloan Dwaine Smith and Susan Pelkev

Smith

Derick Snare

Andy Snyder

Patty Spencer

Sue Staats

Kim Stewart

Beth Taylor

Dart Thalman

Brett Thelen

Andrew Toepfer

Deb Tramposh

Erica Tucker

Rebecca Trudeau

Susan W. Tucker

Lu Van Zeeland

Ann Vanneman

Lisa von Kann

Alison Wagner

Diane Walker

Scott C. Weaver

David L. Webb

Mr. Eric Wegner

Laura Weickert

O.S. Webb

Development, Inc.

Barbara Snook

Diane G. Snyder

Norma C. Spauldina

Ronald and Lisa Smith John and Ann Spencer Karl Stein and Judy Carpenter Lee and Mary Stewart Miriam and Gary Sturgis Lou and Nancy Tognan Tim Traver and Delia Clark Vermont Properties and



Libby Welch Diane I. Wessel Sue Wetmore Glenelle Wetzel Richard and Suzie Wheeler Patty Wiley Donna Williams Kate Williams Dottie and Charlie Windisch Mike and Kira Winslow Woodbury Lake Association Betsy Ziegler and Joey Klein Shirley Zundell

#### **SUSTAINERS**

Becky Howe

Craig and Susan Hunt

Sustainers support VCE throughout the year by giving every month or

quarter. Bill and Ginger Cotten Cynthia Crawford and Wayne Cripps Anne Cummings David Eberly Pea Elmer Hough Sabina Ernst Soryun and Howard Fitzpatrick Tina Foster Veer-Tess Frost Keith and Laurie Gee Raymond Gonda Emily Gordon Donna and Peter Hollinger

A Rvan Rebozo discussing lakeshore ecology at Alburgh Dunes State Park in September 2024

Toni Luff Bob Malbon Tita and Oliver^ Manice Blair Nikula Ashley Orton Nancy Osgood Abigail Reifsnyder Renfro-Pihut Family Alyssa Rimmer and Matthew Henderson Christopher Rohan Kathryn S. Roosa Micah and Sachin Saste Scott Sillett Lynn Spensley and Erika de Papp Gus and Cameron Speth Joanna Sturm Amv Swarr Laura and William Tobin Jacquelyn Tuxill Ann Vanneman Ann S. Wittpenn, M.D. Charles Wohlers Clive Wood and Stella Martin Emilie Woodward

#### **GIFTS IN HONOR**

In honor of All the loon chicks who didn't get to fledge Jane MacKualer

\* Bicknell's Legacy Society ^ Deceased

2024 DONORS **PARTNERS** 

In honor of Fred Pratt

Anna Gerretson

In honor of David and

In honor of Owen Rachampbell

Pat Folsom

In honor of Stew Arnold Valerie Roonev

In honor of Baby ducks Anonymous

In honor of Peter Brooke Anonymous (5) 3H4 Charitable Fund Clint Baiakian Kyle Bajakian John F. Brooke Samuel Brooke and Gail Weiss Charitable Gift Fund Bill and Roseann Hayes Hidden Hill Giving Fund Jason Hill and Katie Mann Susan and Todd Hindinger Robert and Lisa Holley David and Nancy Mears Alanna Ojibway Laura and Phil Prothero Chris and Leslie Rimmer The Ruml Leithner Family Fund Jennie Savage

In honor of Farley Brown Ms. Christina Goodwin In honor of Citizen scientists

John Snell In honor of Dickson Corbett

John and Marion Campbell In honor of Clara Cornelia Conadon Johnson

Roxane Johnson De Lear In honor of Guy Crosby and Rebecca Hovey

Tina Barney and Sara White In honor of The DDD Anonymous

In honor of Sonny Demars Dave Deciucies and Betsy Perez

In honor of Nancy Fitzpatrick Soryun and Howard Fitzpatrick

In honor of Ben Fletcher Erin Burke Mills

In honor of Anna Gerretson Owen Rachampbell

In honor of Dolores Glade John and Christine Glade

In honor of Jim Goetz Bob McGuire

In honor of Jim Graves and Mike Blust

Gerry Fitzaerald

In honor of Tom Greene Wally Malley and Garet Allen-Mallev

In honor of Cyndy and Tony Hall Peter and Thelma Thompson

In honor of Eric Hanson Cheryl and Jim Arney Jerremy Jones Katherine Marshall



Dian Parker Kim Stewart Jim and Tricia Wasserman In honor of Spencer Hardy Green Blossom Painting Reeve Williams and Sandie Anderson

In honor of Iason Hill Jo Ann Hendricks Micah and Sachin Saste In honor of Susan Hindinger

Laura and Phil Prothero Helen and Guerrino Savio In honor of Axel Hoffer

Dr. Thomas Gutheil In honor of Honey and Vic

Linda McElvany In honor of Robin and David Key Christina and Ezra Ripple In honor of Anastasia Kudrez

Bill and Dianne Kudrez In honor of the Lake St. Catherine loon chick

Carolyn Armenio Linda Machiz Katherine Marshall Donna Williams

In honor of R. Daniel Leighton Sally Leighton

In honor of Ken Libertoff John Snell

▲ Larry Walter admiring a Black Cherry tree on a 2024 exploration of an old-growth forest

In honor of Tom Liston Christopher Rohan In honor of Marie Lonatin Scott Longtin In honor of the Loons on Shadow

Lake, Concord, VT The Renfro-Pihut Family In honor of Betty Lord's service on

Brookfield's Śelect Board Ed Cuoco

In honor of the Lyons Family Ms. Margaret Lyons In honor of Kent McFarland

Ann Suokko In honor of Claire Merritt Joanna Mintzer and Donald R. Ferrell

In honor of My parents who paved the way toward empathy O.S. Webb

In honor of Desirée Narango Lisa Eby Green Blossom Painting

Helen and Guerrino Savio In honor of Dean Peterson Henry Keutmann and Ilene Gipson

Cordelia Reimers Kat Moraan In honor of Chris Rimmer Jim and Mally Cox-Chapman Birgit N. Deeds Mark Greenberg and Karen Pushee Mollie and Tom Hoopes Carolyn B. Jackson Alyssa Rimmer and Matthew Henderson Dave and Mary Rimmer Jennie Robbins Mary Russ Peter and Mary Stangel In honor of Delia Robinson lennie Savage In honor of Pauline Roy Bruce and Michele Zanca In honor of Nicki Steel Jack Widness In honor of Janet Stewart and Ray Shatney

Barasch In honor of David Tobias The Tow Foundation In honor of VCE Staff Nancy Osgood Jim and Francie Tolan Ben Williams and Mea Darrow

Andrea Gould and Charlie

Williams In honor of Izzy Zander Barb Zander and Dennis Casey

#### GIFTS IN REMEMBRANCE

In memory of Arvin Anderson Karen Ánderson Oliver In memory of Peter and Anne Brooke John F. Brooke In memory of Bill Chester Anonymous Penfield Chester Chris and Leslie Rimmer In memory of Will Cochran

Anonymous (2) In memory of Hugh and Judy Cox Bruce and Cheryl Cox In memory of Alan Day

Ann B. Day In memory of Alexander Dickey Berger Family Fund at the New Hampshire Charitable Foundation John and Lucy Douglas

In memory of Closey Dickey Ann Gormley and Richard Wallace

In memory of Norman Ecker Jo-Ann Écker In memory of Patti Eckles Keith and Laurie Gee In memory of Kenneth and Ramona Flewelling Bruce K. Flewelling In memory of Martha Lamb Montgomery Gordon Emily Gordon In memory of Mary J. Kellett Ed and Sue Gilbert

In memory of Cathy Kostecki Ms. Patrice Favreau In memory of Ken Libertoff Sarah Hofmann

In memory of R. Rees Llewellyn Col. and Mrs. Craig Llewellyn In memory of Carolyn E. Lorman

Jean Condon In memory of Lucia Murphy Kathleen Murphy

In memory of my dad and his work with loons Anonymous

In memory of Bob Norman David L. Webb

In memory of Pat Nye Chris Warsaw In memory of Connie Peterson

Emilie Woodward In memory of Pat and Bill Renfro Renfro-Pihut Family

In memory of Ted Richards Paula Á. Gills

In memory of Clyde and Reba Richardson

Anonymous In memory of Charles P. Rimmer Alvssa Rimmer and Matthew Henderson

Chris and Leslie Rimmer Clare C. Rimmer

In memory of Lisa B. Rimmer Alyssa Rimmer and Matthew , Henderson Chris and Leslie Rimmer Clare C. Rimmer

In memory of Linere Silloway Holly B. Bull

In memory of Susan Skogstoe Laura Robertson and Kurt Behrens

In memory of Tanka, a rescue dog from Costa Rica Änonymous

In memory of Jon Turmel Trish Hanson In memory of Chris Wetmore Sue Wetmore

VCE thanks you!

#### **BUSINESSES**

Billings Farm Birds & Beans Coffee Cedar Circle Farm Coaticook River Water Power Co. Great Bay Hydro Great River Hydro Hardwick Electric Department Morrisville Water & Light Plan it Wild Sunrise Farm Vail Resorts

#### **CONSORTIA & PARTNERSHIPS**

Automated Insect Monitorina Group e-Butterfly.org Forest Ecosystem Monitoring Cooperative International Bicknell's Thrush Conservation Group Northeast Network of Mountain Observatories Northeast Seed Network Vermont Biodiversity Alliance

#### **FEDERAL - UNITED STATES**

Green Mountain National Forest U.S.D.A Forest Service U.S.D.A Forest Service Office of International Programs U.S. Fish and Wildlife Service U.S. Geological Survey, Northern Prairie Wildlife Research Center White Mountain National Forest

INTERNATIONAL Canadian Forest Service-Atlantic Forestry Centre (Canada) Consorcio Ambiental Dominicano (Dominican Republic) Critical Ecosystem Partnership Fund **Environment and Climate Change** Canada (Canada) Grupo Jaragua (Dominican Republic) Insectarium in Montréal (Canada) Mila - Quebec Artificial Intelligence Institute (Canada) UK Centre for Ecology and Hydrology

#### NONPROFIT - DOMESTIC

(AmeriCorps)

Wildlife Refuge

Manomet Inc.

National Aviary

Native Plant Trust

Foundation

Program

Society

Museum

Science

Council

Atlas

Vermont Land Trust

Fairbanks Museum and Planetarium

Friends of the Missisauoi National

Green Mountain Audubon Society

Loon Preservation Committee

National Geographic Society

New Hampshire Audubon

New Hampshire Charitable

New York Natural Heritage

North Branch Nature Center

Northeast Kingdom Audubon

Otter Creek Audubon Society

Sociedad Ornitológica

Puertorriqueña Inc

The Nature Conservancy

Smithsonian Migratory Bird Center

Southern Vermont Natural History

Vermont Community Foundation

Vermont Entomological Society

Vermont Conservation Voters

Vermont Institute of Natural

Vermont Natural Resources

Village and Wilderness

Woodwell Climate

Vermont Reptile and Amphibian

Adirondack Center for Loon STATE - VERMONT Conservation Vermont Agency of Agriculture Adirondack Mountain Club and Food Markets Appalachian Mountain Club Vermont Agency of Digital Services Ascutney Mountain Audubon Vermont Agency of Transportation Society Vermont Department of Audubon Vermont Environmental Conservation Avian Haven Vermont Department of Forests, BirdsCaribbean Parks and Recreation California Academy of Sciences Vermont Fish & Wildlife California Native Plant Society Department Connecticut Audubon Conservation Biology Institute Cornell Lab of Ornithology MUNICIPAL Barre Public Works Department Corporation for National and Town of Hartland Community Service

**COLLEGES AND UNIVERSITIES** 

STATE - ALASKA

STATE - NEW YORK

Alaska Dept. of Fish and Game

New York State Department of

Environmental Conservation

Aarhus University (Denmark) Alabama Museum of Natural History-Odonata Central City University of New York Cornell University Dartmouth College Massachusetts College of Liberal Arts McGill University (Canada) Northern Vermont University Raritan Valley Community College SUNY New Paltz Tufts University Wildlife Clinic Université Laval (Canada) University of California Berkeley University of Delaware University of Massachusetts University of Massachusetts Amherst University of New Hampshire

University of North Carolina Chapel Hill

University of Ottawa (Canada) Université de Sherbrooke (Canada)

University of Southern California University of Vermont

University of Vermont Extension University of Vermont Gund

Institute for Environment University of Vermont Natural

History Museum University of Vermont Spatial Analysis Lab

University of Vermont-The Vermont Bee Lab

#### **FINANCIALS**

#### STATEMENT OF FINANCIAL POSITION

ASSETS	AS OF 12/31/24
CASH	\$472,902
RECEIVABLES	\$496,353
TOTAL CURRENT ASSETS	
INVESTMENTS	\$3,201,506
PROPERTY AND EQUIPMENT (NET)	
OTHER ASSETS	\$144,113
TOTAL ASSETS	\$5,221,696
LIABILITIES AND NET ASSETS	

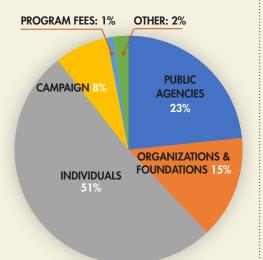
TOTAL LIABILITIES AND NET ASSETS	5
TOTAL NET ASSETS\$4,392,430	)
TOTAL LIABILITIES \$829,266	5
LONG-TERM DEBT, LESS CURRENT PORTION ABOVE	1
TOTAL CURRENT LIABILITIES	

#### STATEMENT OF ACTIVITIES

2024	REVE	NUE

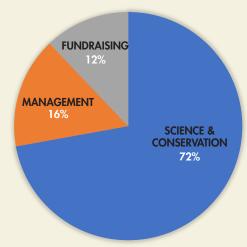
PUBLIC AGENCIES	\$501,885
ORGANIZATIONS/FOUNDATIONS	\$312,868
INDIVIDUALS	
CAMPAIGN	\$163,145
PROGRAM FEES	\$20,679
OTHER	\$45,148

TOTAL REVENUE ..... ....\$2,149,023



#### **2024 EXPENSES**

TOTAL EXF	PENSES	\$2,483,283
FUNDRAIS	3ING	\$300,723
MANAGE	MENT	\$390,679
SCIENCE A	and conservall	ON \$1,/91,881



#### A NOTE ABOUT VCE'S STRATEGIC GROWTH

In 2023, VCE entered a period of planned operating deficits to enable strategic expansion of our science, conservation, outreach, and fundraising activities. Expenditures adhere to carefully vetted programmatic and financial plans made possible by the generosity of donors toward our \$5 million ALL IN for Biodiversity Campaign. Funds from this successful campaign are invested and then deployed—along with increasing revenue from grants, contracts, and annual giving—to support unprecedented growth in our work and conservation impact.

## We've Got Vermont Covered

VCE's long-term monitoring projects blanket the state, with several projects and dozens of survey locations established in every county. The information we collect guides biodiversity conservation, policy, and funding decisions from border to border—and well beyond. To learn more about what we're tracking in areas you care about, visit vtecostudies.org/volunteer.

