Uniting People and Science for Conservation



ANNUAL REPORT 2017

MISSION

The Vermont Center for Ecostudies (VCE) advances wildlife conservation across the Americas through research, monitoring, and citizen engagement.

BOARD OF DIRECTORS

Peter Brooke, Chair Margaret Cheney, Trustee Brian Dade, Trustee Robert Holley, Trustee Jared Keyes, Vice-Chair and Treasurer Chris Rimmer, Trustee Elizabeth Ruml, Trustee William Schmidt, Trustee

ADVISORY COUNCIL

NY THE BOOM AND

Elizabeth Adams Richard Bowe Brian Farrell David Goudy Donald Graham Eduardo Iñigo-Elias Ted Jastrzembski David Key Sally Laughlin Jeff Marshall Larry Master Peter Marra Betsy McGean Gary Meffe Wendy Paulson Jackie Richter-Menge Tim Traver

STAFF

Chris Rimmer, Executive Director Susan Hindinger, Associate Director John Lloyd, Director of Science Steve Faccio, Conservation Biologist Eric Hanson , Conservation Biologist Jason Hill, Conservation Biologist Melissa MacKenzie, Business Manager Juan Carlos Martinez-Sanchez, Conservation Biologist Kent McFarland, Conservation Biologist Rosalind Renfrew, Conservation Biologist Sara Zahendra, Conservation Biologist



DEAR VCE FRIENDS AND SUPPORTERS,

I turned 98 today. More accurately, I submitted my 98th observation to iNaturalist. *Hericium coralloides*, or the Coral Tooth Fungus, to be specific. While not a scientist myself, I have become enamored with photographing, identifying, and contributing my findings from the woods and fields around my house to this global biodiversity database—and at the same time, locally to VCE's Vermont Atlas of Life.

I am a generalist: I do love to bird, but I love to look for dragonflies and hunt for mushrooms in equal measure. For me, there is richness in variety. It is this richness that has drawn me closer to the heart of the Vermont Center for Ecostudies. VCE has, through the varying interests of its scientists, cast a broad net in pursuit of a greater understanding of ecosystems in northern New England, the Caribbean, and Central and South America. VCE biologists go where the species they study take them—birds, insects, and amphibians and the forests, grasslands, and montane habitats that sustain them have been studied, monitored, assessed, and conserved.

Similarly, the extended VCE family brings diverse backgrounds and experiences that inform and sustain their collective efforts. Staff, Board, Advisory Council, and volunteers comprise a formidable group of inspiring, engaged, and committed individuals. I am humbled and honored to be a part of such a family. While the scientists direct VCE's course of research (and consequently, citizen science opportunities), our role as supporters is to nurture the foundation upon which their exceptional work flourishes. I encourage all who are interested to explore the many ways to become part of this family and support that foundation. Together, we can continue to unite people and science for conservation.

Peter w Brooke

PETER BROOKE

THE EXTENDED VCE FAMILY BRINGS DIVERSE BACKGROUNDS AND EXPERIENCES THAT INFORM AND SUSTAIN THEIR COLLECTIVE EFFORTS.





VCE IS NOT ONLY SURVIVING AT 10 YEARS OF AGE, BUT UNDENIABLY THRIVING.

A DECADE OF MILESTONES

As we age, every year seems chock full of milestones and passages. Reflecting on the past year at VCE, we experienced several of each. First and foremost, VCE reached its tenth year. More symbolic than substantive, this benchmark is nevertheless meaningful: VCE is not only surviving at 10 years of age, but undeniably thriving. Our conservation science program is robust, our visibility and reputation vibrant, our legion of loyal citizen scientists growing, our finances stronger than ever, our dynamic staff phenomenally talented, our Board and Advisory Council fully engaged. VCE's vitality after a decade represents nothing short of an all-hands-on-deck team effort.

More specifically, 2017 capped a quarter century (OK, 26 years, but who's counting?) of VCE's signature work on Bicknell's Thrush. From Mt. Mansfield in 1992 to Cuba's Pico Turquino in 2017, VCE has surveyed, counted, banded, radio-tracked, and pursued this rare and vulnerable songbird across the hemisphere. Many have been involved, and touched, in the process—see our retrospective summary later in this report.

Three other notable milestones from the past year:

> Eric Hanson's tenure as VCE's Loon Biologist reached 20 years! The architect (and chief bottle-washer) of Common Loons' resounding recovery from near-extirpation in Vermont, Eric shows no signs of easing up on the conservation throttle. With his leadership of hundreds of volunteers, there can be little doubt we'll reach the century mark for nesting loon pairs within a year or two.

> Forest birds also made news, as **Steve Faccio spearheaded publication of** *The Status of Vermont Forest Birds*, a 25-year trend analysis from our long-term Vermont Forest Bird Monitoring Program. The news is mixed, with avian winners and losers, but this work reaffirmed the immense value of this core VCE citizen science project, the longest running of its kind in North America.

> Roz Renfrew produced a hemispheric Bobolink Conservation Plan for the U.S. Fish and Wildlife Service, an historic effort with contributions from dozens of collaborators, laying out an explicit roadmap for collaborative international actions to conserve this steeply declining grassland icon. Trans-border conservation is never easy, but this far-reaching plan will guide and inspire actions from Canada to Argentina.

Passages? Three deserve special mention. Far too soon, we lost our dear friend and founding advisor Jenepher Lingelbach in June. We profoundly miss her compassionate spirit, boundless spark, and wise counsel. We also bid farewell to two core VCE staff: Sara Zahendra and Juan Carlos Martínez-Sánchez. Both added immeasurably to VCE's success, and our unique persona—Sara as a founding (and still active) voice of *Outdoor Radio* and our Whip-poor-will maven, JC as our first and only Caribbean Bird Conservation Coordinator, who literally forged new ground as a conservation mentor and practitioner on Hispaniola.

Looking ahead, challenges and opportunities abound. Our natural world is changing rapidly, and dramatically. As VCE confronts those changes, striving to advance conservation through science, we'll need help from every corner. Whether you're a citizen scientist, conservation partner, advocate, fellow nature enthusiast, supporter, friend—or all of these—you helped make 2017 a great year for VCE. Together, let's aim even higher in the years to come.

CHRIS RIMMER

Discovery

VERMONT'S OLDEST LOON

While driving by Newark Pond one June day, Eric Hanson noticed a loon near shore sporting colorful identification bands on its legs—green and orange bands on the left leg, yellow and aluminum on the right. Upon consulting historical banding data, Eric realized that he had banded this male on this same pond in 1998, his first year as the Vermont Loon Recovery Program biologist! Just how old was this bird?

Based on plumage, the loon was at least three years old in 1998, but more likely five or even older, making him now at least 25 years old—and the oldest Vermont loon on record (the average lifespan of a Common Loon is eight years.) How fitting that Eric and one of his first banded loons in Vermont were reunited on the eve of his 20th anniversary with VCE!



▲ The bird leaving this nest was banded in 1998 on Newark Pond by Eric Hanson and re-sighted in 2017, once again by Eric, on Newark Pond.

Birds of a Feather

A VCE study published in *The Condor: Ornithological Applications* analyzed carbon isotopes in feathers to discover what Bobolinks eat while on their wintering grounds. These carbon compounds reflect the different types of plant native grasses vs. planted rice—the birds consume while growing their feathers during winter molt.

Rosalind Renfrew and colleagues collected feather samples from Bobolinks wintering in South America both in a rice-producing region and a grassland region, and from breeding Bobolinks in North America. Results showed that the winter diet of most individuals was weighted toward non-rice material. but that rice consumption was highest in late winter, when rice is nearing harvest and the birds are preparing for their northbound migration.

While rice provides Bobolinks with needed calories as they prepare for their journey north, it may also increase their exposure to pesticides, or perhaps threats from some farmers who view them as pests. The study suggested that maintaining native grasslands, encouraging integrated pest management programs to reduce toxic pesticide applications, and compensating farmers for crops lost to seed-eating birds could help ensure the species' survival on its wintering grounds.

> Rosalind Renfrew prepares to release a banded male Bobolink.



MONT CENTER

LICENCE FOR CONSERVATION



© JONATHAN VAN BILSEN



DRAGONFLY ATLAS

2017 was an exciting year for Odonata in Vermont. Two new dragonfly species were added to the list of Vermont fauna, and VCE launched the Dragonfly and Damselfly Atlas-the most comprehensive assessment of Vermont Odonata ever assembled, documenting species occurrence and distribution. This is of growing importance as the mounting effects of climate change alter species' habitats, range, and abundance worldwide.

Soon after VCE launched the Atlas, the first discovery came in: angler Dale Ferland snapped a photo of a dragonfly perched on the shoreline of the Black River in Springfield; an acquaintance posted the image to iNaturalist Vermont; Atlas curators determined (and enthusiastically announced) that Dale had discovered Vermont's first Cordulegaster erronea (Tiger Spiketail)!

A planned expedition to a remote section of the Victory Basin Wildlife Management Area yielded the second new dragonfly discovery of 2017. VCE collaborators Josh Lincoln and Mike Blust set out on a two-hour bushwhack into the heart of Victory Bog in search of Somatochlora incurvata (Incurvate Emerald), among the rarest of North American dragonflies. Their soggy adventure paid off, as they found their elusive quarry.

Citizen Engagement

THE VERMONT CENTER FOR ECOSTUDIES PROMOTES WILDLIFE CONSERVATION ACROSS THE AMERICAS USING THE COMBINED STRENGTH OF SCIENTIFIC RESEARCH AND CITIZEN ENGAGEMENT.

CITIZEN SCIENCE OPPORTUNITIES



Mountain Birdwatch

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



LoonWatch

On the third Saturday in July, volunteers conduct a one-day census of Vermont's breeding loons. Loon monitoring throughout the summer is optional.



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.



Vernal Pool Monitoring

In April, May, and September each year, volunteers visit and collect data to monitor "adopted" vernal pools following protocols and using using VCE-provided equipment. Jason Hill prepares to hand over a recently-banded Willow Flycatcher for release during a banding demonstration in Norwich, Vermont.



CROWD-SOURCED DATA PROJECTS

VERMONT eBIRD

40,000 COMPLETE CHECKLISTS submitted to Vermont eBird, comprising over 300,000 bird records, representing 281 bird species, and tallied by 1,732 birders.

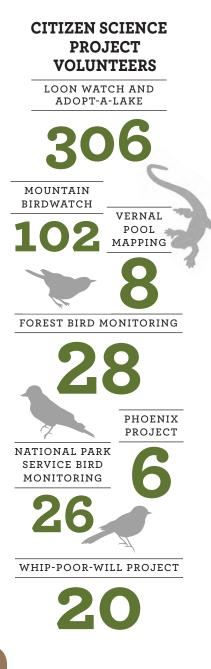
ODONATA ATLAS



VOLUNTEERS added 1,605 records to the Vermont Dragonfly and Damselfly Atlas (VDDA). Our growing dataset now stands at 10,544 records. That includes the addition of two new species to the Vermont fauna in 2017: *Cordulegaster erronea* (Tiger Spiketail) and *Somatochlora incurvata* (Incurvate Emerald).

VERMONT ATLAS OF LIFE AT iNATURALIST

1,057 NATURALISTS contributed over 56,250 observations representing more than 3,850 species. Over 1,325 naturalists helped to identify and verify identifications, elevating the data to "research grade."





Whip-poor-will Project

On clear, moonlit nights in early summer, volunteers travel between roadside survey points to listen for Whip-poor-wills and record surrounding conditions.



eBird

Volunteers submit bird sightings and checklists that are vetted by experts and added to a worldwide avian database.



e-Butterfly

CROWD-SOURCED CITIZEN SCIENCE TOOLS

Volunteers report sightings and submit photos of butterflies across North America.



iNaturalist Vermont

Volunteers share observations of all Vermont biodiversity in this digital project of the Vermont Atlas of Life.

Outreach

MANY LANDOWNERS ATTENDED OUR WORKSHOP TO EXPLORE WAYS TO SUPPORT GRASSLAND BIRDS IN BALANCE WITH OTHER LAND MANAGEMENT OBJECTIVES.



Odd Names, Serious Trouble

COMMUNICATING SCIENCE



Field Notes

Our twice-yearly science magazine offers in-depth coverage of our research and conservation efforts, and behind-thescenes updates here at VCE. Learn about what we've been doing and how you can join us in science and conservation of wildlife. You can read past issues of **Field Notes online** at vtecostudies.org/ field-notes.

eNews

VCE's monthly electronic newsletter delivers timely information and stunning photography to over 3,000 subscribers. eNews reports on topics ranging from VCE research, to breaking news from the frontiers of conservation biology, to explorations of regional natural history phenomena through our featured "Field Guide to the Month." and more. Subscribe at vtecostudies.org/ subscribe.

Managing Habitat

VCE and Upper Valley Land Trust sponsored "The Balancing Act: A Workshop for Landowners and Land Managers" with the goal of educating land managers about how they can help grassland birds and maintain field quality through bird-friendly mowing regimes. Participants learned about grassland bird ecology and watched a birdbanding demonstration. Experts from VCE, the Vermont Department of Forests. Parks and Recreation, and **University of Vermont** Extension shared tips, tools, and incentives to help landowners strike a balance between hav production and stewardship for birds.





SUDS & SCIENCE

You know you're doing something right when the most frequent complaint is, "there's nowhere left to sit," in a room that holds 50. VCE's public science discussion series, hosted by biologist Jason Hill, keeps getting better as we blend science with the arts of storytelling and craft beer. Held monthly (January-May and November) at the Norwich Inn, community members gather with beverage in hand to casually learn about a diversity of topics-which in 2017 included insect sound communication, the evolutionary origins of stress, shorebird migration, climate change, and Arctic soils. Our speakers are professionally recorded for rebroadcast on CATV Community Access Television, where the show is quite popular, and simultaneously affords access to constituents far and wide. vtecostudies.org/suds-and-science/

A Dr. Zane Thayer, Dept. of Anthropology at Dartmouth College, entertained with her talk on the evolutionary explanations for why stress affects our health.

¥

Sara Zahendra and Kent McFarland pose atop an old beaver lodge at North Branch Nature Center in Montpelier.

Outdoor Radio

VCE and Vermont Public Radio team up to explore fascinating natural history topics on air and online in our monthly Outdoor Radio show. Now in its fifth year, Outdoor Radio co-hosts Kent McFarland and Sara Zahendra, along with VPR's Chief Production Engineer, Chris Albertine, take listeners across the state (and sometimes underwater or above treetops) to delve into natural curiosities all around us. From mussels to moose and worms to waterfowl, anything is fair game for our intrepid hosts. Tune in to VPR the third Wednesday of every month at 6:20 PM, again on Thursday at 7:50 AM, or listen online anytime at vtecostudies.org/ outdoor-radio.



Leadership

Male Bobolink in non-breeding plumage. This photograph was taken by a birder in Pennsylvania who contacted VCE to help identify the leg bands. VCE is an internationally recognized leader in Bobolink research. REACHING BEYOND ITS NAMESAKE, THE BOBOLINK CONSERVATION PLAN IS A FRAMEWORK FOR CONSERVATIONISTS, PLANNERS, AND BIOLOGISTS TASKED WITH ADDRESSING THREATS TO A SUITE OF GRASSLAND BIRD SPECIES.

LEADING THE CHARGE FOR BOBOLINK CONSERVATION

VCE completed the international Full Life Cycle Bobolink Conservation Plan, commissioned by the U.S. Fish and Wildlife Service in response to long-term declines in grassland bird populations. Reaching beyond Bobolink, the Plan is a framework for conservationists, planners, and biologists tasked with addressing threats to a suite of grassland bird species throughout their annual cycles. Using input solicited from wildlife and conservation experts from seven countries, it defines population goals and prioritizes conservation strategies to stabilize grassland bird populations across the western hemisphere, and will provide a roadmap for future work that all parties interested in grassland bird conservation can share.





Top Right: VCE summer interns Kirsti Carr and Nate Launer proudly display banded **Bicknell's** Thrushes on Mt. Mansfield, 12 July 2017.

Liza Morse pins a Polyphemus moth for preservation.



MENTORING TOMORROW'S CONSERVATIONISTS

Over nearly three decades of conservation science, VCE biologists have mentored dozens of students and young scientists. From field crews immersed in "brute force biology," searching for Bicknell's Thrush nests in balsam fir thickets atop Stratton Mountain and Mt. Mansfield, to banding songbirds, identifying butterflies, and mapping vernal pools, involvement in VCE's projects has set many a youth upon a career path to conservation. Former interns and seasonal biologists have gone on to PhDs and distinguished careers in academia, wildlife agencies, and fellow conservation nonprofits.

Reaffirming our commitment to mentorship, VCE in 2017 extended our mentoring opportunities to include participation in the University of Vermont (UVM) Rubenstein School Perennial Internship program, the ECO Americorps program through Vermont's Department of Environmental Conservation, and the second year of our own Alexander Dickey Conservation Internship.

ECO Americorps member Liza Morse joined VCE in fall 2017 to plan and coordinate the pilot year of a new citizen science project, VPMon, that will monitor vernal pool ecosystems. Under the guidance of Steve Faccio, she led the project through its first field season, developing protocols, recruiting and training participants, and spreading the word about this new project in communities across Vermont.

Two rising seniors at UVM filled VCE's dual internship slots: Nate Launer, from Greensboro, VT was VCE's second annual Alexander Dickey Conservation Intern. Kirsti Carr, from Fairfield, CT, was selected for the

Rubenstein Perennial Internship position at VCE. Nate and Kirsti conducted point counts for Mountain Birdwatch, banding on Mt. Mansfield, and loon surveys for the Vermont Loon Conservation Project. Read about their experiences at vtecostudies.org/blog



Building a Consensus Agenda for Conservation

People often ask, "How does VCE set its priorities?" It's a legitimate question, given the vast array of wildlife and habitats, and the threats they face, even within the "Greater Laurentian" landscape at the core of our work.

We pursue projects that:

- > are within our areas of expertise
- represent timely and significant conservation challenges
- > present real opportunity for action
- > offer opportunities to engage the public in our work
- have available funding

Our ideal would be to build a "consensus agenda" which all parties active in conservation would advance: researchers would agree upon key areas of focus with input from policy makers who would envision putting the research to use. Practitioners and policy makers would advise the researchers on the most effective modes for delivering the science to parties who would apply it, and funders would direct their resources to advance this work.

To that end, VCE collaborated with Hubbard Brook Research Foundation to gather scientists, policy makers, practitioners, and funders. All who attended were selected because of their broad perspectives, willingness to think expansively, and potential for contributing to a rich and inspiring day-long discussion.

The discussion culminated in the 2017 publication of our report, "Co-creating an action-oriented agenda for biodiversity research in Vermont," which will inform VCE's strategic priorities in the coming years.

Collaboration

LOON CONSERVATION

The Vermont Loon Conservation Project is an unqualified success story, having ushered the Common Loon population from the brink of extirpation (a low of 7 nesting pairs in 1983) to 2017's record high of 97

A STRONG NETWORK OF COLLABORATORS HAS HELPED THE VERMONT LOON CONSERVATION PROJECT USHER THE COMMON LOON POPULATION FROM THE BRINK OF EXTIRPATION TO 2017'S RECORD HIGH OF 97 NESTING PAIRS. nesting pairs. In addition to the sheer number of loons, Vermont's loon productivity (number of chicks produced per pair) has exceeded the North American average. Each Vermont territorial pair produces on average about 7 chicks over a 10-year period; the average across North America is 5 chicks over 10 years.

What accounts for such success? One thing we know is that Vermont benefits from a very strong and diverse network of collaborators, each contributing in a unique way to protect loons and their habitats.

> HYDROPOWER DAM OPERATORS

Ten hydropower dam operators help prevent flooding of nests for at least 22 territorial loon pairs. If loons nest on natural sites (such as islands and marshes) on any of these dam-regulated water bodies, VCE alerts the operators to tailor their water management regime to prevent flooding the nests, especially during heavy rain events. All but one of the stations does this voluntarily—Great River Hydro's license requires that they maintain relatively steady water levels on Somerset Reservoir during the loon nesting season. (Although Great River Hydro's license requires it, the company is a willing partner and important funder of this project.)

> VOLUNTEERS AND CITIZEN SCIENTISTS

Over 500 volunteers and others serving as "informal contacts" are the program's eyes and ears, following loon activity on more than 120 lakes and ponds around the state. They document loons' spring arrival, courtship and conflict behaviors, nesting activity, failed nests and re-nests, and of course, they follow the rearing of "their" loon chicks. Volunteers help manage nest warning signs and nesting rafts, assist with loons in trouble (e.g., fishing line, road crashes, landing on ponds too small to fly from), and serve as loon ambassadors to their friends and neighbors. On a single day each July, volunteers around the state count loons on every lake during the same window of time, providing us an accurate snapshot of the statewide loon population.





► VCE STAFF

1111

Eric Hanson, VCE's Loon Biologist for the past 20 years, spends just as much time coordinating volunteers and communicating with the public and various stakeholders as he does observing or managing loons. The results speak for themselves. Vermont's loons are back and thriving!





Lake associations provide an avenue to reach lakeshore landowners and lake users on an even larger scale. Many associations have handed out thousands of VCE's pamphlets on loon natural history, conservation, and the importance of preserving shoreline habitat. VCE's loon outreach programs are presented at lake association meetings every year. In combination with outreach done by volunteers, Vermonters' level of loon awareness is likely among the highest in the country.

FROT PERKINS

> PROFESSIONAL COLLEAGUES

 Veterinarians at Tufts University Wildlife Clinic have performed necropsies on more than 60 loons over the past 20 years. They provide insight on causes of loon deaths, which in turn informs our conservation and management practices.

 Vermont Fish and Wildlife game wardens assist when a distressed loon is reported, and the agency provides key funding to this project.

 Vermont State Parks personnel often help with monitoring and outreach efforts.

 Conservation groups involved in loon research and management in other states share information through the Northeast Loon Study Work Group.





VCE volunteers discover a Common Loon egg in a nest. Volunteers monitor nests and help place warning signs around nesting areas on over 120 lakes across Vermont.

Record Year for Loons

Our Vermont Loon Conservation Project, through both monitoring and active management, saw record numbers in the project's 40-year history, both in terms of loon population recovery (97 nests and 308 adult loons, up from 7 nests and 29 adults in 1983) and volunteers engaged (306, not including agency and corporate partners).

What accounts for these chartbusting numbers? There was a higher percentage of 2-chick hatches compared to some years, and 86% of the known territorial pairs nested. Of course, having a record number of loon nests contributed to the record chick numbers (92 chicks at the end of August: previous high was 80 in 2016). Many ponds saw their first successful nests (Curtis Pond, Dog Pond, Green River Reservoir-Merganser Inlet), while others saw success after many years of failure (May Pond, Echo Lake-Charleston, West Mountain Lake).

There can be no doubt that the combination of dedicated volunteers, many partners, and a strong commitment by Vermont's lake users to live peaceably with loons has led to a remarkable conservation success story.

JANET STEWARD

Conservation

Chris Rimmer enthralls Ty Christensen at the Mt. Mansfield bird banding station.

25 YEARS OF LEADERSHIP IN INVESTIGATING BICKNELL'S THRUSH HAS LED TO OUR FOCUS ON CONSERVATION OF CRITICAL HABITATS AT BOTH ENDS OF THE SPECIES' RANGE.

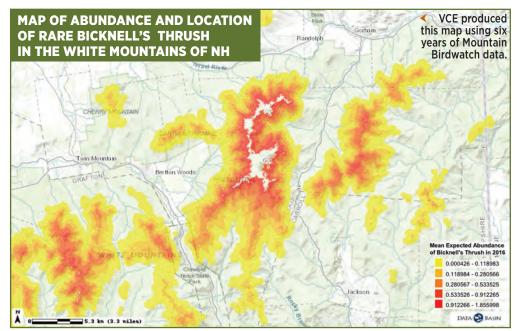
	1992	1994	1995	2000	2001	2003
BICKNELL'S HRUSH JOURNEY		First of -40 field trips to Hispaniola	BITH declared a distinct species from Gray-cheeked Thrush; BITH banded on Mt. Mansfield is recaptured by Kent McFarland on the wintering grounds in the Dominican Republic (DR).	The launch of Mountain Birdwatch, a citizen science initiative to investigate the population dynamics of montane forest birds, including BITH. 18 years later, more than 500 citizen scientists have conducted well over 25,000 point counts.	VCE biologists publish the official Birds of North America (BNA) account for BITH, cementing VCE's leadership role in investigating the species.	VCE biologists describe the unique mating system of BITH in the leading North American ornithological journal (The Auk).

BICKNELL'S THRUSH: A RETROSPECTIVE

VCE's pioneering research on Bicknell's Thrush (BITH) inspired our approach to full life-cycle conservation of migratory birds. While we have learned a tremendous amount about the species' ecology, population dynamics, and conservation issues (since 1995, we have published no fewer than 42 peer-reviewed papers on Bicknell's Thrush), our efforts are increasingly turned to on-the-ground habitat conservation. Chronic-even accelerating-habitat loss in the Caribbean demands this approach. With the U.S. Fish and Wildlife Service's 2017 decision not to list Bicknell's Thrush as Threatened, the hard work of conserving this species falls largely on non-governmental organizations like VCE and our partners in the Caribbean.

LOOKING AHEAD

As our work to conserve BITH by protecting its wintering grounds proceeds, on the breeding grounds in northeastern North America we will broaden our scope to include conservation of the entire montane forest ecosystem. BITH is just one of many species that resides in the northeastern mountaintops. And while our research suggests that BITH populations are relatively stable at present, other species—such as the Blackpoll Warbler-are experiencing steep population declines. Understanding why will help us, and our partners, take action to conserve not only the birds but all of the wildlife that inhabit our mountain forests.



© CHARLES GANGAS

2005

Our Ecotoxicology publication is the first to document mercury in a terrestrial songbird.



VCE leads collaborative formation of the **International Bicknell's Thrush Conservation Group (IBTCG),** with 7 countries, 6 U.S. states and 3 Canadian provinces now represented.

2007

2010

VCE spearheads publication of IBTCG's Conservation Action Plan for Bicknell's Thrush. VCE hires a full-time conservation biologist in the DR and Haiti.

2011



VCE's BITH field surveys and habitat model are key to establishing **DR's first-ever** private reserve in Cordillera Septentrional.

2012

2017 Achievements

> Counting Bicknell's Thrush: We published research estimating the U.S. BITH population (-71,000 individuals) and identifying hotspots of the species' abundance.

> Mitigating habitat loss: At the request of the U.S. Forest Service, we developed an innovative program to offset loss of BITH breeding habitat through conservation on the imperiled wintering grounds, described in our 2017 publication, "Bicknell's Thrush Mitigation Across Borders: A Strategy for Full Life-Cycle Conservation."

> Guiding conservation planning: With our IBTCG partners (see 2007 timeline), we revised and updated the Conservation Action Plan for Bicknell's Thrush.

> Publishing results: We published the State of the Mountain Birds report online, making 10 years of highelevation bird monitoring data available to the world.

> Saving Caribbean habitat: We played a key role (funding and programmatic) in producing a strategic conservation action plan for DR's Sierra de Bahoruco National Park, a biodiversity hotspot and crucial wintering area for BITH.

> Expanding research: We initiated innovative work to investigate the occurrence of BITH in industrial forests of Maine and northern New Hampshire.

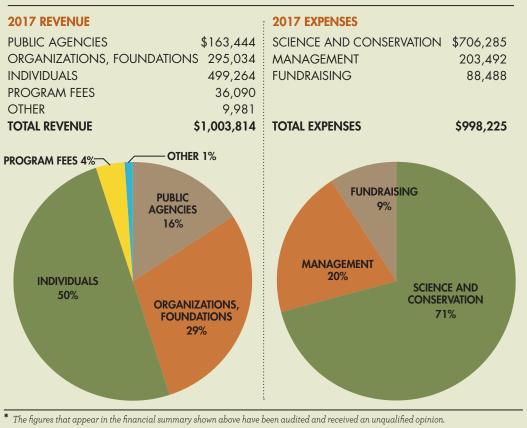
> Surveying Cuban habitat: We launched BITH surveys in the mountains of southeastern Cuba, collaborating with Cuban scientific partners at Centro Oriental de Ecosistemas y Biodiversidad (BIOECO).

> VCE launches islandwide **BITH surveys on Puerto Rico** (completed in 2016); VCE hosts IBTCG meeting at which John Lloyd succeeds Chris Rimmer as chair.

2015

STATEMENT OF FINANCIAL POSITION		
ASSETS	2017	2016
CURRENT ASSETS		
CASH	\$678,360	\$635,235
CONTRIBUTION RECEIVABLES	105,476	101,928
GRANT RECEIVABLES	91,138	133,561
PREPAID EXPENSES	19,393	18,573
TOTAL CURRENT ASSETS	894,367	889,297
EQUIPMENT & WEBSITE, NET	17,600	19,485
TOTAL ASSETS	\$911,967	\$908,782
LIABILITIES AND NET ASSETS		
CURRENT LIABILITIES		
ACCOUNTS PAYABLE	\$7,738	\$8,089
ACCRUED PAYROLL & RELATED TAXES	73,497	74,018
DEFERRED REVENUE	679	629
CURRENT PORTION OF CAPITAL LEASE OBLIGATION	FION –	1,583
TOTAL CURRENT LIABILITIES	81,914	84,319
TOTAL LIABILITIES	81,914	84,319
NET ASSETS		
UNRESTRICTED	507,740	510,968
TEMPORARILY RESTRICTED	322,313	313,495
TOTAL NET ASSETS	830,053	824,463
TOTAL LIABILITIES & NET ASSETS	\$911,967	\$908,782

STATEMENT OF ACTIVITIES



DONORS

LEADERS \$10,000+

Anonymous (5) Bailey Charitable Foundation Binnacle Family Foundation Bobolink Foundation Richard Bowe and Karen Nemeth Peter W. and Ruth H. Brooke Fund at the Boston Foundation * Erika and Brian Dade Annette Gosnell * The Florence O. Hopkins Charitable Fund, Inc. Gale Hurd Jared and Songmei Keyes * Warren and Barry King Clare Rimmer David Roby Elizabeth Ŕuml * Ruth Stewart TechFoundation, Inc. **GUARDIANS** \$5,000 to \$9,999 Jack and Dorothy Byrne Foundation George Clark Will and Laurie Danforth

Stephen Whitney Dickey, Jr. Eugene B. & Nina L. Doggett Charitable Fund at the Boston Foundation Mr. Spotswood Hall, Jr. Hanover Consumer Cooperative Society, Inc. Robert K. and A. Joyce Jones Foundation, Inc. Emily Landecker Foundation, Inc. Mary D. Lindsay Charlotte S. Metcalf * Judy Peterson Robert and Sandra Taylor Tow Foundation

PROTECTORS

Wendling Fund Wildwood Foundation

Carter and Lissa Winstanley

\$1,000 to \$4,999 Anonymous (4) Charles and Jill Agnew David Baldwin, Jr. Anonymous Fund of the Berkshire Taconic Community Foundation Margaret Biggar John F. Brooke Charles E. & Edna T. Brundage Charitable Science & Wildlife **Conservation Foundation** Carolyn Foundation Children's Fund of the Upper Valley of the New Hampshire Charitable Foundation Conroy Family Foundation W. Carl Cooley and Seddon Savage Gerrit Crosby John and Lucy Douglas Philip and Deborah Edmundson Fund Alexander and Robin Ellis John and Margot Ernst Elliott Fisher and Nan Cochran Jim and Susan Ford

Laura Gaudette and David Hume Judy Geer and Dick Dreissigacker Jonathan Gibson and Eliza Mabry Robert Glushko and Pamela Samuelson

Stephen and Mary Gorman Donald Graham and Carol Barr Norman and Jane Hanson Patricia Highberg Robert and Lisa Holley Kristin Graham and Tom Hulleberg Carolyn B. Jackson Barbara M. Jordan Sarah Jones Lawson's Finest Liquids John and Carolyn Marsh Winifred McDowell and John Follett Harriet S. Mitiguy Living Trust Norwich Women's Club Oakland Foundation Darlene and Ernest Palola Pitchoff Fund Don and Linda Post Richard and Lorna C. Post * Ann and Tip Ray Grace Jones Richardson Trust Carol Saunders and Amy Bodwell Nicholas Skinner Stone House Farm Fund of the New Hampshire Charitable Foundation Georgena Terry Tom and Charity Tremblay

Tom and Charity Tremblay Steve Trombulak William and Joanna Wright

CONSERVERS \$500 to \$999

Anonymous (3) Paul J. Beisswenger, MD and Carolynne T. Krusi Birds & Beans, LLC Michael Biro MaryJane Boland Browning Family Foundation Barbara Butler and Jeff Bendis Laura Carlsmith and Robert Bast Ann B. Day * Whit and Closey Dickey Fund of the NH Charitable Foundation * Anne Felton Spencer Dr. Richard Fried and Stella Kim Carolyn and Milton Frye Al and Susan Gillotti Donna Goldberg Ann Gormley and Richard Wallace Richard and Marcia Haas Hesler Family Fund JMM Fund of the Vermont Community Foundation Robin and David Key Judy and Jonathan Keyes Claudia P. Kinder Trust Sally Laughlin * Kathy and Peter Leonard McCaslin-Henningsen Charitable Trust Martha McDaniel Gary and Nancy Meffe David Moulton Marne Onderdonk Norene and George W. Peck IV Cathie and Ned Redpath



"My list of appreciations is very long for this group. Thank you for annual reports I can understand, for newsletters, personal notes, and project updates, all of which I've kept, re-read, and have inspired me to investigate my own territory." – supporter

Renfro-Pihut Family Harry Roberts and Elizabeth Howard Brent R. Rohloff and Lorna J. Kane-Rohloff Chris Runk Albert and Barrie Schultheis Stettenheim Foundation Margery S. Walker Howie and Sue Wemyss Working Landscapes

SUPPORTERS \$100 to \$499

Anonymous (16) Kathleen Achor and Timothy Hoch Peg Ackerson Clay and Liz Adams Lynn Adams and Simon Carr Robert and Karen Allen Blake and Nancy Allison Lee and Carmen Anderson Stephen Antell and Barbara Leaf Terri Armata Averill Lakes Association Anne Aversa Jim and Betsy Bahrenburg Charles and Diana Bain Marcia Baker Thomas C. Barber Stephen Barker Virginia Barlow lames Barrett Elizabeth Bassett and John Pane Edward and Sheila Becker

Nancy Bell Ross and Joyce Bell Eve Benen Dr. Paul Bengtson Thomas Berriman Louis and Anne Bigliani Charlotte and Hal Bill Linda Garrett and Jon Binhammer Joan Binns John and Cindy Blackburn Peter and Ruth Bleyler Marilyn Blight James A. Block David Blockstein Jinx and Mike Bloom Gilbert Bolsterle Larry and Marsha Booker Margaret F. Borden Mr. and Mrs. William Botzow II Karen Bourgue and Robert Horton Karen Bowles Kingsley Boyd and Tina Brazeau Sandy and Kristi Bragg Harold and Mona Brewer Margaret Briggs Richard and Robin Brooks Dr. Stephen Brown and Ms. Metta McĠarvey Chess Brownell Susan and Larry Bruce Joan Burchenal Amanda Cannell-Boone David Capen Josette and Steve Carter

Lisa Cashdan and Peter Stein Anne and Mike Cassidy Dick and Barb Catlin Alan Cattier and Carole Meyers Richard and Ann Chalmers Rob and Jan Chapman Margaret Cheney and Peter Welch Gretchen Cherington and Michael O'Leary John and Melanie Clarke Brenda Clarkson Alan Cody Concept2, Inc. Jean Condon Manton and Nancy Copeland Harry and Karla Cornelius Sarah Cornog and Christopher Chesney Pete Corradino Bill and Ginger Cotten Mally and Jim Cox-Chapman Ruth Crawford **Cronkite Family** Tina Culver Fred and Ann Curran Charles Curtis and Kari Dolan Andy and Judy Dales Mary Daly Dan and Whit's General Store Scott and Beverly Darling Chip and Alisa Darmstadt Pam Darrow Charles and Ann Davis Judy Davis

DONORS

Marilyse de Boissezon Sandra Dehmer Jan and Jennifer Dembinski Randy Dettmers Dr. John and Katherine Dick Fund Courtney Dobyns Wick and Cynthia Doggett Stuart Douglas Susan Roney Drennan Anne and Derek Drummond Duke Energy Foundation Judith Dunnan Louis Dupont and Ellen Spring Echo Lake Protective Association Norman and Jo-Ann Ecker Christopher Eggers Jean Eisenhart Gordon and Joni Elicker Marvin and Susan Elliott Ben and Dianna Emory Peter and Nancy Engels Sabina Ernst Gilda Faccio Fairfield Pond Recreation Association, Inc. Sarah Fellows David and Julie Filiberti First Universalist Parish Lionel and Ardys Fisher Michael and Sandra Fisher Gerry Fitzgerald Lynné Fitzhugh Pat Folsom C.J. Frankiewicz Friends of Wolcott Pond Dirk and Elizabeth Frater Karin Frazer Mr. and Mrs. Conrad Frey Jonathan Frishtick and Holly Glick Jenny Garber and Don Brown Marty and Cathy Gardner Barbara D. Gerstner * Barbara Gibbs Cyrus and Joanne Gibson Edmund and Susan Gilbert Kate Gillis Paula A. Gills * Arthur V. Gilman Linda Gionti Bill and Jean Golden Billi Gosh David Goudy and Susan Gallagher Alan and Kris Graham Wayne and Deborah Granquist Clive Gray Phil Gray Janet C. Green Susan and Dean Greenberg Greenwood Lake Association Bob and Suzanne Griffiths Donald Groll Dr. Thomas Gutheil Sandy and Edward Hack * David Hadden Steve and Sunita Halasz Jim and Marilyn Hand Jan and Dave Hapke Janet and Doug Hardy Brian Harrington and Martha Sheldon Mari L. Harter

VCE DONORS SPAN NORTH AMERICA



Bindy Hathorn Haynes & Garthwaite Architects Patti Haynes George and Jill Helmer Matthew Henderson Richard and Michelle Hicks Robert E. Hindle David Hoag Allen and Kit Hood Mollie and Tom Hoopes Susan Houston Patrick Hynes Ironwood Foundation Peter Isakson and Helen Hamman Susan James Ted and Kathy Jastrzembski Bob and Shirley Johnson Peter A. Johnson and Claire P. Lyon Win and Rita Johnson Amber Jones Janice Jorgensen Kathryn Jorgensen Hank Kaestner Ken and Karen Kaliski Robert and Sue Kancir Heather Karlson and Bill Leeson Kearney & Son Carpentry Preston and Virginia Kelsey Sherman and Laura Kent Henry Keutmann and Ilene Gipson Christopher Kibbe Kathy Kirkland Marcie and Ned Kirschbaum Karen Kluge and Terry Rosenmeier * Dr. Mark Knott Toby Kravitz, DDS Elizabeth Krusi and Sandy Harris Ken and Renee Kudrak Deb Kunhardt Lake Fairlee Association Lake Harvey Association Lake Rescue Association, Inc. Judy Lam and Jiggs Blackburn Jim and Patty Lambert Andrea Landsberg Ron and Linnea Laperle

Mr. John Larkin Peter Larsen Linda Leddy and Trevor Lloyd-Evans John and Diane Liccardi Brian and Sandi Lincoln Crawford and Ann Lincoln Katherine Linton Jason Loomis and Mica Tucker Lois Lorimer and Bill Sullivan Rebecca Lovejoy and Kevin Peterson Deborah and Peter Luquer Gordon MacFarland * Bruce and Pam MacPherson James and Nancy Malcolm Ezra and Sandra Mann Barbara Mansell Bill Martin and Dorothy Allard Gerry and Chryl Martin Larry Master David and Roxanne Matthews Mr. and Mrs. Edgar Matthews Kay McCabe and Rod Griffin Stephanie and Philip McCaull Penny McConnel and Jim Gold Robert and Gloria McEwen Geoffrey McGean Mark S. Pecker and Elizabeth A. McGee Bob McGuire Barbara McIlroy Holly McKenzie and Robert P. Martin Elisabeth McLane Linde and John McNamara Lynn McNamara Gail and Mark McPeek Jennifer Megyesi * Bill Mercia David Merker and Sharry Baker Miller & Candon, LLC Frank S. Miller Gilles and Jacqueline Molleur Eric and Jane Molson Kathleen M. Montague Jack and Karen Morgan **Richard Morse** John Mudge

Mr. and Mrs. Ronald Mura Holly Nash Wolff Martha Nelson Cathy and David Newbury Gail Nichols and Bill LaCouter Northland Construction Company Louise Nunan Taylor Judirae Obrecht Karen Oliver James E. Osborn III Nancy Osgood Mr. and Mrs. Samuel J. Palmisano Jan Parsons Karyn M. Patno Bill and Betsy Peabody Dr. Robert and Jane Perrin David and Elinor Peters Donald Peterson and Amy Rader Jerry and Susan Peterson Lynn and Nancy Peterson Thomas Peterson Chris and Nissa Petrak Karl Pfeiffer Nicki Pfister Jane and John Phipps Ann Pibal and Colin Brant Roy W. Pilcher * Carol Pinney Jim and Faith Pivirotto Carol Post and Daniel Kinney Mike and Barbara Powers Frederick Pratt Craig Provost Lisa and Van Purcell Karen Pushee and Mark Greenberg Robert Qua Sharon Randall Barbara Reed David and Sarah Reeves Virginia Renfrew Craig Repasz Hira and Solon Rhode Philip Ribolow Keith and Marvelene Richards Zoe Richards and Joshua Brown Eileen Riley

BICKNELL'S LEGACY SOCIETY

Alyssa Rimmer Andrew and Tish Rimmer Chris and Leslie Rimmer * David and Mary Rimmer Jennie and Gil Robbins Frank Robey Anita Rogerson Ken and Anne Rosenbera Jim and Chris Runcie Carl and Deb Runge Fred and Mary-Em Saar Scott and Pat Sainsbury Sara Jean Sangdahl James Sawyer William B. Scarborough, Jr. Jonathan Schechtman and Karin Davenport Andrew Schulz John and Rita Ruiz Severinghaus Nat and Angela Shambaugh Kent Shaw and Jean O'Conor Li Shen and Stuart Blood Barrett M. Singer Company Carla Skinder Bill Slocum Eric and Dale Smeltzer David and Wilhelmina Smith Sydney and Rosamond Smithers Ólaf Soltau Eric Sorenson and Cathy Kashanski Mike and Lisa Sorenson John Sowles Arnold and Priscilla Spahn Lynn Spensley and Erika de Papp Gus and Cameron Speth Cindy Sprague and Jim Converse St. Johnsbury Animal Hospital Jon and Cindy Stableford Bob and Sally Staiger Peter and Mary Stangel * Stark Mountain Woodworking Martha Stauffer Ms. Barbara Stearns John Stein Betsy T. Stevens Lee and Mary Stewart Maria Steyaart Katherine D. Stone Mr. and Mrs. David Strachan David Straus Allan Strong and Lisa Nawrocki Skip and Marilyn Sturman Robert Stymeist and Martha Steele Ned Swanberg and Tory Rhodin Gerry and Paul Sweterlitsch Shiela and Steve Swett David and Susan Taylor Frederic Taylor Cho and Sandy Teng Tara Thacker Bridget Tierney Susan Tiholiz Laura and William Tobin Andrew and Gail Torkelson Jack and Ellen Travelstead Jacquelyn Tuxill Rod and Betty Vallee Vermont Woods Studios' Employees Jim and Ginger Visconti George and Patricia von Trapp Alison Wagner

estate plans. Your work and VCE are SO important to our quality of life in our precious state of Vermont." - bicknell's Legacy society member

"I am happy to

include you in my

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. While 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 (3) Peter W. and Ruth H. Brooke George Clark Ann B. Day Whit and Closey Dickey Fund of the New Hampshire Charitable Foundation Robert Engel* Abbott T. Fenn Trust* Barbara Gerstner Paula A. Gills Annette Gosnell

Bicknell's Legacy Society

Thrush on Mt. Mansfield.

members Sally Laughlin and Jenn Megyesi with a Bicknell's

Lynda Graham-Barber and David Hunter Edward Hack Linda Huebner Jared and Songmei Keyes Karen Kluge Sally Laughlin Gordon MacFarland Jennifer Megyesi Charlotte S. Metcalf Julie Nicholson* Patricia Nye Trust* Roy W. Pilcher Lorna Chang Post Joan Randall Chris and Leslie Rimmer Charles, Jr. * and Clare Rimmer Elizabeth Ruml Carla Skinder Jen Stamp and Thomas Anderson Peter and Mary Stangel

* deceased

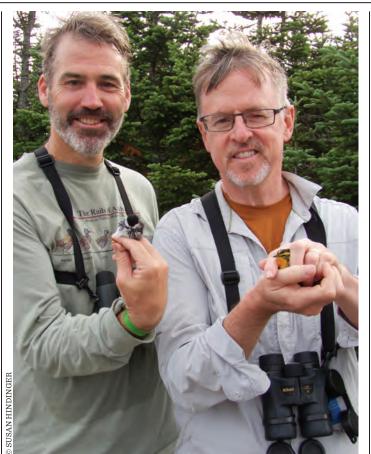
© SUSAN HINDINGER

DONORS

Howard Wagner Tom and Amy Wagner Clare Walker Leslie Marianne and Michael Walsh Virlinda G. Walsh Dick and Sally Warren Christine Warsaw Jim and Tricia Wasserman Thomas and Paulette Watson Mary and Bernie Waugh David L. Webb Ron and Norma Wiesen Mr. Ron Wild Allon Wildgust Williams Family Reeve Williams and Sandra Anderson Eric Wistrand George C. Wood and Nina F. Weisbord Elizabeth G. Woods Fraley Wright Sunny and Mark Wright Paula Yankauskas and Dale Martin Steve Young and Jan Roy Connie and Mark Youngstrom Barb Zander and Dennis Casey Shirley Zimmermann Tom Źiobrowski

FRIENDS Up to \$99

Anonymous (25) AmazonSmile Foundation Joan Aleshire Ted Allen Mrs. Charles Alling Ann H. Alman Julia Alvarez and Bill Eichner Mr. Rob Anderegg Jean Arrowsmith Charles Aversa Tom Aversa Barbara Badgley David Bailey Lilias and David Barton Cassandra Beauvais Seth and Melva Bigelow Elizabeth Billings and Michael Sacca Harry and Sylvia Bingham Bob Éirkett Tom Bjorkman Marcy Blauvelt Doug Blodgett and Kim Royar Blue Gentian Lodge Liz Blum and Nelson Kasfir Walter Blumenscheid Michael Blust Roxanne Bogart and Scott Schwenk Sally Borden Matthew Bourgault Ken and Nancy Bowen Bob and Ginnie Bowman Natalie Boze and Becky Cook Margaret Bragg Martina Breed Colleen and Vinnie Brennan Karen and Rod Brigham Carol and Will Brooke-deBock Meriel Brooks Jim and Judy Brown Rob and Holly Buck



Holly B. Bull Douglas and Mary Burnham Patricia Campbell Esther Cantus Bodo Carey Silvia Cassano Deb and John Caulo Sara Cavin Charles and Kathryn Chamberlain Steve Chorvas Delia Clark and Tim Traver Stewart and Denise Clark Dr. and Mrs. Richard Clattenburg Michael and Susan Coffey Micki Colbeck Jeremy Coleman Abby Colihan Ken Copenhaver Bruce and Cheryl Cox Cynthia Crawford Catherine Crawley and Richard Weinstein Jason and Michaela Crooks Louise Cross Anne J. Cummings William and Marcy Cummings Mrs. Laura C. Cutler Priscilla Daggett Richard and Martha Dale Tom Danbrook **Emilie Daniel** Anne Dannenberg Nancy and Ralph Darrah Matt Darrow Raven Davis Barbara De Angelis

Jared Keyes and Phil Edmundson preparing to release banded Blackpoll and Blackburnian warblers on Mt. Mansfield.

Donna Dickerson Valerie and Douglas Dillon Terri Donovan and Peter Jones Drury Family Kathleen Duclos Domus, Inc. Idoliné Duke G. Richard and Bonita Dundas Lois Eby Patricia Wood Eckels Karen Gallas and David Edwards Laura Ells Beverly Emmons Charlotte Encinares Bob Ensminger Evergreen Erb Nona Estrin and Charles Johnson Allyson Evans Page and Andrea Fairchild Marc and Peggy Faucher Jeffrey Fernandez Steven Fesmire and Heather Keith Mike and Cynthia Field Kenneth Finch Anne Fines Janina Finsthwait Bruce Flewelling Stanley Flink Polly Foley David and Valerie French

David and Jo Fretz Walt Frey Veer-Tess Frost Jon Gailmor and Cathy Murphy Gardell Family Lené Gary Allison Gergely Seth Gibson Gary and Margaret Gilbert Lou and Cathy Gilbert Barry and Lorrie Goldensohn Jennifer Gomo Michael and Rebecca Gonyaw Ashli Gorbet David Govatski Roberta Gowing Peter and Pam Grace lim Graves Margaret Greaves Erica Green Shirley K. Griggs Dean Grover Haddock Family Steve Hagenbuch and Dana Hudson Greg Hanisek Katherine Hart Sylvia T. Hartmann Fran Haugen Sarah Havens Sue Heavenrich Roland and Laurie Heijn Rich and Martha Heilemann Oz and Judy Henchel Robert Hendel Jo Ann Hendricks Ann Hicks Layne and Lorna Higgs Charles and Julie Hill Libby Hillhouse Sara Hills David and Susan Hindinger Beth Hindmarsh Judith Hobbs **Deborah Holmes** Frederick and Joyce Holmes Tom Honigford and Sharon O'Connor Jamie and Nancy Horton Dave Houston Ging Mazer and Mark Howard Chuck Hulse Rob and Doris Humphries Karen Hussey IBM International Foundation Jim and Sharon Jackson **Ruby Jenness** Tait Johansson Dr. Thomas Johnston Jennefer Jolls Elizabeth Karet Ron Kelley and Ann Spearing Charles Kelly Matt and Mary Kelly Elizabeth Kennedy **Eileen Kerkes** Doug Kibbe and Mackenzie Goldthwait Meredith Kimbell Lindsay Knowlton Barbara Kohn Ron and Janet Kolar Ellen Kouwenhoven Mark and Lorena Krenitsky

2017 JULIE NICHOLSON CITIZEN SCIENCE AWARD

Kathleen and William Kruesi Rudolph Kugler Linda and Russell Kulas Kim Kurak Marilyn B. Lagrow Lake Groton Association Lake Raponda Association, Inc. William Landesman and Kristen Ross Sheila LaPoint Richard and Sheri Larsen Fuat Latif Anthea Lavallee Elizabeth Lee Patricia Lee Dianne Lendler Armelle and Mitchell LesCarbeau Philip Lewellen Ann[']Lewis Mr. and Mrs. Rob Libby Carol D. Licht Dan Lindner Marcia Liotard Cindy and Phil Livingston Julia Lloyd Wright Andrew and Virginia Longacre Westy Lovejoy Liz Luca William and Anastasia Lyman Ariel and Mike Lynch Jen MacCullough and Jeremy Stonier Deb MacKey W. Scott MacLachlan Penny Mahar Ellen H. Maloney Donna Martin Mascoma Savings Bank Suzanne Masland Peter Mason and Laurie Harding William and Mae Mayville Robert and Nancy McCafferty Jerry and Gretchen McFarland Mary Ann McGarry Mark and Mary McGrath Anne McKay Fran McKay Todd and Renay McLeish David Mehlman Mary Metcalf Mark Milazzo Donald H. Miller Fran and Betty Miller Susan and Bill Minard Joanna Mintzer and Donald R. Ferrell Barbara Mitchell Cathy Molloy Thomas Moran and Rebecca Purdum Jim Morris Kevin and Polly Murdough Kathleen Murphy L.A. Murphy Larry Myott Carole Neese Mimi Neff Kristine Nelson Roxann Nickerson Blair Nikula Craig Nolan Richard and Joanne Norton Gerry Notman Eric and Ingrid Nuse Tim O'Donoghue



BRYAN PFEIFFER

The Julie Nicholson Citizen Science Award honors Julie Nicholson's extraordinary passion and commitment to birds and wildlife conservation through her many years of tireless work as a citizen scientist. It is presented annually to an individual who exemplifies Julie's dedication to the cause of citizen science and conservation. We're proud to present this year's award to Bryan Pfeiffer.

More than 30 years ago, a new birder on the scene in Vermont, Bryan Pfeiffer, "made the pilgrimage" to meet Sally Laughlin, the executive director of the Vermont Institute of Natural Science in Woodstock. At about that time, Sally hired VINS' first research director, Chris Rimmer, who would go on to become a founder and executive director of VCE. Ever since, Bryan and Chris and VCE have been partners in science and conservation.

For the past three decades, Bryan and every member of the VCE staff have collaborated on a huge range of projects from the reintroduction of Peregrine Falcons in the 1980s to the launch of a damselfly and dragonfly atlas in 2017.

"There are few who have done more to share their passion and knowledge of Vermont's natural history—with such flair and artistry—than Bryan," says Chris Rimmer. "His keen eye, richly articulate voice, solid understanding of science, and deep commitment to conservation have touched legions of people. Bryan's contributions to science-based conservation run deep and across all levels of society."

Bryan brings an unusual slate of skills to VCE. He's a writer, editor, educator, birder, photographer, entomologist, and all-around naturalist. Sharing nature with people—in the field or with the force of the written word—is in Bryan's DNA.

Bryan doesn't give it all away for free. He's been a VCE contract employee, most recently conceiving of Outdoor Radio, VCE's successful collaboration with Vermont Public Radio, and supervising the overhaul of our website.

As a volunteer. Brvan's contributions are older than VCE itself. He has surveyed our Forest Bird Monitoring route at Bear Swamp for 27 consecutive years; worked on the Vermont Breeding Bird Atlas, both outdoors and indoors, including co-authoring the chapter on avian conservation; completed several Mountain Birdwatch routes; and curates dragonfly, damselfly, and butterfly records on the Vermont Atlas of Life iNaturalist project. The brand new Vermont Damselfly and Dragonfly Atlas was a natural collaborative project for Bryan and fellow insect enthusiast Kent McFarland. Having made big contributions to birding in Vermont, Bryan has stepped away a bit from birds, in order to bring more attention to invertebrate discovery and conservation in the state.

Bryan's nature blog, found at bryanpfeiffer.com, connects followers to his adventures in his Vermont backyard and around the globe.

DONORS



© LAWSON'S FINEST LIQUIDS

Patty O'Neill Pierce and Ashley O'Neil Linsay Oakden JeanÁarie Oakman David and Karen Oles Kate Olgiati and Dory Rice Rodney and Meghan Olsen Elinor Osborn Matt Osborn Terry Osborne and MK Beach Barbara Otsuka Ann Owen Chris Owen and Patricia Hazouri Rick and Susan Paradis Jacob Park Dr. Thomas Parker Phyllis Parrott Roger F. Pasquier Jake Pendleton and Terry Cantor Bryan Pfeiffer Joshua and Julie Phillips Dr. Carlos F. A. Pinkham Dave Potter Craig and Donna Powers Sean and Sarah Prentiss Jose and Lea Ramirez Carol and George Ramsayer Margaret Ramsdell Edward and Adrienne Raymond Sandra and John Reilly Cordelia Reimers Susan and Martin Reiter Terry Rich Pip Richens Rebecca Richman Catherine Richmond and David McCullough Ben Rimmer Sue Roberts and Steve Victor Fredelle and John Robinson Amelia Robinson-Fritz Larry and Mona Rogers Alań A. Rozycki, MĎ Susan Saferstein Gary and Margery Salmon Micah and Sachin Saste Ridge Satterthwaite David Scarborough Karen Schabot and Walt Garner Taj Schottland Tatiana Schreiber Jody Schubert Lisa Schukei Ms. Betty Secord Jerry and Diana Senturia Dennis Shaffer and Amy Emler-Shaffer Andrew and Jennifer Shaw Mavis and Ad Shaw Lynn Sheldon and Daniel Hudnut Bill Shepard Tracy and Victor Sherbrook Shrewsbury Outing Club Peter and Jacqueline Sinclair **Emily Sloan** Mary Sloat Slocombe Family Dwaine Smith and Susan Pelkey Smith Marisa Smith Kraus Nathaniel Smith and Priscilla Bonney-Smith **Derick Snare** Diane G. Snyder

Harold and Jean Somerset Christine Soychak Rosemary Spahn and Mike Korkuc Paty Spencer Jen Stamp and Tom Anderson * Gary and Kathleen Starr Jim and Nancy Stead Judy Carpenter and Karl Stein Sterling Inn Jeff Stern Yvonne Straus Kate Summey Frank Susan Sussman and Scudder Parker Susan Sutheimer Tom and Karen Sweeney

Kate Williams Mike and Kira Winslow Jeanne G. Wisner Roger and Jill Witten Charles Wohlers Elizabeth Mei Wong Andy Wood Woodbury Lake Association Tom and Éarbara Woodward Peter and Penny Wright Carol Yarnell Mary Zimmermann Mike and Barb Zimmermann Rita Zimmermann Shirley Zundell



Kimberly Taber Louise Thompson Paula Thompson Doug Tifft and Bonnie MacAdam Tig and Elise Tillinghast Valorie Titus James Tobin Andrew Toepfer Renee Traverse Rebecca Trudeau Susan W. Tucker Ellen Valley Deb Van Árman Ann Vanneman Sara Villeneuve Alison Violette Lisa von Kann Barbara Walker Glenn and Diane Walker Kit Walker and Rob Hofmann Susan Walter Thomas and Karen Ward Tom Warhol Gordon and Marti Watson Scott C. Weaver David and Ingrid Webb John Weeks, Jr. Laura Weickert Milton and Rhonda Weinstein Peter Weston Sue Wetmore Richard and Suzie Wheeler Donna M. Wiegand-Bicknell Judy Wilkinson

GIFTS IN HONOR

Anonymous In Honor of Dory and Brooke Thomas C. Barber In Honor of Roz and her Bobolink Work Stephen Barker In Honor of Nina and Peter Blain Virginia Barlow In Honor of Mary Holland Bruce and Cheryl Cox In Honor of Judith Cox on Mother's Day Louise Cross In Honor of Noel Dodge Tom Danbrook In Honor of Paul Row Laura Ells In Honor of Ted Richards Elliott Fisher and Nan Cochran In Honor of Will Cochran Dr. Richard Fried In Honor of Jared Keyes Paula A. Gills In Honor of Ted Richards Dr. Thomas Gutheil In Honor of Paul Nevin David Hadden In Honor of Leslie and Chris Rimmer Janet and Doug Hardy In Honor of Ed Hack's 75th Birthday

Katherine Hart In Honor of Barbara MacAdam Jo Ann Hendrick In Honor of Jason Hill Layne and Lorna Higgs - In Honor of Lynne Carpenter on her 75th Birthdau The Florence O. Hopkins Charitable Fund, Inc. In Honor of Elizabeth Ruml Henry Keutmann and Ilene Gipson In Honor of Dean Peterson Carol D. Licht In Honor of Peter and Linda Romans Crawford and Ann Lincoln In Honor of Brian and Sandi Lincoln Mary Metcalf In Honor of Julie Mitchell Joanna Mintzer and Donald R. Ferrell In Honor of Donald R. Ferrell In Honor of Claire Merritt Kathleen M. Montagu In Honor of J. Wallace Malley and Margaret Allan Malley Richard Morse In Honor of Elizabeth M. Morse Kathleen Murphy In Honor of Lucia Murphy Judirae Obrecht In Honor of Jason Hill Donald Peterson and Amy Rader In Honor of Judy Peterson **Renfro-Pihut Family** In Honor of Katia and Terry on Valentine's Day Jerry and Diana Senturia In Honor of Eric Hanson on the occasion of the "old" loon Tracy and Victor Sherbrook In Honor of Judith Scarl Jim and Tricia Wasserman In Honor of Eric Hanson Mr. Ron Wild In Honor of Bryan Pfeiffer Reeve Williams and Sandra Anderson In Honor of Spencer Hardy Fraley Wright In Honor of David B. Wright **GIFTS IN REMEMBRANCE**

Anonymous

In Remembrance of Julie Nicholson Anonymous In Remembrance of Ernie Licht Anonymous In Remembrance of Byron Connor Roosa Anne Aversa In Remembrance of Julie Nicholson Sally Borden In Remembrance of Walter E. Borden III Margaret F. Borden In Remembrance of Abbott T. Fenn Pete Corradino In Remembrance of Janey Tina Culver In Remembrance of R. Allyn Culver

G. Richard and Bonita Dundas $In \, Remembrance \, of \, Eugene \, and$ Ruth Kosche Pat Folsom In Remembrance of Chris Pratt (Mrs. Team Pipit) Gary and Margaret Gilbert In Remembrance of Ed and Ruth Mari L. Harter - In Remembrance of Richard A. Harter Matthew Henderson In Remembrance of Charles P. Rimmer, Jr. Mollie and Tom Hoopes In Remembrance of Charles P. Rimmer Doug Kibbe and Mackenzie Goldthwait In Remembrance of Elizabeth Farnsworth Kathy Kirkland In Remembrance of Dave Evancich Kim Kurak In Remembrance of Jason Saltman Katherine Linton In Remembrance of Marjorie C. Linton Anne McKay In Remembrance of R. Bruce McKay David Merker and Sharry Baker In Remembrance of Doug Kern Bill and Betsy Peabody In Remembrance of Jenepher Lingelbach Jake Pendleton and Terry Cantor In Remembrance of Peter Nilles Sharon Randall In Remembrance of my Beautiful Irish Mama, Mary Isabella Randall Virginia Renfrew In Remembrance of Esther Renfrew Renfro-Pihut Family In Remembrance of Pat and Bill Renfro Alyssa Rimmer In Remembrance of Charles P. Rimmer Andrew and Tish Rimmer In Remembrance of Charles P. Rimmer Ben Rimmer In Remembrance of Charles P. Rimmer Chris and Leslie Rimmer In Remembrance of Charles P. Rimmer Clare Rimmer In Remembrance of Charles P. Rimmer David and Mary Rimmer In Remembrance of Charles P. Rimmer Eric Sorenson and Cathy Kashanski In Remembrance of Jenepher Lingelbach Lynn Spensley and Erika de Papp In Remembrance of Richard Spensley Mr. and Mrs. David Strachan In Remembrance of Charles P. Rimmer

PARTNERS DONORS

Gerry and Paul Sweterlitsch In Remembrance of Janet Spring Howard Wagner

In Remembrance of Linda Wagner Christine Warsaw

In Remembrance of Patricia Nye In Remembrance of Steve Warsaw Paula Yankauskas and Dale Martin In Remembrance of Deborah J. Beier Barb Zander and Dennis Casey

In Remembrance of Hal D. Casey

GIFTS TO THE ALEXANDER DICKEY **CONSERVATION INTERNSHIP FUND**

W. Carl Cooley and Seddon Savage Manton and Nancy Copeland Mrs. Laura C. Cutler Closey F. Dickey Stephen Whitney Dickey, Jr. John and Lucy Douglas Stuart Douglas Christopher Eggers Ann Gormley and Richard Wallace Mr. Spotswood Hall, Jr. Mary D. Lindsay Deborah and Peter Luguer Peter Mason and Laurie Harding Charlotte S. Metcalf Chris and Leslie Rimmer Working Landscapes

PARTNERS **BUSINESSES**

Barre Public Works Department Baxter State Park Coaticook River Water Power Company Essex Timber Company Great Bay Hydro Green Mountain Power Hardwick Electric Department High Branch Conservation Services LandVest Morrisville Water and Light New Page Corporation Stowe Mountain Resort Great River Hydro UPM-Kymmene Corporation Wagner Forest Management Weverhaeuser

CONSORTIA & PARTNERSHIPS

Atlantic Coast Joint Venture Eastern Tallgrass Prairie and Big Rivers Landscape Conservation Cooperative Forest Écosystem Monitoring Cooperative International Bicknell's Thrush Conservation Group Northeastern States Research Cooperative Prairie Potholes Joint Venture

FEDERAL - UNITED STATES

Green Mountain National Forest International Institute of Tropical Forestry (Puerto Rico) National Park Service Northern Prairie Wildlife Research Center Northern Research Station Patuxent Wildlife Research Center Smithsonian Migratory Bird Center



Audubon Vermont

Birds of Vermont Museum

Cornell Lab of Ornithology

Biodiversity Research Institute

Corporation for National and

California Academy of Sciences

Community Service (AmeriCorps)

Corporation for National Research

Echo Lake Aquarium and Science

Green Mountain Audubon Society

Hubbard Brook Research Foundation

Four Winds Nature Institute

Loon Preservation Committee

New Hampshire Audubon

North Branch Nature Center

Northeast Kingdom Audubon Society

Northern Woodlands One World Conservation Center

Rutland County Audubon Society

Otter Creek Audubon Society

Southeastern Vermont Audubon

Southern Vermont Natural History

Taconic Tri-State Audubon Society

Vermont Community Foundation

Vermont Entomological Society

Vermont Reptile and Amphibian

Maine Dept of Inland Fisheries and

Maryland Division of Natural Resources

Sociedad Ornítólogica

Puertorriqueña Inc.

The Nature Conservancy

Vermont Public Radio

Vital Communities

STATE - MARYLAND

STATE - MAINE

Wildlife

Manomet, Inc. Merck Forest & Farmland Center

Green Mountain Power

Maine Audubon

National Aviary

NatureServe

Society

Museum

Atlas

BirdsCaribbean

Initiatives

Center

STATE - NEW HAMPSHIRE

New Hampshire Fish and Game University of New Hampshire Cooperative Extension

STATE - NEW JERSEY NJ Division of Fish and Wildlife

STATE - NEW YORK

NYS Dept of Environmental Conservation

STATE - PUERTO RICO

Puerto Rico Department of Natural and Environmental Resources

STATE - VERMONT

University of Vermont Cooperative Extension Vermont Agency of Transportation Vermont Department of Environmental Conservation Vermont Fish & Wildlife Department Vermont Forests, Parks & Recreation Department **STATE - WISCONSIN** Wisconsin Department of Natural

Resources

UNIVERSITIES

Dartmouth College Kansas State University Oregon State University Paul Smiths College Plymouth State University State University of New York, ESF Tufts University Wildlife Veterinary Clinic University of Arizona University of Delaware University of Maine - Orono University of Massachusetts University of Minnesota University of Missouri - St. Louis University of New Brunswick University of New England University of Ottawa University of Vermont University of Wisconsin Madison

26

Upper Midwest Environmental

U.S. Dept. of Agriculture Forest Service

U.S. Dept. of Agriculture Natural

Resources Conservation Service U.S. Dept. of Defense Legacy

U.S. Fish & Wildlife Service

U.S. Forest Service Office of

White Mountain National Forest

Asociación Armonía (Bolivia)

BirdLife International (United

Biodiversidad (Cuba)

(Dominican Republic)

Fondation Seguin (Haiti) Fundación William H. Phelps

Centro Oriental de Ecosistemas y

Consorcio Ambiental Dominicano

Environment and Climate Change

Grupo Jaragua (Dominican Republic)

Insectarium Montreal (Canada) Museo Nacional de Historia Natural

de Santo Domingo (Dominican

Atlas of Living Australia Bird Studies Canada

Asociación Calidris (Colombia)

International Programs U.S. Geological Service

Sciences Center

Program

INTERNATIONAL

Kingdom)

Canada

(Venezuela)

Republic)

(Canada)

Nature Canada

Nature Quebec (Canada)

(Dominican Republic)

Société Audubon Haiti

NONPROFIT - DOMESTIC

Conservation

Audubon New York

Adirondack Center for Loon

Adirondack Mountain Club

Appalachian Mountain Club

Regroupement Quebec Oiseaux

Secretaria de Estado de Medio

Ambiente y Recursos Naturales

Space for Life in Montreal (Canada)

Ascutney Mountain Audubon Society



The Vermont Center for Ecostudies envisions a society that sustains healthy ecosystems through informed decision-making.



Uniting People and Science for Conservation

PO BOX 420, NORWICH, VT 05055 | 802-649-1431 WWW.VTECOSTUDIES.ORG

Printed on recycled paper

VCE IS A 501 (C)(3) NON-PROFIT. ALL CONTRIBUTIONS ARE TAX-DEDUCTIBLE