



FALL/WINTER 2019-2020

VERMONT *Nature*

New Exhibit: A Forest Canopy Walk

IMAGINE: you're fifty feet high, surrounded by leaves, taking in fresh air and smelling the clean scent of pine with every breath.

The trees gently sway in the light breeze. You heard birds singing and frogs calling, and close your eyes to take it all in. Open your eyes and you see squirrels face-to-face and caterpillars munching on leaves. This is an opportunity shared by only the most adventurous tree climbers, but one that VINS can offer without climbing skills or harness. The new Forest Canopy Walk allows visitors a glimpse into a world many cannot access. With an ADA-compliant boardwalk, everyone can stroll out on a level path as the ground drops away and gain elevation with minimal effort. And the journey will undoubtedly be worth it! Your perspective will be forever changed.

Views from the Walk are stunning and will vary through the ever-changing seasons. From the vibrant greens of spring and deeper colors of summer to the bright



VINS Co-Founder J. David Laughlin, D.D.S.
and Janet Mayberry

autumnal leaves, you'll get to observe the change of seasons from a new vantage point. Even the winter, with its sparsity of leaves, promises to enchant the eyes. Smell, feel, touch, and see what life is like among the upper leaves of the forest.

Along the Walk there are interpretive signs that educate about the importance of healthy forests and give ideas for how humans can manage the land in a way that is respectful of and reciprocal with what they provide to us. What services do forests offer? How do animals utilize different levels? And what products do we get from them? You will also learn to identify common trees, spiders, birds and other forest animals. Or relax and just be inspired by quotes from great writers who relished their time in the woods.

Beyond the educational value of learning about forests, one will also have a chance for play. In our Giant Spider Web, children can scramble out and imagine what it would be like to catch insects high above the ground. Or make-believe that they are an eagle building a nest in the treetops. Or stand at the top of the Treehouse, 100 feet high, and fantasize about being a bird soaring over the forest canopy. The opportunities for imagination and creativity are endless.

Another key component of the Forest Canopy Walk is its ability to give everyone a possibility to experience life in the trees. Because it is ADA-compliant, persons with limited mobility will be able to gain access to the treetops.



VINS Executive Director Charles F. Rattigan

Beyond the mild incline at the beginning of the Walk, the majority of the path remains level so anyone using a wheelchair or other mobility device, or parents with young children in strollers, can have a truly remarkable adventure.

A while ago, I was working with a group of middle-school students and showed them the plans for the Walk. A young woman who uses a wheelchair, face beaming, asked, "So you mean I will be able to get up there also?"

"Absolutely!" I said. My hope is that everyone has the same expression of excitement that she showed.

We are delighted to have opened this amazing new exhibit. No matter the season or weather, the new Forest Canopy Walk will give everyone a chance to view the forest with new eyes.

—Chris Collier, Director
On-Site Programs & Exhibits

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A Special Message

From Our Executive Director

It has been an exceptional and exciting year at VINS, and I am so proud to be a part of this organization.

Every year, more than 38,500 schoolchildren, campers, teachers, families and adults experience nature firsthand at the VINS Nature Center, and another 23,000 participate in a Vermont Institute of Natural Science community outreach event, VINS Nature Camp, or VINS School Program.

This is possible because of the skill and dedication of the VINS staff, our volunteers, generous donors, board of trustees and advisors, and the thousands of people VINS touches through its many programs.

For the past four decades, our on- and off-site programs have had a major impact on environmental education and conservation throughout New England and beyond. VINS' programs and services engage and instill in people of all backgrounds a desire to care for the wildlife and diverse habitats that they encounter in their daily lives.

Recognizing the demands we face as a society and the political, social and economic pressures that will make environmental stewardship more important and more challenging than ever, we are actively planning VINS' future. Facility improvements, new and innovative exhibits, our outdoor classroom and online experiences offer us creative new ways to reach the next generation. We understand the critical role today's young generation will play in protecting the natural world and the important effect they will have on generations to come.

We welcome you to visit us and experience the new Forest Canopy Walk, extension of the McKnight Trail to the river's edge, Outdoor Classroom, and the recently renovated Center for Wild Bird Rehabilitation! As you can see, it has been a busy year and we appreciate your continued support. Our vital work would not be possible without you.

—Charles F. Rattigan, Executive Director



The Long View

I am continually amazed by the success of VINS. The latest manifestation of this success is the Forest Canopy Walk. This amazing experience will inspire even more participants to appreciate and care for our precious natural world.

Having been a part of VINS since day one, looking back at all the blood, sweat, tears, joy, euphoria and pride, I ask; what is the source of this success?

The answer is the power of thousands of people who have believed in our mission over the past 47 years: the dedicated and creative staff and board members; the generous donors; the dedicated volunteers; and the thousands of program participants. With this power, we have overcome existential challenges, spun off at least three other

environmental organizations in Vermont, and created a wonderful Nature Center in Quechee visited by thousands annually. This power and dedication will sustain us into the future.

In 1972, the original mission was to educate and inspire people to care for the natural world. The mission is the same today. A perfect example of the success of that mission is the cleanup of the Ottauquechee River. In 1972, it was essentially an open sewer from Killington to Hartland. It is hard to imagine now that at the time the towns and residents along the river resisted the effort to clean and restore it. Now the river is pristine and any attempt to pollute it would be unthinkable.

Thank you to the thousands who have made VINS and its mission successful.

—J. David Laughlin, D.D.S., Co-Founder

McKnight Trail Extension

VINS owns 47 acres just west of the Quechee Gorge. Approximately 7 acres of our land is open and comprised of meadow, parking lots, exhibits and buildings that house birds in rehabilitation, offices and a welcome center.

The other 40 acres are made up of beech, oak, ash, hemlock, maple and many other tree species that comprise the VINS woods. Those woods also are home to ferns, ephemeral wildflowers, salamanders, birds, deer and a myriad of other plants and animals.

It is our mission to motivate people to care for the environment. However, one cannot care about a place they are unfamiliar with. So, in 2012 we built an accessible trail to help encourage people of all abilities to get into the forest and explore this great landscape. This year we extended that trail even further, offering the opportunity to get close to the water's edge and enjoy the bountiful life found on the boundary of forest and wetland.

With a generous contribution from the McKnight family, in honor of June McKnight (one of the four founders of VINS), we continue her legacy of

environmental education by building a trail accessible to people of all levels of mobility. The trail culminates at an observation platform above a bluff along the water's edge. From the platform, visitors have a chance to see waterfowl of all kinds, beavers collecting food, songbirds flying overhead and otters sliding on the riverbank.

This autumn, take a walk in the woods as the leaves show their brilliance. Enjoy a peaceful stroll on this new trail that allows everyone access to the woods we all love.

—Chris Collier, Director
On-Site Programs & Exhibits



VINS Outdoor Classroom is a Reality

This structure, funded by the Jane's Trust Foundation, models outdoor learning and supports the educational goals of VINS by demonstrating ways that learning can be taken beyond the four walls of an indoor classroom.

We know that children benefit from spending more time outdoors, especially in natural places. Our goal for the Outdoor Classroom is to increase the quantity, quality and benefits of outdoor experiences for children and adults during their visit to the VINS Nature Center. Taking learning outside is a central component of place-based education, which is an essential aspect of all VINS educational efforts.

Learners of all ages can enjoy the sights, smells and sounds of this living learning environment. Throughout the winter, adult learners in one of VINS' snowshoe events can track the comings and goings of animals in the snow. During the school year, children on a class field trip can escape the confines of a desk and stretch their muscles and brains in an



VINS Outdoor Classroom

interactive lesson on animal adaptations. On a hot summer's day, visitors to the Nature Center can pause and feel their senses come alive as they listen to the life around them on the forest floor. The quality and appeal of VINS' educational programs derives from authentic learning experiences such as these.

The Outdoor Classroom, sited in the woods, immerses students in one of the habitats on our beautiful 47-acre campus and allows easy access off our ADA-accessible McKnight Trail to

the newest exhibit at the VINS Nature Center, the Forest Canopy Walk. This designated educational space enables VINS to meet the increased demand for field trips and adult learning opportunities by creating an additional space where groups can gather.

We look forward to welcoming hundreds of learners to this new, living, educational space!

—Emily Johnson
Interactive Media Coordinator
& Sarah Strew, Lead
Nature Camp & Adult Programs



Visit Us at the Nature Center – New Exhibits, Science Exploration, and More!

VINS School Programs is Looking Forward to... Its Best Year Yet!



Student holds a Yellow-bellied Sapsucker

VINS School Programs enhance STEM, inquiry and place-based education in schools across the Upper Valley and beyond through embedded teacher professional development and direct student instruction.

During our record-setting academic year in 2018/2019, VINS School Programs educators worked with 29 schools, 235 teachers and 1,485 students. Our program offerings include Small Wonders, PreK; ELF (Environmental

Learning for the Future) Science Program, Kindergarten through grade 5; and Science Symposium, grades 4 through 12. VINS Science Educators work with teachers to add meaningful and engaging lessons into the teachers' curriculum. One participating teacher in the 2018/2019 academic year said, "You are always so knowledgeable and well prepared, as well as work collaboratively to be sure your lessons meet our [classroom] goals. I would highly recommend you and VINS to any organization looking to support their science curriculum."

VINS School Programs also offers lessons for classes that visit the VINS Nature Center for a field trip. In the 2018/2019 school year, VINS School Programs also taught over 100 lessons to schools that visited the VINS Nature Center for field trips. Our field trips are designed with consideration of both teachers and students, making every visit to VINS a valuable learning experience.

All of our field trips are aligned with the Next Generation Science Standards and can be customized to fit seamlessly into the teacher's curriculum. We look forward to scaling up field trips to the VINS Nature Center with the addition of the Outdoor Classroom. The Forest Canopy Walk will offer extensive opportunities with our school field trips. Teachers can look forward to innovative lessons that will utilize these new spaces at the VINS Nature Center.

—Michelle Amato, Science Educator



Field trip students at the VINS Nature Center

In Memory of Anne August



Anne M. August (1922 - 2019) speaking with VINS Executive Director Charles F. Rattigan

Anne Morgan August, resident of Shelburne, VT passed away at the age of 96 this spring.

Anne was an avid reader, artist, researcher, skier, gardener, dog and bird lover. She was a supporter of the arts, libraries, nursing, and education, and had always kept close tabs on all VINS' endeavors. We thank Anne for her generosity and sponsoring VINS environmental education initiatives for over 38 years, recognizing the importance in helping to create the next generation of environmental stewards.

Anne was one of the first to champion the idea of the Forest Canopy Walk. We will miss her friendship, infectious laugh and good nature.

—Mary Davidson Graham, Assistant Executive Director



VINS School Programs – Enhances STEM at Schools in VT, NH and Beyond

Citizen Science at VINS



Monarch Butterfly tagged at the VINS Nature Center

It's not hard to get visitors to VINS excited about the natural world – often they come to the Nature Center ready with curiosity, wonder and excitement about wildlife and natural systems.

That's why it's always surprising to me that more people don't know about citizen science, and the ways that our passion for nature can be put to use by contributing to scientific data collection. There are so many meaningful ways to take action to care for the wild places you love, and through citizen science, we can give our visitors the tools to continue to discover and appreciate life and science even after they return home.

In the past two years, VINS has become more involved in a greater diversity of citizen science projects, such as monarch butterfly monitoring and collecting data from VINS' on-site vernal pool. These projects allow for place-based environmental education, while promoting understanding of ourselves as citizens of the wider world.

MonarchWatch aims to track the migration of these rapidly declining but iconic butterflies, who depend on

open meadows stocked with milkweed plants for raising their young in summer, stopover sites at nectar-rich plants throughout the United States, and safe, warm wintering grounds in Mexico. By helping our staff members catch and gently tag individual butterflies, our visitors all at once can get up close with wild creatures, collect valuable observations, learn about handling and marking animals the way scientists do, and walk away with excitement and optimism for a small creature on a long journey. Our visitors, along with us, eagerly anticipate the possibility that a volunteer in Mexico might find the very butterfly we tagged in Vermont!

This past spring, VINS also began collecting data on its vernal pool, located near the beginning of the Lingelbach Trail on our Nature Center campus. Run by the Vermont Center for Ecostudies, the Vernal Pool Monitoring Project aims to better understand these ephemeral resources in order to advise land-use management and track amphibian populations. Although our pool does not currently support the sometimes hundreds of individual spotted

salamanders, Jefferson salamanders, and wood frogs that can rely on these unique forest features, it is enlightening to understand how the pool changes and grows throughout the season. We look forward to developing more detailed interpretive materials from the data to help visitors understand vernal pools.

Looking into the future, VINS plans to make getting involved with interesting and relevant citizen science projects easier for our visitors through the creation of a new "Citizen Science Station". This coming winter, expect to be able to quickly obtain and bring home information about myriad citizen science projects for all interest and ability levels. We'll also keep you in the loop on the changing environment around the Nature Center through regular updates from our ongoing projects.

Until then, we look forward to feeding your curiosities!



—Anna Morris, Lead Environmental Educator



Citizen Scientists with butterfly nets at the VINS Nature Center

Observe the Natural World at VINS – Become a Citizen Scientist Today!

Center for Wild Bird Rehabilitation Renovation

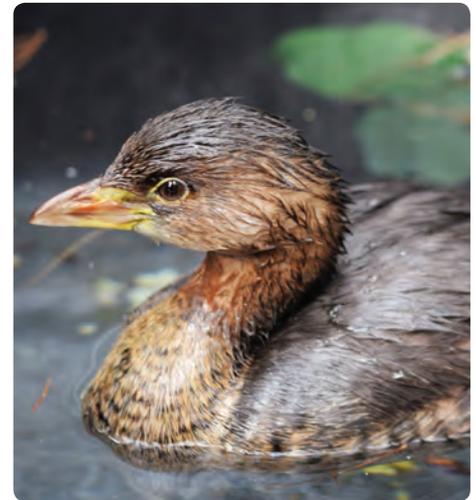
VINS has experienced substantial growth and change – and the Center for Wild Bird Rehabilitation is no exception.

Last year, the department saw a record-breaking number of patient intakes, receiving 652 injured or orphaned birds. This year, we've already taken in more than 655 patients and likely will exceed 700 by the end of December! We suspect this increase stems in part from greater awareness of our wild bird hospital via VINS, but also the attentiveness of the community to help these wonderful animals.

With such a large influx of injured birds over the past three years, our rehab center was in need of some serious revamping to accommodate all the new patients and to optimize patient care with new, modern appliances. On April 4, the demolition began. Every room was gutted and the process to create a more efficient space began.

Many changes were made to increase functionality. Among those is a designated reception area to greet concerned citizens, volunteer transporters, and Fish & Wildlife game wardens bringing in new patients, and a larger commissary that makes the daily tasks of running the department smoother. We now have more room to store crucial items and to accomplish the necessary everyday duties of the center such as laundry and preparing animal diets. A new, spacious exam room was created, with more storage space for medications and medical supplies. Now all the important tools necessary for providing patients immediate, critical care are within reach.

Rehab staff are most excited about our newly expanded Intensive Care Unit. Previously, our facility had two indoor stalls to house birds during treatment and recovery. We have increased our capacity to six stall enclosures, crucial for optimal patient care during the healing process.



Pied-billed Grebe – released back to the wild after its stay at the VINS Nature Center

The last major addition is an extra room, which is already nicknamed “The Baby Bird Bump-out.” In this room, visitors to VINS can observe rehab staff and volunteers hand-feeding and caring for baby songbirds through a one-way viewing window. They view our tiniest patients up close, seeing nestlings fed every half hour and watching them grow before their eyes.

Without any doubt, summers for the rehab staff are exciting and demanding, what with starting the day at 6:00 a.m. and ending at 8:00 p.m. With record numbers of birds, this summer would have been significantly more challenging if we did not have this new space to give our patients the proper care they need.

We are truly grateful to those who donated time, effort and funds to this renovation. This project would not have been possible without the support of so many amazing people.

Thank you from the Center for Wild Bird Rehabilitation for making our dream a reality.



—Grae O’Toole,
Lead, Wildlife Keeper



Wildlife Keeper Bren Lundborg and Lead Wildlife Keeper Grae O’Toole

VINS Center for Wild Bird Rehabilitation Cares for 650+ Injured Birds Yearly

Volunteer Spotlight: Ellie Havrda

Every year, the rehab staff relies on a small army of volunteers to help in the care of both resident birds, and especially the hundreds of songbird babies that are brought to the Center for Wild Bird Rehabilitation every summer. Ellie is one of these wonderful volunteers, and has been helping for three years. She comes in every week throughout the summer, helping to feed and care for dozens of baby birds every week. Ellie is great at making sure of all the babies are being cared for and fed properly, and dutifully reports any time a bird may have a health issue, or when the mischievous robin fledglings start trying to escape their enclosures. Her favorite birds to feed are the eastern phoebes; she likes the noises they make and always remembers not to feed them fruit since they are insectivores! Ellie is one of the many great volunteers that allow us to care for hundreds of birds of all kinds every year.

—Bren Lundborg, Wildlife Keeper



VINS Volunteer Ellie Havrda

Three Billion Birds

If you started counting now, and never stopped for any reason, it would take you 190 years to count to three billion.

Three billion is under half the population of humans on this planet, and it's the approximate distance in miles from here to Pluto. Three billion is also the estimated number of individual birds lost in North America since 1970.

A study undertaken by seven scientific institutions and published in *Science* this month details the staggering conclusions of 48 years' worth of data: that avian populations in North America are simply crashing. One out of every four birds that existed in 1970, of hundreds of species and from all habitats, no longer exists today.

The researchers did not speculate as to the cause of the decline. Their goal was simply to track the change in population. Our work is now to determine exactly why our ecosystems are less able to support birdlife, and how we can take action to change that.

In keeping with the VINS mission, we plan to incorporate education and action on this topic into every aspect of our work.

We see our role as interpreters of the most relevant science for our visitors, empowering them to make the best choices and take the steps necessary to improve the world for birds.

Our plans begin with the development of informational signs detailing the results of the 2019 study, putting its findings in a personal, communal, and continental context, to add to our existing messaging. We wish to put the study in these different perspectives for our visitors, who come to us with diverse backgrounds and levels of knowledge, by displaying data on known threats to local bird species from our Center for Wild Bird Rehabilitation, and linking the health of our native forest habitats to that of more intensely threatened habitats like grasslands.

Our Nature Store plans to stock products to help our visitors take simple actions to help birds thrive. We now carry window deterrents (that do not affect your view) to prevent window strikes by birds. Introduce a child to the world of bird watching with a pair of binoculars and a field guide, and keep an eye out for a recommended list of native plants for next spring.

Much of the data used in this study came from citizen scientists – ordinary volunteers who helped collect data about birds through their observations in service of projects like eBird, the Breeding Bird Survey, and the Christmas Bird Count. Research is a crucial component of the mission of VINS, and we plan to host several citizen-science focused events in the coming year. Keep your eyes out for the Winter Bird Feeding Workshop, an iNaturalist Workshop, and let us know if you'd be interested in attending a Citizen Science Fair!

It has taken only 48 years for us to lose three billion birds from North America. In that time, the world's population grew by nearly four billion people. Birds are just the beginning – being one of the most well-studied groups of animals – so biologists anticipate similar findings about declines in other populations, like those of amphibians, mammals and insects. Help us turn this dire trend around by visiting the VINS Nature Center, checking out 3billionbirds.org, and taking a few simple actions to help birds in your daily life.



—Anna Morris
Lead, Environmental Educator

Volunteers Are Vital to VINS' Mission – Visit Us at vinsweb.org/volunteer



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vinsrise.org

Upcoming Events

at the VINS Nature Center

DECEMBER

- 3 Giving Tuesday
- 15 Camp Registration Opens

JANUARY

- 5 VT Residents – \$5 admission
- 12 NH Residents – \$5 admission
- 18 Winter Wildlife Celebration

FEBRUARY

- 15 Great Backyard Bird Count

APRIL

- 18 & 19 Owl Festival

MAY

- 2 Grand Opening of the
VINS Forest Canopy Walk

View our full event schedule at:
vinsweb.org/events

VINS Nature Camp

Pre-K to 8th Grade



Locations in Quechee,
South Pomfret, Washington, VT
and Hanover, NH

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