



VERMONT *Nature*

FALL/WINTER 2018-2019

Year of the Bird: Bringing People Together

In 2018, we are marking the 100th anniversary of the passing of the Migratory Bird Treaty Act, a powerful piece of conservation legislation that has saved the lives of millions of birds in North America, and laid the foundation for further conservation measures that protect our land and water.

Calling it the “Year of the Bird,” hundreds of environmental organizations have joined together to focus the efforts of people who care about birds on taking specific, simple actions every month to better the lives of wild birds.

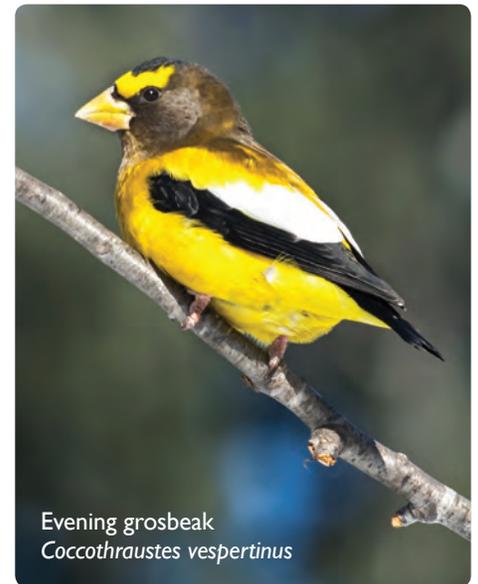
At VINS, we believe strongly in bringing individuals and communities together over the common goal of understanding and caring for wildlife, and are always conscious of the Migratory Bird Treaty Act (MBTA) itself and its sweeping impact. Because of this law, our environmental educators are able to teach with some of the most magnificent creatures on Earth, wild raptors, as they still thrive in our state. Our rehabilitation staff is able to provide medical care for most local wild bird species. The permitting process is long and rigorous, to ensure that VINS is taking the best possible care of these wild animals.

At its heart, the Year of the Bird is about bringing communities together for bird conservation, whether a small community like Quechee, VT, or a large one like that of a nation. In fact, although the MBTA began with the United States, since 1918 Canada, Mexico, Japan, and

Russia were inspired to provide similar protective laws for wildlife across the globe. On May 5th and October 6th, bird-watchers in every country came together to count as many bird species as they could in 24 hours, documenting a snapshot of the distribution of birds that is invaluable to researchers.

The Year of the Bird is also about teaching children in a world full of biodiversity. The first step in my career as an environmental educator began when I was 11 years old and I attended a program about owls at our local nature center. Fifteen years later, the environmental ethic that I started learning then has become such an important part of me that I have made a career of passing on to others my love for and knowledge of the wild world. That moment of inspiration is out there for everyone – you just have to go and find it! Gardening with native plants, exploring your local public lands, and sharing photos of experiences in nature are great ways to introduce this kind of wonder into a child's life.

Finally, this year is about bringing habitats together. A new field within conservation biology involves the study of “migratory connectivity,” and looks at the demands of a single migratory species for a diversity of habitats: those needed during breeding, and then later during wintering months, and aims to bring communities and countries together under the common cause of



Evening grosbeak
Coccothraustes vespertinus

protecting land for birds. As an example, although our migratory birds of prey are protected by law in the United States, they are not yet protected in some countries they inhabit during the winter months, in Central and South America.

We can easily help birds along their journeys through life, just by making choices about our own lifestyles. Though the actions may appear small, the cultural shift they bring about has the potential to be one of the most important environmental triumphs we have ever seen.

To learn more about VINS' involvement in the 2018 Year of the Bird, visit our Nature Blog at vinsweb.org.

—Anna Morris
Lead, Environmental Educator



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A Special Message

From Our Executive Director

The Vermont Institute of Natural Science is creating a new generation of environmental stewards, each day.

VINS continues to have a major impact on environmental education, and plans to further develop the message of caring for the natural world with new, hands-on educational exhibits – including the VINS Forest Canopy Walk.

Some important highlights from this year:

- This was another successful year for the VINS Nature Camp Program; more than 450 children joined us to experience the outdoors in both our day and overnight camps.
- The new Adventure Playscape – an interactive place for children to climb and explore – is now open seasonally, allowing for children's imaginations to run free.
- In May, VINS opened a new building to house the program ambassador raptors. The building allows VINS to expand the number of birds available for its education programs and offers a much larger living space for each individual bird.

- The VINS Science Symposium had a record year, with more than 450 middle-school students presenting the results of their projects over two days in May at the Nature Center.
- VINS' newest project, the VINS Forest Canopy Walk, is on the way to becoming a reality. We break ground this fall, with the "Walk" slated to open in October of 2019. We are already three-quarters of the way to our \$1.7-million goal, and we continue to raise funds.

With your help, we are actively planning VINS' future with facility improvements, including updating the Center for Wild Bird Rehabilitation, nature trail improvements, innovative exhibits and an outdoor classroom. Overall, these developments will offer a better learning experience for all.

VINS' vital work would not be possible without you. We look forward to sharing these new, exciting features at the Nature Center.

Wishing you all a happy holiday season and a healthy New Year!

—Charles F. Rattigan, Executive Director

A Warm Farewell to Three Trustees

This year's annual meeting was a wonderful, yet bittersweet afternoon. To our departing trustees: your contributions to VINS have been tremendous and, on behalf of the organization, I offer my thanks.

Tom Ciardelli, who has been Chair of the Finance Committee for 10 years and who served as Treasurer for eight years, is retiring. Tom, as an avid outdoorsman and environmentalist, is a consistent supporter of conservation projects. He and his wife Andrea have been enormously generous in their support for VINS and its mission.

Debbie Williamson has been on the Board for over 10 years and was its Secretary for six years. Debbie is a middle- and high-school mathematics and science tutor.

Her generosity has supported many projects along with professional development opportunities for VINS staff.

Doug Bolger, Professor of Environmental Studies at Dartmouth College, is an ecologist and conservation biologist interested in how human land use affects animal and plant populations. Having a skilled scientist on the VINS Board was valuable to VINS as we continued to shape our educational efforts.

We are grateful to Tom, Debbie and Doug for their dedication, hard work and continued friendship. You are already missed.

—Charles F. Rattigan, Executive Director



VINS Forest Canopy Walk



“As a kid growing up in the city, I spent most of my time in the trees and looking out, or on rooftops looking down on the world. As I got older I realized that what I liked was that it gave me a sensation of both remoteness and immersion – a different perspective on the world.”

—Tom Weller, Architect for the Canopy Walk

Something For Everyone

A new exhibit is coming to the VINS Nature Center – the Forest Canopy Walk. The “Walk” will complement VINS’ mission and enhance its world-class environmental education for visitors. Designed so people of all levels of ability can enjoy it, this new feature will offer every generation a new perspective and way to experience the beauty of the landscape.

The landscape of VINS’ 47-acre property is perfectly suited to allow people to gain elevation without the need for stairs or steep ramps. Because the land drops in elevation as it slopes toward the backwater of the Ottawaquechee River, we can build a boardwalk that remains relatively level while the land drops away beneath. At the highest points, visitors will be an amazing 65 feet above the forest floor getting eye-to-eye with tiny warblers, woodpeckers and squirrels!



Special Features

The Walk will provide an opportunity to move from forest floor to treetops without a climb. Connecting to the existing McKnight Trail, the Walk will be reached by a combination of ground-level trail and a newly constructed, ADA-accessible boardwalk. The increase in elevation from the start of the trail to the entrance will be minimal to accommodate the greatest diversity of visitors.

Three special features and five Interpretation Nodes will also be built into the Walk. The Eagle’s Nest is a spur off the main walk. It will be built on two levels, with the upper level being an oversized nest that visitors can climb into and see the world from an eagle’s vantage point. The Tree House will be an elevated structure on one corner of the Walk built with several levels that are reached by a helical stair system.



The Tree House is designed to bring people higher into the canopy and reach above the treetops, providing visitors with a 360-degree view of the surrounding countryside.

Integrated into a portion of the Walk is the Giant Spider Web (20 feet in diameter), which will give the visitor the chance to lie in wait, or walk across a woven web high above the ground. Fitted with three layers of netting to protect users, the open weave permits visitors to see down to the forest floor. A cargo net added to one end of the web will encourage those with the strength and stamina to climb the net to reach the Owl’s Nest.

There will be four other nodes on the Walk, encouraging visitors to engage with a variety of forest facts and experiences from sight and sound to contemplation of the forest.

We are all used to walking through the forest and looking up to see the birds and leaves, but rarely do many of us have the opportunity to see those same things at eye level or while looking down.

With the Canopy Walk, your perspective will be completely altered!

—Charles F. Rattigan, Executive Director
& Chris Collier, Director, On Site Interpretation



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

Chimney Swifts



It was mid-July, nearing the height of a record-setting baby bird season, when someone arrived at the Center for Wild Bird Rehabilitation and handed us a box. Inside was a tiny, strange, nearly featherless bird with large clawed feet. It was a nestling chimney swift.

Chimney swifts are enigmatic birds who spend nearly their entire lives in the air with the exception of roosting and nesting. As aerial insectivores, they fly about hunting insects on the wing, and are nicknamed ‘winged cigars’ due to their unique body shape. Parents nest in chimneys, caves, and hollow trees, with baby swifts outgrowing their nest and clinging to walls two weeks after they hatch, before they can even open their eyes. The parents feed their young in complete darkness, as the nestlings respond to the sound and feel of their parents’ wingbeats.

Our new patient was not quite old enough to cling, and, having fallen from its nest, was completely helpless. Two weeks later, as rehab staff carefully cared for this young bird, the center admitted three more small clutches of orphaned chimney swift nestlings from locations across Vermont. Because of their unique lifestyle, chimney swifts present numerous challenges to wildlife rehabbers.

In the wild, the parents climb down past their young and feed from below, as the nestlings make a chittering call and swing their heads back and forth, snapping their mouths open and shut grabbing food.

The first chimney swifts we received quickly learned to take hand feedings of a high protein mix of foods that emulate their natural diet. The last group to arrive were two to three weeks old – making them too old to adapt as easily. These birds did not readily gape for feedings like the younger clutches, so we had to force feed them their specialized diet every thirty minutes, fourteen hours a day. Concerned with their lack of progress, we put them in with the other chimney swifts. Within minutes, they were making a low chittering sound with the others, and learning how to take food from us. A few weeks after their intakes, the group of swifts, now ten in total, were fully feathered and living in an outdoor enclosure with plenty of space to stretch their wings and learn to fly. Finally, they were ready for release.

Wildlife releases are typically brief affairs. We do not expect thanks, but it is rewarding to see them out in the world. At the beginning of dusk, we set out, trying several sites until we found wild swifts flying around for them to join.

It was important to release them with an existing flock so they would learn where to roost and stay warm at night. When their release box opened, they spiraled upwards joining the many wild swifts who came to greet them. As we sat and watched, the number flying above tripled. In several more weeks, they would begin their long migratory journey south with their newly adopted flock.

It was immensely challenging and rewarding raising the young swifts, knowing their population has declined over 70 percent since 1966. This decline is likely due to habitat loss and insecticide use, among other causes. Conservationists suggest that measures including preserving old-growth forest, maintaining existing nest sites, such as brick chimneys, and even building artificial nesting towers can help limit their decline and stabilize their populations.

You can help swifts by not capping your chimney before summer to provide them with nesting sites and by not cleaning chimneys from June through August to prevent destruction of nests. As we put efforts into conserving this remarkable species we look forward to seeing these “winged cigars” grace our skies.

—Bren Lundborg, Wildlife Keeper



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

Growing Leaders: VINS Nature Camp

This summer, VINS Nature Camp's Leaders-In-Training (L-I-T) reached a record 17 participants, contributing 1310 volunteer hours to our camp. Additionally, VINS Nature Camp is proud to announce that it is graduating four outstanding teen leaders from this program.

The terrific members of our L-I-T team dedicate at least one week and in some cases four or five weeks of their summer to working with our campers and camp instructors, generously sharing their skills, time, energy and enthusiasm. Taking on varied responsibilities including leading games, befriending campers, gathering materials and even teaching their own lessons, L-I-Ts assist camp instructors while honing their leadership and teaching skills. VINS' L-I-T program provides youth valuable experiences in outdoor camp leadership, preparing them to return as VINS Nature Camp Instructors or pursue other opportunities.

The 2018 cohort of graduating Leaders-In-Training includes Matthew Fenner, Nathan Grove, Maeve McGuinness, and Eamon Worden.

Matthew Fenner brings boundless energy to any group, and always works to create an atmosphere focused on respect. Matt's energy is contagious and his ability to keep groups engaged gives the counselors valuable moments to prepare for the next activity. His service as one of only a few L-I-Ts at our Storrs Pond Recreation Area camps contributed greatly to the success of the programs at this satellite location where, with 99 campers enrolled over the course of four weeks, most camps were at full capacity.

Nathan Grove has become a leader who thoughtfully combines observation and self-reflection to constantly adapt to

the needs of his group. Nathan tackled new territory this summer, spending one of his weeks volunteering at Old Pepper Place Nature Reserve with VINS' overnight camp, Trail Blazers II, where he taught campers about erosion and trail design prior to the group's trail building project.

Maeve McGuinness' calming presence, confident leadership and collaborative spirit shines through at camp. Over the past few summers, she has eagerly taken on more responsibilities, which culminated this summer in leading a group of Falcons, rising fourth- through sixth-grade campers, on an invasive plant pull on VINS' campus. The experience left all who participated with a sense of accomplishment and understanding of the importance of native plants for local ecosystems.

Eamon Worden sees the positive in anyone and anything that comes his way, whether he is connecting with

hesitant, shy children or finding new ways to challenge himself. This summer, Eamon took an interest in honing his lesson planning skills. He and a co-L-I-T successfully adapted a complex lesson on bird migration to make it engaging and age appropriate for our Advanced Science of Amazing Raptors (SOAR) camp.

Each one of these volunteers brought an impressive amount of energy and commitment to the L-I-T program and the contributions they made to VINS Nature Camp during their tenure are significant.

VINS Nature Camps congratulates and thanks these four incredible young leaders for their years of service, and we look forward to seeing where they go next – although, of course, we are hoping they return to lead VINS Nature Camp as staff Nature Camp Supervisors.

—Sarah Strew, Lead, Nature Camp
& Julie Kozak, Nature Camp Assistant



Adventure & Discovery at VINS Nature Camp – vinsweb.org/nature-camp



Vermont Institute of Natural Science
149 Natures Way, PO Box 1281
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Upcoming Events at VINS

View our full event schedule at vinsweb.org/events

December 15

Camp Registration Opens

December 28

Lecture: Cheetahs in Kenya

January 6

\$5 admission for VT Residents

January 13

\$5 admission for NH Residents

January 19

Winter Wildlife Celebration

January 24

Lecture: Timber Rattlesnakes

February 16

Great Backyard Bird Count

February 23 & 24

Owl Festival

Adopt a Raptor

Meet our avian ambassadors at vinsrise.org



Barnard – Great Horned Owl



LaGuardia – Snowy Owl

VINS NATURE CAMP Pre-K to 8th Grade



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

**MEMBERSHIP DISCOUNTS
AVAILABLE!**

Contact us at 802.359.5000
or camps@vinsweb.org

vinsweb.org/nature-camp