



## POISON IVY: BEYOND THE ITCH

By Margaret Gillespie

When my nieces and nephew were playing basketball in school, inevitably there were teams that didn't seem to play fair. It was doubly frustrating when those teams went on to win games. In the wider world, this unfortunate turn of events is quite common. Even plants take positions in competitions, with poison ivy coming out as a major, if dubious, player. Why is such a nasty plant so successful?

Poison ivy's scientific name (*Toxicodendron radicans*) summarizes its reputation. "Taxicodendron" means "poison tree." Just touching any part of the plant – leaves, bark, or roots – is an opportunity for its irritating oil, urushiol, to be transferred to skin, clothing, or animal fur. I remember as a child learning to identify and avoid poison ivy with the saying, "Leaves of three, let them be." While other plants form leaf triplets, those of poison ivy are often shiny and waxy-green. The real challenge in identifying poison ivy is the various forms it takes, from a tree-climbing vine to ground cover or as a "shrub." Even in winter, the bare poison ivy plants are able to pass on the itch.

Have you noticed poison ivy is more prevalent and expanding into ever-new locations? Poison ivy has an ally in its "quest" to expand its influence, and surprisingly, that ally is we humans. This poisonous plant is undoubtedly not in the top 10 desirable research topics, but Jacqueline Mohan of the University of Georgia took on the mystery of poison ivy's success. She points out that when growing as a vine, poison ivy funnels its energy into abundant leaves while relying on structures like trees, stone walls, and fences to be its support system. Like all plants, poison ivy uses carbon dioxide (CO<sub>2</sub>) for photosynthesis. With the burning of fossil fuels for such needs as energy production and powering the ever-increasing number of cars, CO<sub>2</sub> emissions into the air are higher than ever before. In her research, she found, that unlike most plants, poison ivy responds to an increased supply of CO<sub>2</sub> with unprecedented growth rates. Poison ivy is in its element. She also discovered an additional threat. The potency of urushiol, the chemical that fuels poison ivy's itch, has increased significantly as well. Proliferation of poison ivy is one more indicator of the complex connections surrounding us on this planet Earth.

In a world where everything is connected, does poison ivy provide any benefits? Yes. Not all creatures have an adverse reaction to poison ivy. In fact, some search for it as a food source. Whitetail deer and bear browse on its leaves with impunity. The white berries of poison ivy, toxic to people, are greedily snatched by birds such as robins, woodpeckers, and phoebes. Since the berries persist into the fall and winter, they provide sustenance in lean times. Small mammals can travel undetected beneath its leafy cover or use poison ivy vines as a kind of jungle gym to access tree canopies.

*continued on page 11*

### IN THIS ISSUE...

- Page 2 ..... Forging Trails
  - Page 3 ..... Volunteer Profile: Lisa Davis
  - Page 4 ..... Beach Balls, Surf Balls, and Whale Burps
  - Page 5 ..... Kirkwood Gardens Plant Spotlight
  - Page 5 ..... Green Tip: Recycling Clothing
  - Page 6-8 ..... Programs, Events, and Lake Cruises
  - Page 9 ..... Summer Splash and Annual Meeting
  - Page 11 ..... Trail's End
- And much more!



## HALLOWEEN HOOT 'N HOWL SATURDAY, OCTOBER 19

6:00 to 8:30 p.m. | Rain or Shine

Registration required

See page 7 for details.



# FORGING TRAILS:

## "...SO, WHAT ARE YOU GOING TO DO NEXT YEAR?"



That question has been thrown at me several times in the last couple weeks as the summer trail visitation numbers keep going up and up. It's a very good question... one I'm going to ignore for now, as we bask in the glow of a record-setting July and August.

The key to the high attendance is the Dinosaurs Alive! exhibit, which has really captured the public's eye and imagination. Bringing this exhibit here was a gamble ... something we had never tried before on such a large scale. I have to say, even on the day they arrived,

it was still a gamble, as we had no idea if we could actually unload them from the 53-foot semi-trailer they arrived in and carry them into their tightly wooded resting places. I should have known our talented staff - and the crew they hired to help - would have it under control.

Within a few hours, all five creatures were in place, ready to be hooked up to compressed air and electricity... and brought to life.

How many people actually visited in July? ... More than 20,000 trail visitors. More than we have ever seen before in a single month. Throughout July, we averaged 660 visitors per day! We had 16 days with more than 700 people and only four days with fewer than 500 people. Now, August is off to an even more blistering pace with one day topping 1,100 trail visitors. Our wonderful Admissions and Howling Coyote Gift Shop staff members have greeted every single person or group with a smile and warm welcome.

The dinosaurs ARE cool and obviously their presence prompted a lot of people to jump in the car and head to the Lakes Region. We can tell from the categories tracked at Admissions that a lot of non-members came. Anecdotally, we heard many people say they were visiting for the first time, or the first time in a long while, so we are confident they were seeing our other new and exciting exhibits for the first time (it's been a busy few years of expansion and growth here). Hopefully, many of these people will make return visits to the Science Center frequently.

If the first week of August is an indication of what the rest of the month will bring, it does beg the question... how do we top this? As we review our strategic plan and one of its priorities of Smart Growth, we want to ensure every visitor has an experience where they feel a connection to the ecology of New Hampshire. Can we grow while still providing a level of education and experience with nature that we want people to walk away with? Stay tuned!

Iain MacLeod, Executive Director  
iain.macleod@nhnature.org  
603-968-7194 x 23



### SQUAM LAKES NATURAL SCIENCE CENTER

PO Box 173, 23 Science Center Road  
Holderness, NH 03245

P: 603-968-7194 | F: 603-968-2229  
info@nhnature.org | www.nhnature.org

Squam Lakes Natural Science Center is a non-profit educational institution incorporated in 1966 as a charitable organization under statutes of the State of New Hampshire with its principal place of business in Holderness. Its mission is to advance understanding of ecology by exploring New Hampshire's natural world.

*Tracks & Trails* is a regular publication of Squam Lakes Natural Science Center distributed to members and contributors. Comments are welcomed by newsletter editors Janet Robertson and Amanda Gillen.

#### BOARD OF TRUSTEES,

Justin Van Etten, Chair  
Lea A. Stewart, Vice Chair  
Anne R. Lovett, Treasurer  
Tom Cowie, Secretary

Kevin Barrett  
Laurie Beeson  
Paul Brochu, Sc.D.  
Sarah Brown  
Laurie Thomsen Burke  
Kenneth H. Evans, Jr.  
Martha Grant  
Harriet R. Harris  
William F. Lee, Jr.  
Carl Lehner  
Susan Lynch  
Emily Preston  
Richard L. Starbuck  
Tony Wagner, Ed.D.

#### HONORARY TRUSTEES

George Carr  
David W. Cote, D.V.M.  
Bertha H. Fauver  
Maurice Lafreniere  
John McRae  
Tashia Morgridge  
Carol Thompson  
Stephen G. Woodsum

#### STAFF

Kim Beardwood Smith, Development Officer  
Dennis Capodestria, Facilities Assistant  
Eric D'Aleo, Naturalist  
Bob Donnelly, Facilities Assistant  
Brian Eaton, Finance Director  
Clare Eckert, Facilities Assistant  
Audrey Eisenhauer, Education Director  
Brenda Erler, Gardens and Exhibits Assistant  
Dave Erler, Senior Naturalist  
Jordan Fitzgerald, Blue Heron School Lead Teacher  
Jordy Gianforte, Blue Heron School Lead Teacher  
Amanda Gillen, Marketing Manager  
Margaret Gillespie, Naturalist  
Keith Hosking, Facilities Assistant  
Corrie Kinder, Blue Heron School Associate Teacher  
Tom Klein, Facilities Director  
Caleb LaRocca, Animal Care Associate  
Iain MacLeod, Executive Director  
Laura Mammarelli, Blue Heron School Director  
Lauren Moulis, Animal Care Manager  
Mary Noyes, Administrative Assistant  
Hannah O'Brien, Blue Heron School Associate Teacher  
Jeremy Phillips, School Programs Coordinator/Naturalist  
Carol Raymond, Volunteer Manager  
Janet Robertson, Development and Communications Director  
Liz Rowe, Human Resources Director  
Kevin VanGorden, Animal Care Associate  
Aubrey Voelker, Animal Care Associate  
Sarah Wall, Visitor Services Manager  
Sharon Warga, Operations Manager

ACCREDITED BY THE  
**ASSOCIATION  
OF ZOOS &  
AQUARIUMS**

# VOLUNTEER PROFILE

## LISA DAVIS



I volunteer at Squam Lakes Natural Science Center for several reasons. One is because I feel very strongly that we must educate people about the importance of all of the species that make up our ecosystem. An example of how important this is was sadly provided by a relative from another state. I was telling her how awful it is that our loons are succumbing to lead poisoning. Her answer was "So what? We don't eat them!" Combating that kind of ignorance is, in my

opinion, one of the most important things we do at the Science Center. We must know something to love it. When we love it, we might protect it. This process is most effective when it starts in childhood. Helping the public to know, and hopefully to love the creatures that comprise our New Hampshire wildlife is my main reason for being out on the live animal exhibit trail.

Feeling like a rock star when I feed otters or carry a little owl around is another reason for volunteering at the Science

Center. Where else could I possibly get such celebrity status? Although I enjoy it, not everyone enjoys the attention or the hordes of noisy kids. The wonderful variety of opportunities available is still another reason to volunteer at the Science Center. Whether your interests or talents lead you to help with Lake Education, feed animals, take a bird for a quiet walk, or even chop firewood, there's an opportunity for everyone's particular interests.

Another reason I volunteer at the Science Center is that it is my happy place. At a time of personal sadness, it was great to go where instead of sympathizing with me, strangers gave me the opportunity to share their joy in being in such a wonderful place and learning such wonderful things.

*Lisa Davis is a retired nurse practitioner who also taught high school biology long ago. Before she and her husband retired to New Hampshire, she volunteered at a nature center in New York State and sought a similar activity in New Hampshire. She was excited to find that Squam Lakes Natural Science Center is so much better! Her interests include travel at every opportunity, skiing, hiking, boating, cooking and her four grandchildren. One of them is a First Guide and the youngest is a First Guide wannabee. Lisa has been a docent here since 2008.*



@nhwildlife



@nhnature

Support the Science Center while you shop at AmazonSmile.  
<http://smile.amazon.com>



## NEWSBRIEFS



Dave Erler with his commendation from Governor Sununu

- Members, staff, volunteers, and trustees, current and past, gathered in August to celebrate a major milestone: Senior Naturalist Dave Erler's 40 years on staff. Dave also received a commendation from Governor Chris Sununu for his dedication to nature and ecology in New Hampshire.
- After 11 years on staff, Facilities Director Tim Curry departed for new challenges. Tim oversaw a period of great change and growth, funded by the Nature Matters Capital Campaign, most notably the Water Matters Pavilion and exhibits. We wish him well and thank him for all his hard work.

- We are delighted to announce Tom Klein is our new Facilities Director. Tom's skills, along with his knowledge and experience of the Science Center, through his past work as Operations Manager, and most recently, Facilities Assistant, led to a smooth, efficient transition. Congratulations Tom!
- Blue Heron School Assistant Teacher Dylan Parker came to Blue Heron School as a Plymouth State University student intern, and stayed as an Assistant Teacher. Dylan is leaving to pursue other employment and will not return for the 2019-20 school year. We will miss his smile and enjoyment of every day, and wish him the best.
- Blue Heron School teachers attended the Natural Start Alliance

annual conference in Manchester in July. Laura Mammarelli presented a session titled *Montessori and Nature Based Education: Bringing the Outdoors in and the Indoors Out*. The Science Center also hosted a conference fieldtrip to highlight the Blue Heron School program.

- Six new docents and four new First Guides joined the volunteer team this year. During First Guides training, EVP Marketing executive Peter Adams gave two four-hour videography sessions in preparation for their Community Action projects. First Guides also traveled to Squam Lakes Association and the Loon Preservation Center as part of their introduction to the Community Action Program. A mini-grant from North American Association for Environmental Education's ee360 initiative funded the training. We trained many docents and volunteers to talk with visitors about the dinosaur exhibit. It is especially cute to see young visitors arrive in their finest dinosaur fashions.
- Pollinator Party in July was a great success with almost 900 people attending. We hosted The Caterpillar Lab's fascinating exhibit of live caterpillars. Visitors also made wildflower seed bombs to attract pollinators at home, learned about beekeeping from Pemi Baker Bee Keepers Association, and viewed Lucy Golden's jewelry-making demonstration. Belknap Landscape Company generously sponsored Pollinator Party.
- Birthday Bash for the Critters in August allowed visitors to see enrichment activities and learn how Animal Care staff take care of our animals both physically and mentally. Animals enjoyed birthday "cakes," presents to unwrap, and new enrichment items throughout the day.

# NATURALIST'S CORNER

## BEACH BALLS, SURF BALLS, AND WHALE BURPS

By Audrey Eisenhauer

What is the most interesting thing you have found when walking along the shore of an ocean or lake?

Beachcombing is one of my favorite things to do. There is something so enjoyable about walking along the beach, filling my pockets with treasures such as uniquely shaped rocks, sea glass, and animal bones. Of course, one can enjoy this activity at the ocean or along the shore of a favorite lake.

A friend recently dropped off an interesting find from the shore of Squam Lake here at the Science Center. It was something I had never seen or heard of, but after a little internet searching, I discovered it is a phenomenon found along shorelines worldwide, in both salt and freshwater. It is an object known as a beach ball, or surf ball, or even whale burp. (Although it has nothing to do with whales, but maybe they sell better in gift shops with that name.)

The beach ball, found by my friend Bob Twombly, is a densely packed ball of pine needles about eight inches across and four inches high. While there is not any formal research on how these objects form, the consensus is that surf action is the creative force. The materials forming the ball, in this case pine needles, end up in the water and sink to the bottom. According to Oregon Sea Grant, as a wave approaches the shore, it drags on the shore floor, causing the wave to crest or curl, and crash onto the beach. This curling motion may roll materials in the surf into balls. You can see the resulting Squam beach ball in the photos below.

We love it when people share interesting natural phenomenon with us here at the Science Center. Thanks, Bob, for sharing this Squam beach ball. Nature is a wonder that never ceases to amaze.



## FROM THE HERON'S NEST

By Laura Mammarelli



These are past, present and future photos from Blue Heron School. The photo on the left shows how our original classroom looked all set up for the children from fall 2010 through spring 2019. The center picture shows how it looked over the summer, with all of the furniture, Montessori materials, and supplemental materials in storage. The right hand picture is of the new classroom, still under construction as of this writing. In just weeks, it will be completed and furnished with rugs, shelves, table, chairs, a wonderful variety of activities, AND full of children, new and returning, ready to have their own Blue Heron School experience.

*Blue Heron School is a nature-based Montessori school for children ages three to six. For more information please visit [www.nhnature.org/programs](http://www.nhnature.org/programs) or contact Laura Mammarelli, Blue Heron School Director, at 603-968-7194 x 40 or [blueheron@nhnature.org](mailto:blueheron@nhnature.org).*

# KIRKWOOD GARDENS PLANT SPOTLIGHT

By Brenda Erler

## Toad Lily

### *Tricyrtis 'Sinonome'*

**Culture:** Plants flourish in average, moist, well-drained soil in part to full shade. Will tolerate drought once established.

**Bloom:** August to October

**Height:** 24 to 36 inches

Toad lilies have exotic, orchid-like flowers late in the season. This variety is upright and vase-shaped with dark, mottled, pale purple flowers. Native to Japan. Good cut flower. Useful in woodland borders and shade gardens.

**Kirkwood location:** Upper garden in front of small stone bird bath.



flickr/Jennifer Snyder CC BY-SA 2.0

## River Birch

### *Betula nigra 'Heritage'*

**Culture:** Prefers moist, acidic, fertile soil in full sun to part shade, but is very adaptable

**Bloom:** catkins in early spring

**Height:** 40 to 70 feet tall with a 40 to 60 foot spread

This is a fast growing, vigorous, disease-resistant birch with beautiful peeling bark. It can be grown as a single or multi-trunked tree. Useful as a specimen tree in the garden or along ponds and streams. Attractive to birds.

**Kirkwood location:** Lower garden on either side of the pergola.



flickr/Kristine Paulus CC BY 2.0



Plant Spotlight and Kirkwood Gardens are sponsored by Belknap Landscape Company, Inc. [www.belknaplandscape.com](http://www.belknaplandscape.com)



**DINOSAURS  
ALIVE!**  
OPEN THROUGH SEPTEMBER 30

Generously Sponsored by:



## GREEN TIP:

### REDUCE, REUSE, AND RECYCLE YOUR WAY TO A CLEANER - AND GREENER - CLOSET

By Marketing Intern Raina Sciocchetti

Where do your clothes go when you're done with them? According to the EPA, landfills across the U.S. receive over 16 million tons of textile waste every year. This back-to-school shopping season, keep in mind that clothing choices have impacts far beyond fashion. Through reducing, reusing, and recycling, you too can reduce your carbon footprint by shopping for more sustainably-sourced clothes and saving your retiring wardrobe from a dirty demise in the trash.

- ↳ **Reduce** - Conscious consuming is the first step to reducing textile waste. Make sure that you're getting the most from each item, and don't be afraid to modify or repair existing garments to extend lifespans.
- ↳ **Reuse** - Friends, family, and secondhand retail are great places to find new clothes. When you sort through your own wardrobe, keep in mind that articles of clothing in great condition are perfect for consignment. Donate less pristine items to thrift stores and charity drives.
- ↳ **Recycle** - Sometimes there's simply nothing that can be done to resuscitate that ratty pair of jeans or shredded sweatshirt you've had for years. Send them on to the afterlife through a textile recycling program. Some companies accept their own clothing items back for recycling, while others provide in-store recycling bins for textiles of any brand. Visit <https://earth911.com/recycling-guide/how-to-recycle-clothing-accessories/#recycling-locator> to find a textile recycler near you.

# CALENDAR OF PROGRAMS & EVENTS

Advance registration is required by noon the day before the program. If minimum enrollment is not met, programs may be cancelled. Walk-ins accommodated if space is available.

## SEPTEMBER

<p><b>SEPTEMBER 10 TUESDAY</b> 9:30 a.m. to 12:30 p.m. For adults</p>	<p><b>Invasive Species Removal Work Day</b> Join us to learn how to identify and remove invasive plant species. Begin with a brief introduction to an invasive species and then go out onto the Science Center grounds to learn and practice techniques for removing that species from an area. Learn skills you can apply to removing invasive species from your own property. Work sessions wrap up with snacks and lemonade. Wear long pants and sturdy shoes. Bring work gloves, water, insect repellent, and sunscreen. Only have an hour? No problem, participate for as little time or as long as you like. <i>Cost: No charge to attend but advance registration is required.</i></p>
<p><b>SEPTEMBER 14 SATURDAY</b> 9:30 a.m. to 5:00 p.m. For all ages</p>	<p><b>Raptor Spectacular</b> Join us for a daylong special event about the wonderful birds of prey known as raptors. Enjoy a special program by Vermont Institute of Natural Science (VINS) featuring birds in flight. Meet live raptors throughout the day at trailside Up Close to Animals presentations. Watch a rehabilitated raptor released back to the wild. Have a one-on-one encounter with a raptor and one of our volunteer docents as they rove the live animal exhibit trail throughout the day. <i>Cost: All Raptor Spectacular activities are included with trail admission.</i></p> <p><b>Raptor Encounter by Vermont Institute of Natural Sciences (VINS)</b> <b>12:30 to 1:30 p.m.</b> Join VINS for this exciting Raptor Encounter presenting a variety of live falcons, hawks, and owls. This engaging program will show you just what defines a bird as a raptor and explain their adaptations for life as predators on the wing. A flight demonstration, touchable artifacts, and hands-on materials round out this special experience.</p> <p><b>Up Close to Animals</b> These engaging naturalist led presentations are free with trail admission and held outdoors at the amphitheater. Visitors will meet live birds up close. 11:00 a.m. – Great Horned Owl 12:00 p.m. – Broad-winged Hawk 2:00 p.m. – Peregrine Falcon 3:00 p.m. – Red-tailed Hawk</p> <p><b>Raptor Release</b> Every year, Wings of Dawn Rehabilitation Center in Henniker receives injured or orphaned raptors in need of special care and rehabilitation. If a raptor is ready for release on September 14, visitors will be able to witness this event.</p>
<p><b>SEPTEMBER 22 SUNDAY</b> 10:00 to 11:30 a.m. For all ages</p>	<p><b>Upper Pond Adventure</b> On the surface, the Upper Pond looks tranquil. But underwater is another story. Join us to learn about critters camouflaged and hiding, predators and prey, large and small. We provide the equipment to collect pond dwellers; you provide your sharp eyes to find them. Our adventure wraps up with a visit from a live animal. <i>Cost: \$9/member; \$11/non-member</i></p>
<p><b>SEPTEMBER 25 WEDNESDAY</b></p>	<p><b>Invasive Species Removal Work Day</b> <b>9:30 to 11:30 a.m.   For adults</b> <i>See description for September 10.</i></p>



## SCIENCE CENTER NATURE TOURS

Visit [nhnature.org/programs](http://nhnature.org/programs) for upcoming tours, itineraries, and availability.

# OCTOBER

<b>OCTOBER 5</b> <b>SATURDAY</b> 10:00 to 11:30 a.m.	<b>What Grows Here?</b> <b>For adults and families with children age 10 and up</b> Get to know your wild neighbors! Join Senior Naturalist Dave Erler on a walk through the Science Center's forests and fields to discover why plants grow in the locations they do. Dave will also share information about animal and human uses of the plants discussed. <i>Cost: \$9/member; \$11/non-member</i>
<b>OCTOBER 5</b> <b>SATURDAY</b> 3:00 to 4:30 p.m.	<b>Mushroom ID Walk</b> <b>For adults and youth ages 15 and up</b> Join New Hampshire Mushroom Company Education Director Stephanie Doyle for a walk in search of wild mushrooms. Explore the Science Center property to search for mushrooms to identify and discuss. <i>Cost: \$18/member; \$20/non-member</i>
<b>OCTOBER 19</b> <b>SATURDAY</b> 6:00 to 8:30 p.m. For all ages RAIN OR SHINE	<b>Halloween Hoot 'N Howl</b> Enjoy an eerily entertaining 40-minute guide tour around the grounds in the evening. Trail walks feature live skits with a seasonal theme and depart every 10 minutes from 6:00 to 7:30 p.m. Come in costume and dress suitably for outdoor weather. After your journey, warm up with Halloween games and tasty treats! Please note that trail is in the dark over difficult terrain and not accessible for wheelchairs or strollers. <b>**Book early: This event regularly sells out!**</b> <i>Cost: \$9/member; \$12/non-member</i>
<b>OCTOBER 22</b> <b>TUESDAY</b>	<b>Invasive Species Removal Work Day</b> <b>10:30 a.m. to 12:00 p.m.   For adults</b> <i>See description for September 10.</i>



## SCIENCE PUB AT WALTER'S BASIN

### Community Conversations on Climate Change

6:00 to 8:00 p.m. | For adults

Second Tuesday: November 12, December 10, January 14, February 11, March 10, April 14

Join us in the lounge at Walter's Basin for engaging evenings discussing climate change solutions over drinks and appetizers. Climate change is affecting our natural world and the animals (including we humans) that inhabit our planet in many ways. We will focus on solutions to this global problem. Different scientists and organizations will speak for about 30 minutes with a lively discussion to follow. Bring your questions and plan to contribute to this community conversation on climate change. Visit [nhnature.org](http://nhnature.org) for the speaker schedule. Sponsored by Squam Lakes Natural Science Center, Squam Lakes Association, and Squam Lakes Conservation Society.

*Cost: No charge to attend. Order and pay for food and drinks individually. Seating is lounge style. For dining with traditional seating, arrive early to eat in the dining room prior to the 6:30 p.m. presentation start time in the lounge. Advance registration requested.*

## HOMESCHOOL SERIES

### All About Series (Ages 4 to 6)

10:00 to 11:30 a.m. on the First Thursday of the month

November 7: Porcupines

December 5: Hawks

January 9: Skunks\*

February 6: Groundhogs

March 5: Owls

April 2: Turtles

Join us with your child to learn all about New Hampshire wildlife. Each session considers a different group of living things through activities, hands-on experiences, and a meeting with a live animal.

*Cost \$9/member child; \$11/non-member child*

*An adult must participate with children at no additional cost. Each additional adult pays child fee.*

*\*Second Thursday in January*

### Get HAPI! (Ages 7 to 10)

10:00 to 11:30 a.m. on the First Thursday of the month

November 7: Adaptations

December 5: Nocturnal Animals and their Adaptations

January 9: Interrelationships\*

February 6: Populations

March 5: Habitats

April 2: Ecosystems

The primary interpretive focus of the Science Center's programs and exhibits is community ecology, which has four major concepts: Habitats, Adaptations, Populations, and Interrelationships (HAPI). Join us with your child to investigate these topics in depth.

## BONUS MEMBER BENEFITS

Reciprocal admission is generally good for up to two adults and two youth per visit. Be sure to take your membership card with you when you go. Visit the Reciprocity and Bonus Benefits section of [nhnature.org/membership](http://nhnature.org/membership) for full details and website links where you may check organization hours and directions.

Remember, as a Science Center member, you also receive discounted admission all year at participating AZA and ANCA organizations. Visit the Reciprocity and Bonus Benefits section of [nhnature.org/membership](http://nhnature.org/membership) for details.



## ON THE TRAIL

-  **River Otter Feeding -**  
Every Monday, Wednesday, and Friday at 11:30 a.m. at the River Otter Exhibit (May - October)  
Sponsored by: 
-  **Up Close to Animals**  
Meet live animals up close and learn from an experienced naturalist. These engaging talks feature a variety of animals, including birds, mammals, and reptiles.  
  
Saturdays and Sundays at 12:00 and 2:00 p.m., plus Labor Day and Columbus Day, at the Amphitheater. Held in Webster Building Classroom 3 during inclement weather.

*All programs above are included with trail admission.*

## SQUAM LAKE CRUISES

New Hampshire is famous for its picturesque lakes and mountains and Squam Lake is a gem among many. See its amazingly clear water, rocky shores, celebrated islands, historic homes, scenic mountain views, and remarkable wildlife.

### Discover Squam

**September 3 to October 14**

**Tuesdays, Wednesdays, Thursdays at 11:00 a.m., 1:00 p.m.**

**Fridays through Mondays at 11:00 a.m., 1:00 p.m., 3:00 p.m.**

This unforgettable guided tour has something to delight everyone. Learn about the natural history of the lake, the wildlife that makes Squam so special, and the people who have enjoyed these lakes for over 5,000 years. See the beautiful lake where *On Golden Pond* was filmed over 30 years ago. Observe Common Loons and Bald Eagles.

### Cruise with a Naturalist

**September 3 to October 10 - Tuesdays, Wednesdays, Thursdays at 3:00 p.m.**

Uncover the rich natural history of Squam Lake with an experienced naturalist educator. Observe Loons and Bald Eagles and their nesting sites along with other wildlife. Learn how animals survive and adapt to their aquatic world. Gain an appreciation and deeper understanding of Squam Lake from mountain ranges, to island stories, to quiet spots, during this memorable lake experience.

### Squam Lake Charters

Treat your visiting family or friends to a truly memorable experience in the Lakes Region. Host your own cocktail party or other unique gathering on Squam Lake. Transport wedding guests to Church Island. Any of these are possible by chartering a private cruise customized to fit your plans. Five canopied pontoon boats and experienced tour guides are ready to help with your special outing. Operations Manager Sharon Warga will personally arrange your charter for any occasion or celebration.

Contact Sharon at 603-968-7194 x10 or [sharon.warga@nhnature.org](mailto:sharon.warga@nhnature.org) for charter reservations.

**Purchase cruise tickets online at [nhnature.org](http://nhnature.org)!**

*All Squam Lake Cruises depart on Route 113 across from the Science Center parking lots. Park in designated lots and walk to Lake Education Headquarters using pathway. Squam Lake Cruises are 90 minutes in length aboard canopied pontoon boats. Binoculars are available for wildlife viewing at no additional cost.*

**Space is limited on Squam Lake Cruises.**

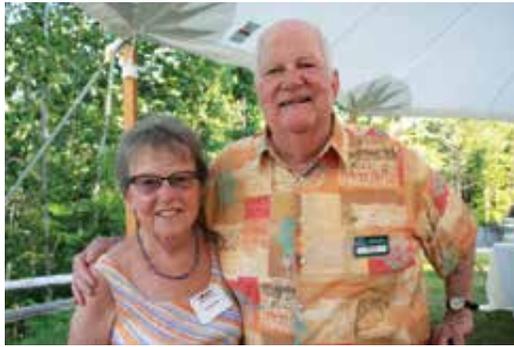
**Make your reservation online at [nhnature.org](http://nhnature.org) or call 603-968-7194 x 7.**

### Squam Lake Cruise Rates:

**Adult: \$27; Senior (65+): \$25; Youth (up to age 15): \$23**

**Members receive a \$4 discount per person. Not recommended for children under age 3**

# 2019 SUMMER SPLASH HIDDEN STORIES



Trustee Bill Lee and his wife, Linda.



Doug Hill, Paul Beck, and Peter Gross show off their version of Squam casual apparel.



Summer Splash was held on Sunday, July 21 at the lovely festive venue - The Barn on the Pemi.



Operations Manager Sharon Warga and Administrative Assistant Mary Noyes greeted guests.



Summer Splash volunteers Nancy Beck and Andrea Eaton.



Trustee Tony Wagner, and his wife P.J. Blankenhorn and fellow Trustee Emily Preston.

## 2019 ANNUAL MEETING FOR MEMBERS



Officers: Lea A. Stewart, Tom Cowie, Justin Van Etten, Anne R. Lovett



New Trustees: Kevin Barrett, Laurie Beeson, Laurie Thomsen Burke, and Paul Brochu



Staff: Brian Eaton, Mary Noyes, Keith Hosking, and Sharon Warga.

Members and their guests enjoyed complimentary coffee, orange juice, and muffins at Lake Cruise Headquarters prior to the 2019 Annual Meeting on August 10.

Chair Ken Evans asked the quorum of members present to approve the 2017 Annual Meeting Minutes, which were accepted unanimously. Treasurer Justin Van Etten presented the 2018 Finance Report. Attendees received copies of the 2018 Annual Report.

Ken Evans thanked outgoing Trustees Mary Earick, Barb Laverack, Peggy Conner, Susan McKimms, and Dave Martin for their dedicated service.

Governance Committee Chair Sarah Brown presented the slate of candidates for election. Executive Director Iain MacLeod introduced Honorary Trustee candidate Tashia Morgridge, who was elected unanimously. Six Trustees were re-elected to serve three-year terms: Sarah Brown, Tom Cowie, Ken Evans, Anne R. Lovett, Emily Preston, and Dick Starbuck. Kevin Barrett, Laurie Beeson, Paul Brochu, and Laurie Thomsen Burke were elected as new Trustees for three-year terms. Their biographies are available at [nhnature.org/programs/annual\\_meeting.php](http://nhnature.org/programs/annual_meeting.php). Officers were elected to one-year terms: Justin Van Etten, Chair; Lea A. Stewart, Vice Chair; Anne R. Lovett, Treasurer; and Tom Cowie, Secretary.

Executive Director Iain MacLeod presented the Horizon Award to Blue Heron School Director Laura Mammarelli.

Executive Director Iain MacLeod recognized seven staff members for their years of service:

- Senior Naturalist Dave Erler - 40 years
- Naturalist Eric D'Aleo - 25 years
- Finance Director Brian Eaton - 15 years
- Administrative Assistant Mary Noyes - 15 years
- Education Director Audrey Eisenhauer - 5 years
- Facilities Assistant Keith Hosking - 5 years
- Operations Manager Sharon Warga - 5 years

The 2018 Annual Report, Audited Financial Statements, and 990 Tax Return are available for review at [nhnature.org/support](http://nhnature.org/support). Request paper copies by contacting Development and Communications Director Janet Robertson at 603-968-7194 x 12 or [janet.robertson@nhnature.org](mailto:janet.robertson@nhnature.org).

# OPENING A WINDOW TO THE NATURAL WORLD

## Support What you Love



Did you know Squam Lakes Natural Science Center is more than a wonderful place to learn about New Hampshire wildlife (as well as home of Squam Lake Cruises, Kirkwood Gardens, and Blue Heron School, and the only AZA-accredited institution in all of northern New England)?

Squam Lakes Natural Science Center is a non-profit organization — with a mission to advance understanding of ecology by exploring New Hampshire's natural world. As a non-profit, we depend on support from people like you. By making a 100% tax-deductible Annual Fund gift to support our mission (when you receive our request in October or anytime through our website), you're furthering our mission and helping introduce more people to the transformative power of the natural world.

Here is another way to give that benefits both you AND the Science Center:

Make a qualified tax-free charitable distribution from your IRA, if you are 70½ or older. It's a great way to support what

matters most to you. You can donate up to \$100,000 each year without incurring income tax on your gift. Just direct distributions straight from your traditional IRA to the Science Center. This can be a one-time or recurring gift.

How do you benefit from supporting what you love?

- You avoid the income tax penalty on your IRA distributions.
- You have the satisfaction of seeing your gift immediately support the Science Center's work.
- The gift is not part of your adjusted gross income only if you make a direct transfer from your IRA directly to Squam Lakes Natural Science Center.
- Contact your financial advisor for more information.

Your generosity does so much to improve and support the Science Center. We welcome and appreciate any donation you choose to give.

*Opening a Window to the Natural World is written by Development and Communications Director Janet Robertson. You may contact Janet at 603-968-7194 x 12 or [janet.robertson@nhnature.org](mailto:janet.robertson@nhnature.org).*

### These generous donors made tribute gifts, which were received between April 1 and June 30, 2019:

*In memory of William Bierlin*

Karen and Edward Bender  
Jane Johnston  
Carly Keidel and John Dykhouse  
Carole and Robert Keidel  
Kimberly and Joseph Noll  
Maureen and Jim Short  
Mary Trost

*In memory of Kenneth Carlstrom*

Allison Kidder  
Suzanne Sims

*In memory of Robert Korten*

Karen Knight  
Coreen Litwin  
Sandy and John Santa Maria

*In honor of Reuben Pomeranz's Bar Mitzvah*

Joanna and Charlie Gilman  
Beth and Michael Lovell  
Sara MacGillivray  
Pat and James Scanlon  
Susan Starr  
Zazik/Gale Family

*In memory of Greg Smith*

Holly and Tom Fulton  
Nancy and Louis Gaudreau

*In memory of William Stratton*

Anne Mitzenmacher

## WISH LIST

*For office - small desk or table*

*For events - small pop-up tent, refrigerator*

*For Animal Care - electric golf cart, 1/4" natural sisal rope, large jet sled*

*For Facilities - loppers and pruners for invasive species removal, three bunk style pontoon boat trailers to accommodate lengths of 32', 30', and 30'*

*For Intern Cottage - toaster oven, blender*

*For Blue Heron School - six-inch dessert plates, baking pans, cookie sheets, cookie cooling racks*

*For Kirkwood Gardens - garden wagon or cart, garden items for treasures sale such as decorative pots, garden art, tools*



**Become a member of the Naturalist's Legacy Society.**  
**Visit [nhnature.org/support](http://nhnature.org/support)**

## THE HOWLING COYOTE GIFT SHOP

### MEMBERS ONLY SALE

Why not do some holiday shopping while supporting the Science Center? Plan ahead and take advantage of our special members only sale.

**October 12 through  
November 1  
members receive a  
20% discount at  
the Howling Coyote  
Gift Shop.**

*(Regular discount is 10%)  
Discount on non-sale items only.  
Open daily 9:30 a.m. to 5:00 p.m.*



**SQUAM LAKES  
NATURAL SCIENCE CENTER**

*All proceeds from sales at the Howling Coyote Gift Shop benefit the mission of Squam Lakes Natural Science Center.*

# TRAIL'S END

## GROWING UP WITH A CONSERVATION SPIRIT



Like many of you, I visited the Science Center as a child. My wife and I often brought our niece to visit when we were in our 20s. Our daughter Guilla first learned to run during her almost daily visits to our animals. In many ways, we've had a traditional Science Center experience. But we've also been blessed to experience our amazing Blue Heron School. Starting at age two and continuing until they were six, our kids have spent five days a week at the Science Center. With their teachers, they have walked our trails and worked with our naturalists, they have spent much of their time learning outside, they have developed rather intense attachments to all of our animals, and rather frequently, they have proven the school's unofficial motto that there is no bad weather, only bad clothes.

You can see the impact Blue Heron School has had as soon as you walk into our home. So many of the photos of our kids are from their school experiences. There are photos of them climbing trees, banding birds, searching for creatures while wading in a swamp, summiting Mt. Fayal, composting, playing in "muck," snowshoeing, sledding in old kitchen ware, holding salamanders, hatching eggs.... I think my incredibly fortunate little kids have experienced more of the New Hampshire's natural world in the first six years of their lives than I have in my lifetime.

Conservation and the preservation of our ecosystem are values that I only came to appreciate later in my life as I watched habitats change for the worse. For my children, conservation and protection are values with which they were all but born. We are creating a generation of kids here in the Lakes Region who by the time they are four years old understand why we need to protect our habitats and ecosystems! It will be remarkable to watch how this cohort grows up and what that means for the area we all love so much.

My family and I owe a tremendous debt to everyone who has made the Science Center the amazing and wonderful place that it is. We had founders who were decades ahead of their time, we've had staff who show an unbelievable level of devotion to our mission, we've had donors and supporters who have been multi-generational in their support of our goals, we've had volunteers who give so much of themselves, and most recently we've had a number of innovative people who thought a natural science center filled with semi-wild animals would be a ideal place to educate preschoolers. For that, my family will be forever grateful!

*Trail's End* is written by Justin Van Etten, Chair of Squam Lakes Natural Science Center's Board of Trustees.  
You may contact Justin at [justin.vanetten@gmail.com](mailto:justin.vanetten@gmail.com)

### POISON IVY *continued from page 1*

To get the upper hand with poison ivy, people sometimes employ goats to make it disappear as if by magic. Unfortunately, the roots remain to sprout again, so goats may need to make repeat visits. Burning poison ivy? That is definite "no." Its oils become airborne and we certainly do not want those aerosols invited into our lungs. Dressed in complete protective gear, one can pull it out and dispose of it, which again comes with precautions. As an alternative, one can concoct natural vegetation killers with the ever-versatile vinegar.

The changing mosaic of fall colors is upon us, to relish and experience in the crisp, cooler days of autumn. Poison ivy also changes color. When you cast your eyes over those brilliant red and yellow leafy vines creeping along stonewalls, just remember that beauty is in the eye of the beholder, and for humans, those poison ivy plants are definitely best viewed at a distance.

### POISON IVY QUIZ

1. T or F? Poison ivy is safe to touch in late fall and winter when it has no leaves.
2. The irritating oil in poison ivy is called \_\_\_\_\_.
3. T or F? Poison ivy is eaten by many creatures including deer, bear, and a number of bird species.
4. Name a plant that has benefited from CO<sub>2</sub> emissions resulting from burning of fossil fuels.
5. Is it dangerous to burn poison ivy?

#### Answers:

1. False | 2. Urushiol | 3. True | 4. Poison Ivy | 5. Yes!



**SQUAM LAKES NATURAL SCIENCE CENTER**

PO Box 173, 23 Science Center Road  
Holderness, NH 03245

*Return Service Requested*

Non-Profit Org.  
U.S. Postage  
PAID  
Permit No. 1  
Holderness, NH  
03245



**DINOSAURS  
ALIVE!**



**OPEN THROUGH SEPTEMBER 30**

Printed on 100% Post Consumer recycled paper

*This newsletter is generously underwritten by:*



*- HONORING THE SQUAM COMMITMENT TO NATURE -*



**MARK ASHLEY**  
ASSOCIATE BROKER  
(603) 998-0780



**BECKY FULLER**  
REALTOR®  
(603) 491-5983

[WWW.LAKEANDISLANDPROPERTIES.COM](http://WWW.LAKEANDISLANDPROPERTIES.COM)



66 RT 25 MEREDITH, NH 03253 \* OFFICE (603) 569-HOME  
Each Office Is Independently Owned and Operated.

**CHRISTOPHER P. WILLIAMS ARCHITECTS, PLLC**

PO Box 703 • Meredith, NH 03253 • 603-279-6513  
[www.cpwarchitects.com](http://www.cpwarchitects.com)



We use green building techniques, along with local craftsmen and materials, to build a home designed to suit your needs, lifestyle, and budget.