



ACROBATIC DRAGONS

By Margaret Gillespie

Acrobats and dragons sound like trying to mix oil and water. With amazing grace, dragonflies bring these two images together like nothing else in nature. A few years ago, I entered the world of dragonflies at a nearby pond where wildlife were the only residents. Fascinated by dragonfly behavior, I felt this location was the ideal spot to take my budding interest to the next level. With beginner's luck, I selected a species with distinctive features as well as territorial behavior, which kept individuals in a relatively small viewing area. My chosen dragonfly was the Common Whitetail, *Libellula lydia*. Whitetail males sport a wide chalky-white abdomen, hence their name, as well as wide black bands across the central part of their wings. Each male protects a segment of shoreline with the apparent ferocity of a dragon but with much more speed and agility, always returning to its chosen perch on shoreline vegetation. Sometimes merely displaying its white abdomen vertically in the air from a perch is an adequate deterrent. I gladly connected with them on my daily pond trips.

These real life dragonflies are definitely more wild and dramatic than jewelry depicts them in delicate earrings and necklaces. We still do tend to look upon dragonflies as "charismatic" insects as opposed to "challenging" insects like mosquitoes or hornets. It may come as a surprise that dragonflies live two very different lives, one being mostly hidden from view. Both lives feature the dragonfly as an ace predator. Let's zoom in for a closer look at dragonflies in their nymph and adult lives.

Dragonfly nymphs are aquatic creatures, moving like miniature tanks complete with brown camouflage. Often they are hidden beneath decaying leaves on muddy pond bottoms. If you encounter one, look closely and you will see hints of the land dweller they will eventually become – large eyes, six legs, wing buds, and a somewhat flexible abdomen divided into separate plates. However, two unique adaptations connect them to predatory life in the water. First is their unusual way of obtaining oxygen. Gills are concealed within their abdomen and absorb dissolved oxygen from water as it is drawn in. This water, however, has a dual purpose. If the dragonfly needs to execute a hasty escape from a predator, it compresses its abdomen, expels water, and launches forward out of harm's way. This jet propulsion also helps nymphs chase and capture their own prey, primarily other insects but also tadpoles and even the occasional small fish. To make the final grab, nymphs deploy a "secret weapon." Their labium or lower jaw is hinged and can shoot forward at top speed, snagging the insect with two needle sharp pinchers. Drawing the catch back to its mouth, the dragonfly chews its meal with tiny but efficient teeth. Dragonflies have teeth? They certainly do, as nymphs and as adults. In fact, the name of their order of insects is Odonata, translated from Greek as "toothed jaws."



continued on page 7

IN THIS ISSUE...

- Page 2 When Will We See You Again?
 - Page 3 Trustee Profile: Lea A. Stewart
 - Page 4 Naturalist's Corner: Empathy for Insects
 - Page 5 Kirkwood Gardens Plant Spotlight
 - Page 8 Making a Difference
 - Page 9 The Importance of Our Natural World
- And much more!

Just about now, you would normally receive the summer issue of our *Tracks & Trails* newsletter in the mail. This year we are cutting costs and reducing hands-on time by producing a digital-only newsletter.

We've missed you and can't wait to welcome you back! We have made numerous changes to keep you, our staff, and our animals safe. Visit nhnature.org for information.

FORGING TRAILS: WHEN WILL WE SEE YOU AGAIN?



As we all sit at home trying to find a new way of living and working under extraordinary circumstances, I'm sure many of us are seeking solace and comfort in nature. As I write this column at my dining room table (my now not-so-temporary workstation), I crack the window and listen to the growing chorus of birds singing in the woods around my property. They are a reminder of normalcy; that life goes on despite the horror headlines on the evening news.

The vernal vocalizations of the spring peepers and wood frogs are a welcome reminder that life goes on. There will be lots of baby frogs as usual. The Broad-winged Hawks arrived back from South America to cash in on the amphibian and chipmunk buffet currently being served. Their courtship whistles above my house intensified as others pass overhead on their way to hawk restaurants further north (take-out only).

Baby Bald Eagles are hatching in treetop eyries and the Loons have returned from their saltwater sojourns to the quiet coves, ready to make little baby Loons. Each event is relished even more than usual this year. Even the first sunny day swarming of the brown hornets on the south side of my log home is strangely comforting; something to hang on to. Nature is therapy.

Things at the Science Center are anything but normal. The staff communicates with each other from our own little home "studios" via Zoom. Occasionally, we actually see each other and are reminded that we all have legs.

The staff has shown great resiliency and adaptability as we navigate this together. I am very proud of everyone. Without question, they are evolving and creating new ways to do their jobs. Contact with school groups is virtual; we anticipate that our outreaches with libraries this summer may also be virtual.

We don't know when we will open the trail. Our traditional May 1 opening passed as we awaited guidance from the Governor's taskforce, but we are moving ahead with adapting the trail to meet the demands of the moment. Admission will be by preregistered time slots to control the number of people on the trail at any one time at a much-reduced total daily capacity. The trail will be strictly one-way, certain exhibits will be closed, hand sanitizer stations will be scattered along the way. Staff will wear PPE, financial transactions will be as touchless as possible, water fountains will be turned off, and reluctantly, we postponed the previously scheduled visit of the Giant Insects until 2021.

So, your visit to the Science Center, whenever it happens, will be different this year. The staff are doing everything possible to make sure you, the animals, and they are safe. We will all be so delighted to see you and welcome you . . . including your legs.

Stay safe, be healthy . . . and we will see you soon!

Iain MacLeod, Executive Director
iain.macleod@nhnature.org
603-968-7194 x 123



SQUAM LAKES NATURAL SCIENCE CENTER

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

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

Kate Banyas, Blue Heron School Assistant Teacher
Kim Beardwood Smith, Development Officer
Paul Brochu, Operations Manager
Dennis Capodestria, Exhibits 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
Jordan Fitzgerald, Blue Heron School Lead Teacher
Josh Flagg, Naturalist
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
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, Naturalist
Carol Raymond, Volunteer Manager
Janet Robertson, Development and Communications Director
Kevin VanGorden, Lead Animal Care Associate
Aubrey Voelker, Animal Care Training Coordinator
Sarah Wall, Visitor Services Manager
Dan Walsh, Facilities Assistant
Sharon Warga, Operations Director

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

TRUSTEE PROFILE

LEA A. STEWART



When I was growing up in suburban Pennsylvania, my family loved to explore the outdoors, travel, camp, hike, bird watch, and fish – anything nature-related. I particularly fell in love with the mountains of Vermont on our many ski trips in the 1960s, moving north for college in 1970, and haven't looked back! The outdoors has always been my 'happy place' and becoming active at the Science Center was a natural fit for me. It had been on my radar since moving to this area in the late '70s and had long been on my list to get more involved with. That opportunity came in 2005 during a time of transition for me. What a joy it has been to be part of such a positive learning environment!

I first began volunteering at Kirkwood Gardens, then took the Docent training program. These last eight plus years I have also served as Trustee. What a surprise it has been that the more I get to know the Science Center, the more I learn about its complexity. There are so many working parts! The dedication of each and every staff member and volunteer is evident in what we have become as an education center and as a community.

Who would have thought that the world would change so quickly, with the global spread of the coronavirus affecting each and every one of us, worldwide? It feels so odd not to be at the Science Center now almost daily, helping prepare for opening day of another busy season. We certainly face many challenges with this new, unknown future. Until just a few weeks ago, I was most concerned about the Science Center becoming too big, with not enough staff and volunteers to provide the quality of experience and education we are known for. Now we find ourselves rethinking everything we thought we knew. How do we make up for the revenue lost, with the trails and lake cruises not resuming for who knows how long? Despite the great unknowns, my faith in the mission and people of the Science Center remains strong. We will come out the other side of this, stronger, and with a renewed sense of purpose.

Lea grew up in Pennsylvania in a blended family with five siblings. She attended Green Mountain College in Poultney, Vermont and later studied Biology at Plymouth State. Lea is a long-time member of the Pemi Choral Society and has performed with the NH Friendship Chorus in China and Tibet, Croatia, Morocco, and Colombia. Travel and exploring nature are among Lea's favorite pastimes, along with photography, art, singing, and gardening. She will reach the term limit of nine years on the board in August but will continue to volunteer often.

NEWSBRIEFS

- In March, Caleb LaRocca left his job as Animal Care Associate and accepted a keeper position at Utica Zoo in Utica, NY. He joined the staff in late 2018 and especially enjoyed working with the bobcats and mountain lions. We wish Caleb success. Hiring his replacement was delayed due to the coronavirus pandemic.
- Liz Rowe started her work here as a seasonal Finance Assistant in 2005. Her talents were soon clear and when Nancy Beck retired in 2006, Liz easily stepped into the role of Operations Director. That position covered a variety of duties then, not the least of which were overseeing visitor services, special events, lake cruises, and human resources. Liz retired in May after spending over three years working part-time as Human Resources Director. It's hard to imagine a more thoughtful, ethical, diligent, or dedicated employee than Liz. She will be greatly missed for her attentive efforts, insightful ideas, and kindness. We look forward to welcoming her back as a volunteer.
- Operations Manager Sharon Warga's experience in the front office prepared her to take over as Operations Director in May. She was Liz's understudy for a few months learning about Human Resources. Sharon will continue to oversee Lake Cruises, IT, and more.
- Paul Brochu resigned from the Board of Trustees in January when he was hired as Operations Manager. Paul's starting date was moved to May, due to a temporary hiring freeze. Paul holds a B.S. in Biology from Middlebury College and a M.S. and ScD. in Environmental Health from the Harvard School of Public Health, which he earned when he was in the U.S. Navy. Paul served in various capacities during his 30-year career in the Navy, including many public health positions around the world, notably in Japan during the 2011 earthquake, tsunami, and Fukushima disaster. Paul retired as a Captain in 2017. Paul became a volunteer docent in 2018 and a Tour Captain in 2019. Paul and his wife Sheryl, who works for the Circle Program, have one daughter in college. Paul enjoys kayaking, fishing, snowshoeing, and skiing and is currently President of the Plymouth Rotary Club.
- We are making plans to keep our staff, volunteers, visitors, and community safe. We started in March by cancelling all programs and activities. Many staff are working at home, as we try to estimate the pandemic's impact on future operations and prepare new procedures for reopening. Staff take turns in the office as needed, focusing on day-to-day operations. Everyone practices physical distancing. Staff meetings take place digitally, allowing us to gather together and communicate.
- Our ambassador animals are healthy and doing well. The animals go outside and are fed and cared for every day by our dedicated and short-handed animal care staff, who are

continued on page 5

NATURALIST'S CORNER

EMPATHY FOR INSECTS

By Eric D'Aleo

What comes to mind when you hear the word insect? Frightening creepy crawly creatures? Disease carrying pests? Squishable annoyances? Or amazing animals adapted to the natural world? Unfortunately, many people place insects in the first three categories rather than the last. These small animals actually deserve our admiration, empathy, and respect.

Insects are the world's most diverse group of animals. Globally, scientists have identified 925,000 different insect species and estimate there may be up to 29 million species not yet identified. They are so numerous that worldwide, insects outweigh humans by seventeen times.

Insects matter. They are an important food source for many animals including birds, reptiles, amphibians, fish, spiders, other insects, and even people. Insects are essential pollinators for countless plants providing food for people. Think almonds, apples, blueberries, cherries, avocados, and numerous other foods. Honeybees are not the only insect pollinators. Wasps, flies, ants, beetles, other bee species, butterflies, and moths are also responsible for this ecosystem service. Without these pollinators, important human and wildlife food sources would be unavailable.

Insects are vital in maintaining soil health. Dung beetles alone save the US cattle industry \$380 million every year by breaking down cow manure, releasing nutrients back into the soil for plants to use. Other insects including termites, carpenter ants, and bark beetles help recycle dead trees into the forest floor.

Yet there is a worldwide decline in insect species. Butterflies, moths, grasshoppers, crickets, many bee species, and most dung beetle species are vulnerable or endangered. Some are important indicators of environmental health. The loss of insects seems to affect the food web from the bottom up. Researchers have outlined four broad, global problems resulting in the drop in insect numbers. They include habitat loss due to ...

1. Human development, deforestation, and expansion of agriculture
2. Pollution, particularly via pesticides, fertilizers, and industrial wastes
3. Parasites and pathogens — like the viruses that attack honeybees — and invasive species
4. Climate change

What can you do? Plant gardens with native flowers or let part of your lawn go “wild” to promote more insect diversity.

Support conservation of land areas for wildlife, including insects. Avoid using pesticides since they impact more than the targeted insect species. These chemicals can harm unintended insects, birds, and other animals that act as biological controls to keep the harmful insects in check. Encourage political leaders to address climate change. Next time you see an insect, don't squash it. Stop, watch, and observe. If you take the time, you may find out how fascinating they are. Insects need empathy too.



FROM THE HERON'S NEST

By Laura Mammarelli



School changed for Blue Heron School children from March through the end of the school year on June 5. Teachers held daily meetings with Zoom every morning. Children saw their teachers and each other and participated in modified school activities. Kindergarten children had another afternoon meeting to continue their work to prepare for first grade in the fall. Blue Heron School Lead Teachers Jordan Fitzgerald and Jordy Gianforte made an impressive transition to online learning and interacting virtually with the children. Science Center Naturalists also visited the children virtually once a week, so children were able to see an animal or have a nature experience. It was easy to see the joy in children and adults when Audrey Autumn showed two turtles to the children. She fielded some great questions from them about how they use their claws, where turtles go in winter, and what turtles eat.

Blue Heron School is a nature-based Montessori school for children ages three to six. For more information please visit www.nhnature.org/programs or contact Laura Mammarelli, Blue Heron School Director, at 603-968-7036 or blueheron@nhnature.org.

KIRKWOOD GARDENS PLANT SPOTLIGHT

By Brenda Erler

Saltspray Rose

Rosa rugosa 'Showy Pavement'

Culture: Enjoys full sun in average, moist, well-drained soils.

Bloom: early summer until frost if deadheaded.

Height: Grows 2 feet tall and wide, but can be pruned to size in early spring.

This beautiful rose can tolerate difficult sites, including banks, sandy soil, and saline conditions. Use in shrub borders or hedges. Attractive to bees and butterflies.

Kirkwood location: next to both sides of the stone steps in lower garden.



Courtesy flickr/FD.Richards CC BY-SA 2.0

Tall Verbena

Verbena bonariensis

Culture: Grow as an annual in average, moist, well-drained soil in full sun. Plant seed directly in garden after last frost or start indoors 8 to 12 weeks before last frost for earlier flowering. Self-seeds once established.

Bloom: Clusters of lilac flowers appear late June to frost.

Height: 4 feet tall, 1.5 to 3 feet wide.

This lovely heirloom annual has strong, airy stems and clusters of lilac flowers that attract butterflies, bees, and hummingbirds. Lovely when allowed to drift through the middle of the border. Note: Considered an invasive plant in the southeast and California.

Kirkwood location: Intermingled amongst shrubs, perennials, and other annuals on driveway side of lower garden.



Courtesy flickr/belgianchocolate CC-BY 2.0



Plant Spotlight and Kirkwood Gardens are sponsored by Belknap Landscape Company, Inc.
www.belknaplandscape.com

NEWSBRIEFS *continued from page 3*

working staggered schedules and using safety precautions to keep themselves and the animals safe. The Facilities crew are working to prep the grounds and exhibits and boats for the season.

- Teachers from Blue Heron School, our nature-based Montessori early learning center, meet online with their students every day. They've also created videos for the public with easy activities for preschoolers. School ended for the year on June 5 with seven kindergarteners graduating.
- For a typical summer, we welcome college students who spend about ten weeks as interns training to work at a non-profit nature center. They learn from staff during what is usually the busiest time of year. The intern hiring process starts in November and spaces are often filled before February. In May, we regrettably decided to cancel internships for this year and hope this year's group will be able to participate in 2021.
- In May, we made the hard decision to cancel Guided Discoveries, our summer camps for children. We felt we cannot provide the camp experience families have come to know and love while adhering to the required CDC guidelines. We will miss seeing the faces of happy campers throughout the summer.

- We have also canceled volunteer training planned in June for adult docents and teen First Guides.
- While programs are cancelled to help prevent the spread of the coronavirus, we've developed ways for the public to stay connected to nature and New Hampshire's ecology: posting activities, videos of animals, stories, and more content through various social media channels such as Facebook, Instagram, Twitter, and YouTube. These resources are available at www.nhnature.org/resources. Additional content is added as it is created.
- The new Virtually Wild School Programs are popular with teachers. They provide distance learning natural science education for schools. A Naturalist and live animal ambassadors visit a virtual classroom for a 45-minute program. Teachers may reserve programs at www.nhnature.org/teachers or email schools@nhnature.org.
- New Hampshire Day was scheduled for May 9 but now is postponed until the fall. We are grateful for the flexibility to reschedule allowed by our generous sponsors, Dead River Company and the New Hampshire Electric Co-op Foundation.
- Kirkwood Gardens Day was cancelled but some plants will be for sale in the garden starting June 1 on the terrace by the Holderness Inn. Sponsored by Belknap Landscape Company.

CALENDAR OF PROGRAMS & EVENTS

JUNE, JULY, AND AUGUST PROGRAMS:

Normally, there are pages listing programs, cruises, special events, volunteer trainings, and more. This year, most activities are cancelled or modified. Here is what we know about programs as this is written in late May. Please check our website, nhnature.org, for current information.

Science Pub: Creating Our New Reality

Tuesday, June 9, 7:00 to 8:00 p.m. | For adults

What can we learn from the global response to the coronavirus pandemic to inform our community-level action on climate change? How can we capitalize on this pause in our carbon emissions to achieve a permanent shift? What community-level solutions have we seen in the coronavirus response that can help us build climate-resilient communities? These are big questions without easy answers. Bring your thoughts and ideas, and your own beverage, to this virtual science pub held via zoom.

This is a free event brought to you by Squam Lakes Association, Squam Lakes Conservation Society, and Squam Lakes Natural Science Center. Advance registration is required:

www.nhnature.org/programs/calendar.php



StoryWalk™

Friday, June 26-September 7 | For all ages

StoryWalk™ features *My Awesome Summer* by P. Mantis, written and illustrated by Paul Meisel. Get a bug's-eye-view on the life cycle of the praying mantis, in this hilarious, scientifically accurate Nature Diary following an insect through her whole summer. StoryWalk™ surrounds the Holderness Town Gazebo behind the Holderness Post Office at Curry Place. Presented in partnership with Holderness Library and Holderness Recreation Department.

Sponsored by: Meredith Village Savings Bank

ON THE TRAIL

Up Close to Animals presentations are cancelled along with Turtle Talks, River Otter Feeding, Fish Feeding, and Mountain Lion Training. Pop Up Animal Encounters with live animals will take place along the trail throughout the day in July and August.

SUMMER SPLASH GALA

The Winged Wonders gala dinner is cancelled but we are planning a virtual event. You can stay at home, don't have to hire a babysitter, and don't have to get dressed up. We hope you'll trade your dinner OUT for a dinner IN for the animals! Your Un-Gala donations will help to feed the animals and support operations. Look for more information soon.

ANNUAL MEETING FOR MEMBERS

Save the date for the Annual Meeting on Saturday, August 8. Whether we can meet in person or not, we will still elect officers and trustees, honor our retiring trustees, recognize employee service, and more. The meeting format, election slate, and biographies of nominees will be posted after July 1 to our website, nhnature.org

SQUAM LAKE CRUISES

For cruise information and schedules, see www.nhnature.org. This is the perfect time to consider a private charter with your family group on a personalized cruise.

Discover Squam

A general overview of Squam Lake from natural history and wildlife to culture and people.

Loon Cruise

See Common Loons as a Science Center naturalist and Loon Preservation Committee biologist discuss loon conservation, biology, and monitoring. The cruise route maximizes loon observations and changes weekly.



Squam Lake Charters

Host your own cocktail party or other unique gathering on Squam Lake. Charter a private cruise customized to fit your occasion. Our canopied pontoon boats and experienced tour guides are ready to help with your special outing. Contact Operations Manager Paul Brochu at 603-968-7194 x 110 or paul.brochu@nhnature.org for reservations. \$225 per hour per boat

GREEN TIP: GROWING PLANTS FROM KITCHEN SCRAPS

If you don't have room for a garden outside, you can still grow plants from kitchen scraps such as celery bottoms, carrot tops, avocado seeds, and more. Experiment with other produce you have on hand. This is a great project for children that will teach them how plants grow. You may end up with some new houseplants, too!

For detailed guidance, see <http://www.missouribotanicalgarden.org/gardens-gardening/your-garden/help-for-the-home-gardener/advice-tips-resources/visual-guides/plants-from-kitchen-scraps.aspx>



ACROBATIC DRAGONS *continued from page 1*

After up to a year or more as nymphs, dragonflies embark on the dramatic transition to adulthood. Exiting the water, they position themselves on emergent vegetation or even a dock. By taking in air, they split their exoskeleton and emerge through the area of the wing buds, dangling backwards out of the lifelike but empty exoskeleton. Maneuvering into an upright position, they pump fluid into their wings, expanding them to full size. That same fluid drains into the abdomen, extending and lengthening it. Left behind is an empty exoskeleton, so lifelike that it can take courage to reach out and touch it.

On stage now is a “new” and adept aerial predator. Let's run through its arsenal. Dragonflies' eyes merge on the

top of their head and wrap around the sides, endowing them with close to a 360-degree view in color. Four wings give them many functions of the helicopter they resemble. They can hover and turn rapidly, utilizing their wings at different angles or as pairs. Rugged and swift acrobats, some dragonflies would qualify for speeding tickets in 30 mile per hour zones. So how do they capture prey, adding up to some 300 insects each day? Their six legs, adorned with tiny spines, are curved into the shape of a basket and are held below them as they fly, trapping insects at will. And yes, dragonfly prey includes mosquitoes, warming their welcome in our backyards. Dragonflies, particularly the large darners, are such strong fliers don't be surprised if they visit you on your boat or if you see them hunting quite far from water.

Another acrobatic display? When mating, dragonflies join together in a “wheel position” that can happen in flight or on pond vegetation. First, the male attaches the claspers at the end of his abdomen behind the female's neck. She completes the circle by connecting her abdomen underneath the front of his so her eggs can then be fertilized. Each female produces thousands of eggs, which she may lay in passing on water or in the stems of plants.

By late summer, most adult dragonflies have completed their life cycle. Not so for some migrating dragonflies including the Common Green Darners, which may swarm in dramatic patrols of your yard. Welcome these large “dragons” as they sweep the air clear of pesky insects. Soon they will be heading south in a timeframe similar to monarch butterflies and Broad-winged Hawks. Another generation of Green Darners will make their way north in the next season. For all the dragons, wildlife, and humans too, let's do our work to keep aquatic environments healthy and vibrant for the years to come.



Arigomphus furcifer
Wikimedia - Rsbernard, CC BY-SA 4.0

OPENING A WINDOW TO THE NATURAL WORLD

Making a Difference



Are you asking yourself what you can do to help?

Consider renewing your membership AND making a donation. Your gift now will help us continue providing the best care for our animal ambassadors, supporting our staff, expanding our virtual learning opportunities

during our temporary closure, and keeping the Science Center strong and ready to deliver our important natural science education programs when this is over. A gift of any size truly makes a difference.

This year, there are new tax benefits through the CARES (Coronavirus Aid, Relief, and Economic Security) Act stimulus passed by Congress in March. It's important to share with you that the stimulus includes an allowance for a \$300 tax deduction for cash charitable gifts, regardless of how taxes

are filed. For wealthier households, the CARES Act lifts the adjusted gross income cap and donors may deduct charitable gifts of up to 100% of their adjusted gross income, effectively eliminating federal tax liability in 2020. If you receive a stimulus check from the CARES Act, but have the good fortune of stable work or robust savings, please consider using it for charitable contributions too.

As always, consult with your financial advisor about your philanthropic giving. Thank you for your continued support and generosity!

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 112 or janet.robertson@nhnature.org.

DO SOMETHING WILD...SPONSOR A SPECIES!

The animals at Squam Lakes Natural Science Center serve as ambassadors for their species, here for the purpose of teaching about New Hampshire's natural world. The cost of caring for wildlife is considerable. You can help to provide food, health care, and housing for the animals - for your favorite feathered or furry species - through Sponsor A Species. It's a unique way to learn about a particular species and help us to care for our live animals.

See sponsorship levels and make your sponsorship gift online at www.nhnature.org/support/sponsor_species.php.



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



These generous donors made tribute gifts, which were received between January 1 and March 31, 2020:

*In memory of William Bierlin
Robert Spear and Jacqueline Merchant*

*In memory of Helen Mathieson
Mary Ann Stanton*

What will your legacy be?

Since 1966, Squam Lakes Natural Science Center has provided enriching natural experiences that plant priceless seeds of wonder. Most of us have memories of places and events in our childhood that created a lasting connection to the natural world. Perhaps it was finding a bird's nest in the backyard or playing in a leaf pile in the fall with a cherished friend. Perhaps it involved a fort in an old gnarled maple, a walk through a milkweed patch filled with Monarch Butterflies, or a visit to a local nature center.

Do you have memories of enjoyable time well spent on the live animal trail with your family? Do you learn something new every time you visit that makes you think? Do you believe future generations need to love and understand the natural world in order to cherish and protect our heritage?

Your legacy gift will help Squam Lakes Natural Science Center to continue to achieve its mission to teach about the natural world for generations to come.

Become a member of the Naturalist's Legacy Society. Visit nhnature.org/support



TRAIL'S END

THE IMPORTANCE OF OUR NATURAL WORLD



The mission of Squam Lakes Natural Science Center is to advance understanding of ecology by exploring New Hampshire's natural world. And as I'm sure, many of you have heard or seen, everyone from everywhere wants to be exploring New Hampshire's natural world right now. Sure, it can get a little challenging when parking lots fill up or trails get crowded but the coronavirus is showing us all just what an incredibly valuable asset our natural world truly is.

The coronavirus presents an interesting challenge for the Science Center - there is no doubt about that. But it also shows that our mission is as relevant as it ever has been. With the world dominated by unknowns and unanswered questions, so many of us are finding solace and happiness out in nature. I know that as an individual and as a father, being able to escape into the natural world every day is a big part of what is keeping me sane.

It has been wonderful to see how dedicated our supporters are to our mission. So many of our members have been renewing their memberships despite the uncertainty. Our volunteers have been connecting on a Facebook group to figure out new and creative ways to help. Our donors have been making their donations much earlier in the year (and frequently increasing their donations). Our friends on social media have been sharing and liking up a storm.

As you can imagine, planning for this year is difficult. We hope and expect to open but when is still a big question. Everyone is working hard on plans to keep our visitors safe - from making the trail one way only to putting hand sanitizer out and about. Who knows, perhaps our dedicated volunteers will come up with a line of fashionable Science Center facemasks!

Our animals remain a top priority and we are working hard to ensure they get all the care and enrichment they need. We've got an amazing animal care staff that are very, very dedicated to their jobs.

Our staff is doing an amazing job of using the online world to help people better understand the ecology of the natural world they are all out exploring. (Who could have imagined that would need to happen!)

The Board is working hard to do everything we can to insure the Science Center can address what is likely to be a tricky financial situation.

While this is hard for all of us, I am optimistic about what it means for the Science Center's future. I expect that many people will come out of this with a greater interest in the natural world that they've all been exploring. I am hopeful that people will emerge with a renewed sense of the importance of our natural world.

We are blessed to be a natural science center in one of the most beautiful places anywhere. We have an amazing community of supporters and a dedicated and talented staff. I expect that the need for our offerings will continue to increase in the years to come.

Trail's End is written by Justin Van Etten, Chair of Squam Lakes Natural Science Center's Board of Trustees.

WISH LIST

- For Staff Professional Development* – airline miles
- For Visitor Services* – small, glass-front refrigerator, cordless stick vacuum
- For Office* - small desk or table, bookshelf
- For Animal Care* - electric utility vehicle, natural sisal rope, large jet sled
- For Facilities* - loppers and pruners for invasive species removal
- For Blue Heron School* – potted houseplants, baking pans, cookie sheet, cooling racks
- For Intern Cottage* - toaster oven, pots and pans in good condition

HOWLING COYOTE GIFT SHOP

Come visit the open air Howling Coyote kiosk stocked with nature inspired books, gifts, jewelry, apparel, and toys. We will also feature some local products from talented artisans offering unique items on consignment.

In addition, we have a full range of refillable water bottles for the whole family.



DRAGONFLY QUIZ

- Which period of a dragonfly's life cycle is longer, the nymph or the adult?
- True or False? Dragonfly nymphs can move forward quickly by expelling water from their abdomens.
- What body part do adult dragonflies use most often to catch prey?
A. Teeth B. Legs C. Wings
- The eyes of adult dragonflies enable them to see around them close to _____ degrees.
- True or False? Some dragonfly species migrate south in the fall.

Answers:

1. Nymph | 2. True | 3. B | 4. 360 | 5. True



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

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



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



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