



## LIVING FOSSILS – THE VIRGINIA OPOSSUM

By Victoria Brown, Naturalist

I want to introduce you to an animal species whose fossils have been found from at least 60 million years ago, and whose skeleton has remained relatively unchanged. Scientists refer to this animal as a living fossil and one of the earliest existing types of mammals. The Virginia Opossum (*Didelphis virginiana*), the only marsupial currently found in the United States and Canada, has an incredible story of adaptability and can teach us what makes an animal successful and how humans play a role in their conservation.



Virginia Opossum

The Virginia opossum originated in South America and migrated to Central America and the Southeastern United States when the Isthmus of Panama formed, which allowed animals to cross between the continents. Although still susceptible to frostbite, the warming of our climate allowed the opossum with its bare nose, paws, and tail to move into more northern territory, and it has been found in New England since the early 1900s. Additionally, the killing of mountain lions and wolves by early settlers allowed prey animals, like the opossum, to increase in population.

Virginia opossums have many behaviors which are crucial to their survivability. “Playing ‘possum,” is a phrase you may have heard, and it has been used since the 1800s; it means “to play dead or feign innocence.” It comes from the behavioral adaptation an opossum exhibits when approached by potential danger. The opossum might first snarl or run away, but if it becomes overwhelmed, its body will shut down and faint, its mouth opens and foams up, and it emits an odor from its anus to smell like a decaying animal, in hopes a predator will become uninterested. The opossum will wake up in minutes to hours, because contrary to the colloquial phrase, “playing ‘possum” is an involuntary behavior.

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The live animal exhibit trail and all hiking trails open Thursday, May 1.

See current rates, hours, and details at [nhnature.org](http://nhnature.org)



# FORGING TRAILS: SEASON PREVIEW BY IAIN MACLEOD



Even though it's February (as I write) and I'm looking out of my window at a winter-white parking lot, the 2025 trail season will soon be here and we are already thinking of May 1 and another summer of visitors. Since the fall, our hard-working and talented Facilities staff – Keith, Adam, Bob, Emma, Dan, Clare, and Dennis – have been hard at work on a myriad of projects.

Renovations are underway at the Ecotone Mammal Exhibit so that we can once again welcome a fisher.

These high-energy arboreal weasels are always a favorite. This one is particularly energetic and dexterous, so reinforcement is needed to ensure his powerful, sharp-clawed paws and jaws don't test the mesh and trim in high places where the gray fox could never reach.

Speaking of the gray fox, many visitors may not have even seen him in the last couple years. He is over 15 years old and getting very arthritic (aren't we all!). We christened him the "fair-weather fox" a few years ago as he is often reluctant to venture outside on anything but a perfect day. He is still with us but has been moved to a behind-the-scenes space where he can live out his well-deserved retirement.

Animal Care Director Lauren has also mentioned a couple other exciting pending new arrivals, but . . . I'll leave you in suspense on those for now. Stay tuned.

There are several new updates at the Water Matters Pavilion. In late 2024, we took possession of a spectacular bull moose mount and I knew the perfect place to put him. When you visit Water Matters this season, you can get up close to this magnificent beast and really appreciate how huge moose are.

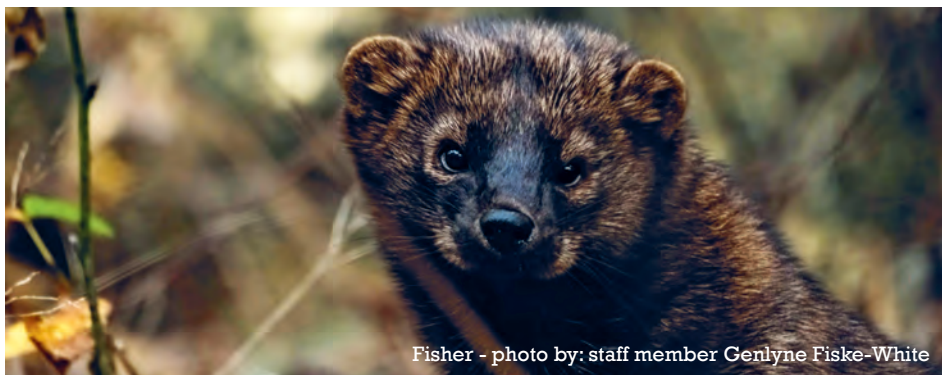
We are also creating a much larger Turtle Exhibit that will provide our three turtles with many more gallons of water to swim in and larger terrestrial space to bask on and explore.

Behind the scenes, we have just completed our new Ambassador Animal Annex. This new wing attached to our Raptor Mews and Winter Bird Quarters provides a huge new space to house and care for all our ambassador mammals (the skunks, opossums, porcupines, woodchucks, and bats that our education staff use in programs).

We are also renovating a space to be our new Volunteer Headquarters where our army of dedicated volunteers can find their materials, props and resources in one, convenient and accessible building.

The Facilities team is working on all this while also doing the normal off-season upgrades and refurbishments to all the other exhibits . . . oh and managing the snow throughout the campus . . . and maintaining the heating systems . . . and servicing equipment and vehicles . . . and . . . you get the picture. Thanks to our amazing Facilities staff and we look forward to welcoming you back for the 2025 trail season!

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



Fisher - photo by: staff member Genlyne Fiske-White

## SQUAM LAKES NATURAL SCIENCE CENTER

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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 at info@nhnature.org.

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# OPENING A WINDOW TO THE NATURAL WORLD

by Rachel Saliba, Development Director



## PLANTING SEEDS FOR THE FUTURE

The ultimate planner, Lead Horticulturalist Emma Erler began growing perennials from seed in January and plans on growing almost 600 perennial and annual plants from seeds through this spring. The plants will be used in Kirkwood Gardens, Grandpa's Pollinator Garden, Songbird Feeding Station, Blue Heron School, and other areas around the exhibit trail where habitat is being restored and invasive species are being removed.

Just as Emma is planting seeds to prepare for the year, the Nearer to Nature Annual Fund represents the foundation of our mission. Each contribution, no matter the size, is like a seed planted in fertile soil. Your support helps us nurture programs that create a lasting impact for years to come, allowing us to grow and thrive together. There are multiple ways for you to get involved with the Science Center, including contributing to the spring and fall appeals, becoming a member, volunteering, participating in NH Gives, and attending the Family Picnic and Garden Party.

## Save the Dates for our Summer Fundraising Events:

### Family Picnic

Saturday, July 12

Tickets go on sale June 1.

Join us for this family-friendly fundraiser featuring food trucks, live animal programs, ice cream, lawn games, live music, and science and nature fun, in casual atmosphere for all ages.

### Garden Party at Kirkwood Gardens

Thursday, August 14

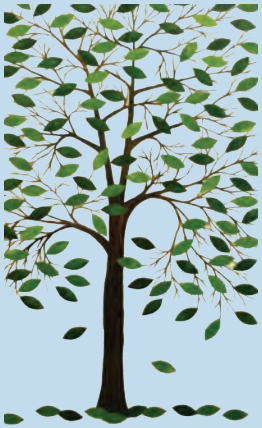
(following the Annual Meeting for Members)

Tickets go on sale July 15

Celebrate the wonders of nature while supporting the Science Center at this adults only up-scale cocktail party fundraiser.

Volunteers coordinate and plan both summer fundraisers. If you'd like to help plan these events or become a sponsor, please contact Rachel Saliba at [rachel.saliba@nhnature.org](mailto:rachel.saliba@nhnature.org). We'd love your help.

## WHAT WILL YOUR LEGACY BE?



Become a member of the Naturalist's Legacy Society by including Squam Lakes Natural Science Center in your estate planning and help us to fulfill our mission for generations to come.

For more information email [Rachel.Saliba@nhnature.org](mailto:Rachel.Saliba@nhnature.org).

*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 our members and people like you. We are here to connect you to the natural world and provide a consistent educational experience immersed in nature. Learn how to support us at [nhnature.org/support](http://nhnature.org/support) or scan the code.*



## Marsh Boardwalk

Be a part of the Marsh Boardwalk and support the mission of the Science Center by sponsoring a plaque in the name of a friend, family member, loved one, or pet. See full details at [nhnature.org/boardwalk](http://nhnature.org/boardwalk).

## SPONSOR A SPECIES

Take your support of the Science Center animals to the next level! Sponsor your favorite animal and see your name listed on our website and we list sponsor a species names on the trail! Plus, receive benefits based on the level you choose, such as free live animal exhibit trail tickets, animal plush stuffed animal, an animal fact sheet, a certificate of appreciation, the Science Center quarterly newsletter 'Tracks and Trails,' and monthly e-Happenings.

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. All of the animals need specialized diets, daily care, enrichment, and creature comforts. You can help provide food, health care, and housing for the animals - for your favorite feathered or furry species - through Sponsor A Species. You may sponsor a species for yourself, your family, or your company, school, or club. You can even send a sponsorship package as a gift.

[https://nhnature.org/support/sponsor\\_species.php](https://nhnature.org/support/sponsor_species.php)



# NATURALIST'S CORNER

## OUR COYOTE NEIGHBORS, HERE TO STAY

Drew Stazesky, Naturalist/Camp Coordinator



Loved by some, loathed by others: the eastern coyote (*Canis latrans* var.) is a common species found throughout New Hampshire, they are a relative newcomer to the state: with the first confirmed sighting occurring in the 1940's. Larger than their western counterparts, our eastern coyotes range from 30-50 lbs and are likely a genetic mix of mostly coyote, some wolf, and a little bit of dog. It's thought that coyotes from the west moved east in search of territory lacking

large apex predators (i.e. bears, wolves, and mountain lions). Centuries of dedicated predator eradication in the eastern United States had efficiently removed or greatly reduced these predator populations. This left a void in the landscape and a perfect place for coyotes to settle into. As opportunistic omnivores (an animal that eats both plants and other animals) and habitat generalists (an animal that doesn't have specific habitat criteria) coyotes all across the nation have done an exceptional job of creating a space for themselves in and among human settlements.

There's an estimated population of 4,500 to 5,000 eastern coyotes in New Hampshire, and the population is considered "stable" by Fish & Game biologists. Despite sometimes being labeled as a killer of livestock and pets, this mid-sized predator actually prefers to eat rodents and small mammals.

They'll also eat fruit, various amphibians, carrion (dead stuff), insects, and the occasional food scrap from a trash can.

The common misconception of coyotes as vicious killers has led to them being one of the most persecuted and villainized animals in the nation. Federal agencies perform routine culls of various coyote populations throughout the year. In New Hampshire, the eastern coyote is the only fur-bearing animal with no closed hunting season. This means that coyotes can be shot throughout the year with no permits and no limitation on how many can be killed; and these numbers don't have to be reported to New Hampshire Fish & Game. So it's unknown exactly how many coyotes are killed per year in the state.

Despite nationwide persecution, coyote numbers continue to stay stable and even rise in some cases. As habitat generalists, they can eke out an existence in any area as long as they have access to food, water, and shelter. Coyotes also form monogamous pairs, which means that a male and female will stay together throughout their lives, protect their territory, and raise their young in a committed team effort. They communicate to each other through yips, barks, howls, and growls and are incredibly adept at reading each other's body language. Coyotes can be highly social and highly independent, whichever suits their current needs, and it's not uncommon to see a nuclear family unit or a lone individual.

Coyotes serve an important role in our ecosystems, and we are able to safely coexist with them when we take the correct precautions. If they find a good habitat to call home near you, you may have the opportunity to call a coyote your neighbor for five to eight years (their average lifespan in the wild). Take the opportunity to better understand and appreciate this resilient creature, because as a species, coyotes are not going away anytime soon.

## ANIMAL CARE: VIRGINIA OPOSSUM

Brian Church, Animal Care Associate

Virginia opossums are one of the many different species of mammals that are native to New Hampshire and are cared for at the Science Center. However, these mammals are very special because they are the only marsupial species in North America, with some significant differences worth paying attention to. Similar to kangaroos and koalas, opossums have pouches and their offspring are called joeys. They possess what are known as prehensile tails, which are able to wrap around and hold onto things like branches. They have a lower than average body temperature than other mammals, hovering around 94-97 degrees Fahrenheit. Lastly, Virginia opossums are not as well adapted to the cold as other mammals in New Hampshire like black bears and eastern gray squirrels. Facts like these are important to know when considering how to best care for the opossums at the Science Center.

Considering their low body temperature and hairless extremities, such as their ears and feet, we make sure they are not exposed to cold temperatures and have proper bedding and shelter to stay warm. Since opossums do not hibernate or go into torpor like some other mammals during the winter, their diet stays consistent throughout the year. Virginia opossums are omnivorous, excellent at foraging, possess a long snout with a strong sense of smell, and have great dexterity with their hands. We take all of this into account and provide them with substrate such as leaves and pine needles to dig through to find hidden treats, toys to pick up and reach into to access food, and a wide variety of meats, insects, fruits, and vegetables to make sure they have a well-balanced diet. Last but not least, we want to make sure these animals feel at home and get a very similar experience to living in the wild. We give their exhibits verticality to practice their climbing skills, and decorate their homes with plant matter such as branches and leaves to give the scents, visuals, and textures that they would typically interact with. We also give them new opportunities every day to keep them active, happy, and curious.



# KIRKWOOD GARDENS

By Emma Erler, Lead Horticulturalist and Exhibits Assistant

## PLANT Q & A

**Q: Do fluctuating winter temperatures hurt fruit and landscape trees?**

**A:** Widely fluctuating winter temperatures are becoming all too familiar to New Hampshire residents. While a February thaw may be nice for us, you might be wondering what it does to fruit trees and other landscape plants.

All of the flowering and fruit trees that can be grown in New Hampshire have a dormancy mechanism within them that keeps them from growing in the middle of the winter. In the fall, when they stop growing and drop their leaves, trees enter a period of rest dormancy to protect themselves from the cold.

This dormant period is only broken after the tree has experienced a certain amount of "chilling hours," which are the cumulative number of hours when the temperature drops between 32° and 45°. How many chilling hours are required to break dormancy varies widely between species of plants and even between cultivated varieties of a tree. For example, apples need to experience between 800 and 1,750 hours of temperatures below 45 degrees to break a rest period. This chilling requirement keeps trees from starting to grow in midwinter despite intermittent above-average temperatures or mid-winter thaws. Once a tree has experienced its requisite chilling hours,

it will begin to break dormancy, and new leaf and flower buds will start to swell. Once the buds start growing, the tree can no longer readjust to the cold. Extreme cold will cause injury to the buds, which is why trees are sometimes damaged by a late frost, freeze or extreme cold. The shorter a tree's chilling hour requirements, the more likely it is to be damaged by winter conditions. This is one of the reasons peaches can be so difficult to grow in NH, needing between 375 and 1000 chill hours.

As a general rule, native plants have higher chilling hour needs, so they break dormancy with less risk of their flower or leaf buds being damaged. Reliability is just one more good reason to plant native trees in the landscape.



## PLANT SPOTLIGHT

### Large-Cupped Daffodil *Narcissus 'Ferris Wheel'*

**Culture:** Grows best in average, moist, well-drained soils in full sun to part shade. Tolerant of a wide variety of soils with good drainage.

**Bloom:** 'Ferris Wheel' is a large-cupped daffodil with flowers that have greenish-yellow petals encircling a huge, frilled, yellow-orange cup. Blooms mid-spring.

**Height:** 18 – 20 inches

'Ferris Wheel' is a hybrid daffodil variety that it is very easy to grow and is particularly spectacular in groups or mass plantings. Strong stems can stand up to light spring snow and ice. Plant in mid to late October or early November once the soil temperature has cooled to 40°F. Like most daffodils, 'Ferris Wheel' is drought tolerant and avoided by deer.

**Kirkwood location:** Lower garden by the apple tree, and upper garden entrance lawn



### Azalea

#### *Rhododendron 'Homebush'*

**Culture:** Prefers acidic, organically rich, moist, well-drained soil in part shade to shade. Shallow, fibrous root system will benefit from mulch (wood chips, bark, pine needles, shredded leaves) to help retain moisture and stabilize soil temperatures. Hardy to zone 5.

**Bloom:** Flowers are bright pink and held in globular clusters. Peak bloom in May. One of the most eye-catching shrubs in Kirkwood Gardens in spring.

**Height:** 4-6 feet

'Homebush' is compact azalea which distinguishes itself from other varieties with its distinctively rounded pink flower trusses. The Genus name *Rhododendron* comes from the Greek *rhodo* for rose and *dendron* for tree. Very useful in native and woodland gardens or in shrub borders. 'Homebush' stays small enough at maturity to be used as a foundation planting.

**Kirkwood location:** Lower garden on driveway side.



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

# SPRING 2025 PROGRAMS & EVENTS

Programs have limited capacities and advanced registration is required.  
Full details and tickets are available on the Calendar of Events at [nhnature.org](http://nhnature.org).

## APRIL

<p><b>APRIL 2 WEDNESDAY</b> Rain date Wednesday, April 9 7:00 to 8:00 p.m. For ages 8 and up</p>	<p><b>Woodcock Watch – Dance of the Timberdoodle</b> Every spring, the American Woodcock performs a wonderful courtship display over the fields and woodland edges of New Hampshire. They start at dusk with their rasping calls (known as peenting), then head for the skies on whistling wings. Then comes the downward zig-zag aerial flight accompanied by the strangest combination of whistles and chirps – think of someone spinning the dial on an old transistor radio... that's what it sounds like. Join Executive Director Iain MacLeod for an evening of Woodcock watching and learn about this fascinating little bird. Youth must be accompanied by a registered adult. <i>Cost: \$12 members/\$15 nonmembers</i></p>
<p><b>APRIL 3 THURSDAY</b> 10:00-11:30 a.m.</p>	<p><b>Hands-On Learning for Homeschoolers - First Thursday of each month November-April</b> Join us at this monthly series for homeschooled students to learn about the natural world through hands-on activities and investigations. We will wrap up each program with a visit with one of our live animal ambassadors. Advance registration required. Activities take place both indoors and outdoors. Dress to be outdoors with insulated boots, hats, gloves, jackets, and warm layers when appropriate. <i>Cost \$12/member child; \$15/non-member child. An adult must participate with children at no additional cost.</i> Ages 4 to 6 topic: Insect Adventure - Ages 7 to 10 topic: Animals and Their Senses</p>
<p><b>APRIL 9 TUESDAY</b> 5:30 to 7:00 p.m. For adults</p>	<p><b>Science Pub – Studying Whale Migration Along North America's East Coast</b> by Dianna Schulte, Director of Research, Blue Ocean Society for Marine Conservation Join us at Walter's Basin Restaurant in Holderness to gather for a casual evening learning about and discussing science topics over food and drinks. Doors open at 5:30 and the presentation begins at 6:00 p.m. Space is limited and pre-registration is required. Register at: <a href="https://www.squamslandtrust.org/events/">https://www.squamslandtrust.org/events/</a>. <i>Cost: No charge but attendance is limited so pre-registration is required. Order and pay individually for food and drinks.</i> Studying Whale Migration Along North America's East Coast: For centuries—if not millennia—whales have been hunted, yet their migration patterns remained largely a mystery until recent decades. Today, our understanding is being further disrupted by a rapidly changing climate, which alters what we thought we knew about their movements. Despite incredible advances in modern technology, these sentient beings still manage to keep us guessing and protecting whales has become a greater challenge than ever before. Join us to explore a century of whale tracking along North America's east coast and uncover the profound implications of recent environmental changes on their migration patterns.</p>

## MAY

<p><b>MAY 10 SATURDAY</b> 9:30 a.m. to 5:00 p.m. For all ages</p>	<p><b>New Hampshire Day</b> <i>New Hampshire residents may visit the live animal exhibit trail for \$8 admission thanks to our generous sponsor: Dead River Company. Non-New Hampshire residents may purchase regular-priced admission tickets. New Hampshire residents must provide proof of residency upon admission. Enjoy Up Close to Animals presentations at the Amphitheater at 11:00 a.m., 1:00 p.m., and 3:00 p.m. Advanced purchased tickets are required. Your timed entry tickets allow you to check in any time during the one-hour admission window. Register at <a href="http://nhnature.org">nhnature.org</a></i></p>
<p><b>MAY 16 FRIDAY</b> 7:00 to 9:30 a.m. for adults</p>	<p><b>Warbler Walk with Iain MacLeod</b> Mid-May is when a dazzling assortment of brightly-colored warblers arrive in New Hampshire at the end of their annual migrations from the tropics. Join Executive Director Iain MacLeod for a stroll around the Science Center grounds in search of these newly arrived jewels. <i>Cost: \$12 members/\$15 nonmembers</i></p>
<p><b>MAY 30 FRIDAY</b> 10:00 to 11:00 a.m. For teens and adults</p>	<p><b>Kirkwood Gardens Guided Tour</b> Join Lead Horticulturist, Emma Erler, for a guided tour of Kirkwood Gardens. This is your chance to learn about the history of the garden, identify what's in bloom, and ask any gardening questions you might have in this personalized tour. Youth must be accompanied by a registered adult. <i>Cost: \$12 members/\$15 nonmembers</i></p>





# JUNE

<b>JUNE 18 WEDNESDAY</b> 5:00 to 7:30 p.m. For Members Only	<b>Summer Solstice Evening for Members Only</b> Enjoy the Science Center after hours as we kick off our summer season! Skip the crowds and enjoy your favorite exhibits when the trails stay open later exclusively for Science Center members. No reservations are required. Please remember that memberships are not transferrable and a named member must be present to use a membership. If you would like to renew or purchase a membership please visit <a href="http://nhnature.org/membership">nhnature.org/membership</a> . <i>Cost: free for members</i>
<b>JUNE 27 FRIDAY</b> 11:00 to 11:30 a.m. For all ages	<b>StoryWalk™ Kick Off Reception - Curry Place, Holderness Gazebo</b> Stroll along the channel as you read a fun nature inspired story posted one page at a time along the trail. Children can participate in a craft and enjoy a snack connected to the story at the Kick Off Reception. StoryWalk™ surrounds the Holderness Town Gazebo behind the Post Office at Curry Place. Presented in partnership with Holderness Library, Squam Lakes Association, and Holderness Recreation Department. Open daily from June 27-September 1. <i>Sponsored by: Meredith Village Savings Bank</i> <i>Cost: No charge and no reservations required.</i>



## 2025 Lake Cruise Schedules

### Bald Eagle Adventure

3pm-4:30pm. Tuesdays: May 20 - June 10

A naturalist discusses the recovery of Bald Eagles in New Hampshire and the route focuses on viewing the Bald Eagles that nest on Squam Lake.

### Discover Squam Cruise

11am-12:30pm. DAILY: July 1st - October 13th

1pm-2:30pm. DAILY: May 17th – October 13th

3pm – 4:30pm. Tuesday, Wed, Thur. Sat, & Sun: July 1st – August 22nd

3pm -4:30pm. DAILY: August 23rd – October 13th

Enjoy Squam Lake and learn about the natural history, wildlife, culture, and people of the lake.

### Loon Cruise

3pm-4:30pm. Monday & Friday: June 23rd -August 22nd.

See Common Loons as a Loon Preservation Committee biologist discuss loon conservation, biology, and monitoring. The cruise route changes to maximize loon observations.

RATES for Public Cruises (Bald Eagle Adventure, Discover Squam, Loon Cruise)

	MEMBER	NON-MEMBER
ADULT	\$30	\$34
SENIOR	\$28	\$32
CHILD	\$26	\$30



### Church Island Shuttle

9:30am Departure for 10:30 a.m. service

Sundays: June 29th -August 31st

The Science Center provides limited boat transportation to Chocorua “Church” Island for Sunday services during the season. Reservations are required.

Church Island Shuttle Rate: \$17 per person (all ages)

### Squam Lake Charters:

Host your own unique gathering on Squam Lake with a private cruise customized to fit your occasion, or transport wedding guests to Church Island. Our four canopied pontoon boats and experienced tour guides are ready to help with your special outing. Contact Erick Amero at 603-968-7194 x110 or [erick.amero@nhnature.org](mailto:erick.amero@nhnature.org) for reservations. *\$375 per boat/ per hour*

# FROM THE HERON'S NEST



Blue Heron School is enjoying the snow and having a very fun winter. Children are learning about a variety of winter topics with the naturalists. We are studying camouflage, hibernation, animals that stay active in the winter, and tracking. Kindergarten children are continuing their botany lessons with Emma Erler and all of the children are enjoying seasonal activities, holidays, learning about different continents, and having parents come in to expand on cultural lessons. We cooked sushi and drank tea, and soon will begin grinding coffee with a hand crank grinder when we begin our studies on South America. Teachers are busy planning and doing trainings of their own. East room teacher Alexis Plunkett began her Montessori training and will continue work on it during the Summer. Mrs. Ashley's baby boy is due at the end of April and we are so excited for her. We are looking forward to spring when we will plant the seeds for our garden. Mr. Groundhog said 6 more weeks, so we'll enjoy sledding in the meantime.



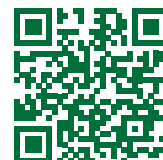
Blue Heron School is a nature-based Montessori school for children ages three to six. For information please visit [nhnature.org/programs](http://nhnature.org/programs) or contact Blue Heron School Co-Directors Jordan Fitzgerald and Jordy Gianforte at 603-968-7036 or [blueheron@nhnature.org](mailto:blueheron@nhnature.org).

## MEMBERSHIP UPDATES

### Membership Brings You Nearer to Nature!

Don't miss out! Renew your membership today to take advantage of special members only events and discounts.

Make memories at the Science Center this year by purchasing a membership to bring your family and friends 'Nearer to Nature' all season long! Your membership allows for free daily admission to the live animal exhibit trail and all hiking trails May 1 through November 1, as well as bonus member benefits at local attractions and 150 ANCA locations throughout the country. You'll also receive discounts for additional trail tickets, events, programs and lake cruises. For a full list of benefits please visit [nhnature.org/membership](http://nhnature.org/membership)



Renew or purchase your membership today!

## 2025 BONUS MEMBER BENEFITS

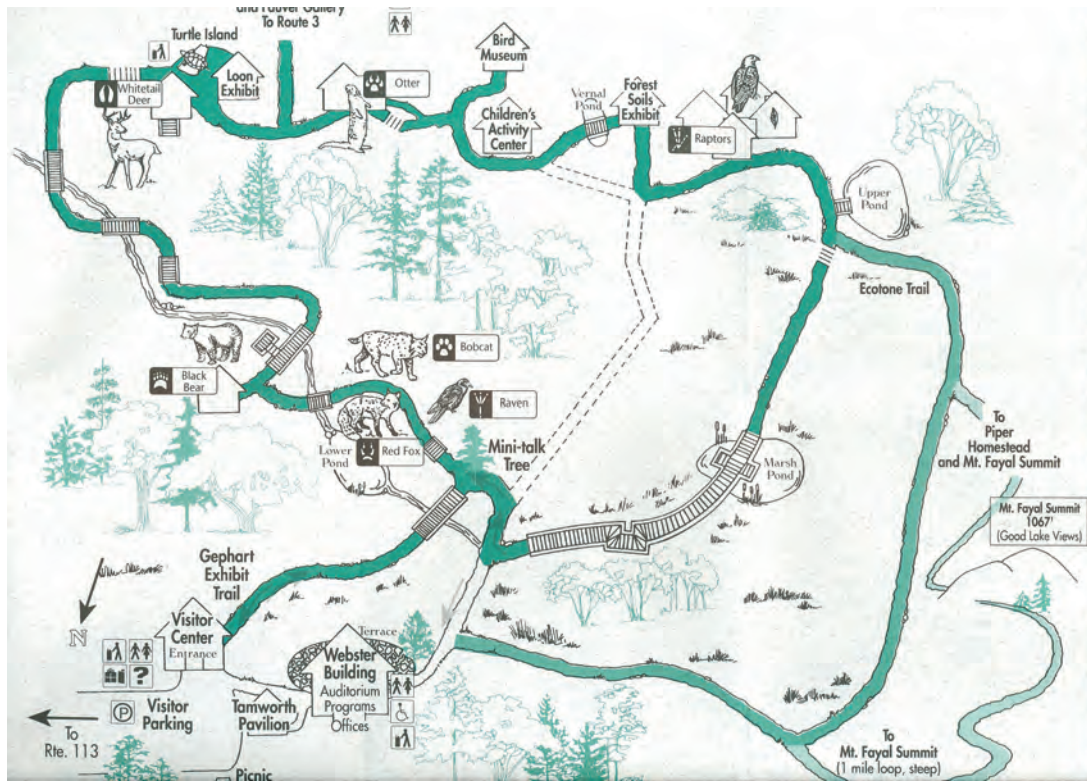
 <b>APRIL</b>	 <b>MAY</b>	 <b>JUNE</b>	 <b>JULY</b>	
 <b>AUGUST</b>	 <b>SEPTEMBER</b>	 <b>OCTOBER</b>	 <b>NOVEMBER</b>	 <b>DECEMBER</b>

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. Check with specific organizations for hours, directions, and information.



As a Science Center member, you receive discounted admission all year at participating ANCA organizations like VINS in Quechee, VT and Seacoast Science Center in Rye, NH.





### Trail Map from 1994

This trail map from 1994 shows a very different view. Note the location of the Visitor (Welcome) Center which was located in the Trailhead building. The current Welcome Center wasn't built and open until 2001.

## KIDS' ACTIVITY

### BIRD NESTING MATERIALS

Spring is the season of renewal. Birds sing to attract a mate and defend the territory around their nest. The nest that a bird makes protects, cushions, insulates, and holds the eggs together during incubation. A fun experiment you can try is to provide nesting materials to see what the birds in your yard might use to construct their nests.

Record the types of materials you put out and observe what the birds in your yard choose. The best time to conduct this experiment is mid-April through May.

#### Materials:

- mesh produce bag, suet cage, or a square of hardware cloth to hold materials
- dead grass, feathers, human or animal hair
- moss
- dried weeds
- twigs
- strips of bark
- roots
- cotton fluff



Yarn, thread, and string are not recommended as the birds may get tangled in them.

Directions: Weave the material through the mesh of your holder. Attach the holder to a shrub, tree branch, or tree trunk where you can easily observe it.



# VOLUNTEER UPDATES

CAROL RAYMOND, VOLUNTEER MANAGER

Science Center staff are very grateful to the incredible volunteer team! Volunteers are a vital part of the Science Center. They not only donate their time and skills but also their enthusiasm and love of the Science Center, having a positive and uplifting impact on the experience of staff and visitors alike. In 2024, 179 regular volunteers and 225 single-project volunteers donated 5,885 hours of service, assisting staff in their work and supporting the Science Center's mission of advancing understanding of ecology by exploring New Hampshire's natural world. This year, many opportunities are available. Those interested in learning more about volunteering may visit the Volunteer Page on our website (<https://nhnature.org/who/volunteer.php>), or contact Volunteer Manager Carol Raymond at [carol.raymond@nhnature.org](mailto:carol.raymond@nhnature.org) or 603-968-7194 x 122. Individuals and groups are welcome!

We are excited to announce a new Volunteer Headquarters! Formerly known as the Tamworth Pavilion, it is located at the top of the path adjacent to the picnic area. Renovations are underway for a new space devoted to volunteer services and training. Volunteers will be notified in the volunteer newsletter *Symbiosis* when the space is open for use. The Volunteer Manager's office will also be located within the space.

## NATURE TOURS WITH IAIN

Check out: [https://nhnature.org/programs/nature\\_tours.php](https://nhnature.org/programs/nature_tours.php) for the upcoming schedule of exciting tours of Scotland and New Mexico led by Executive Director Iain MacLeod.



## TRAIL'S END



I write this brief column today from far away (a UNESCO site in northern Vietnam) and wish you all could see, hear and feel the many wonders of this part of the world. This is my first time in Southeast Asia and I am quite smitten. There is, of course, much US history in this area - the bulk of which centers on the war in Vietnam (we managed to visit the "Hanoi Hilton" which was devastating....). But one thing

I have noticed is that there does not seem to be much focus on protecting endangered species or on animal welfare in general. In truth, I am not sure we have seen more than a couple of pet dogs anywhere. Now, this may reflect my own blind spots - or more likely a stronger focus on economic welfare than animals in general and/or endangered species. I suspect that counting

and caring for exotic species is far, far down the list - which is just one more reason for our own nation to do what it can both locally and internationally to care for and honor our fellow creatures. We did learn of an important effort to preserve forest elephants, and of efforts to save a group of monkeys considered endangered, but not much more than that. In any event, I so look forward to returning to New Hampshire, enriched by travels to far places and a renewed sense of gratitude for our precious Science Center and its efforts to educate and protect our complex environment.



*Trail's End* is written by Sarah Brown, Chair of Squam Lakes Natural Science Center's Board of Trustees. You may contact her at [sarahbrown1948@gmail.com](mailto:sarahbrown1948@gmail.com).



## THE VIRGINIA OPOSSUM *continued from page 1*

While some of us may be disgusted by what they eat, opossums know being resourceful and opportunistic is how to survive. Opossums are omnivores, but more importantly,

o p p o r t u n i s t i c omnivores, meaning they eat anything and are not finicky when choosing habitat. Their diet includes insects, carrion, fruits and vegetables, small mammals, reptiles, amphibians, crustaceans, pet food,

bird seed, and garbage. While we do not want any wild animal eating garbage or pet food, the Virginia opossum has a crucial role to play as nature's clean-up crew. Keep trash and pet food locked up tight so opossums can focus on the things we do not want too much of around: insects, small rodents, and carrion.



Virginia Opossum

Although opossums live a shockingly short time in the wild, up to two years, they make up for a short life span with a high fecundity rate: they are capable of having up to 20 babies per litter (an average of 8-9), 1-3 times per year. They have a gestation period of only two weeks, so the babies are honeybee-sized and underdeveloped when born, needing to crawl into the mother's pouch to continue growing. They will stay in the pouch for around 2 months, receiving a constant flow of milk until they are fully developed. Unfortunately, female opossums can support only up to 13 babies with her teats, but that is enough to repopulate the amount lost to old age, car strikes, and predation.

With many habitat options, a varied diet, a biological response to repel predators, and high reproductive capabilities, the Virginia opossum allows us a small sigh of relief in a world full of problems we need to address. The next time you see a Virginia opossum waddling around your backyard at night, I hope you see it with new eyes: you are witnessing a living fossil, one that has survived and adapted through millions of years.

## QUIZ

1. What is the Virginia opossum's scientific name?

- A. *Trichosurus virginiana*
- B. *Pseudocheirus virginiana*
- C. *Didelphis virginiana*
- D. *Procyon virginiana*

2. How long is a Virginia opossum's gestation period?

- A. 2 months
- B. 1 month
- C. 1 week
- D. 2 weeks

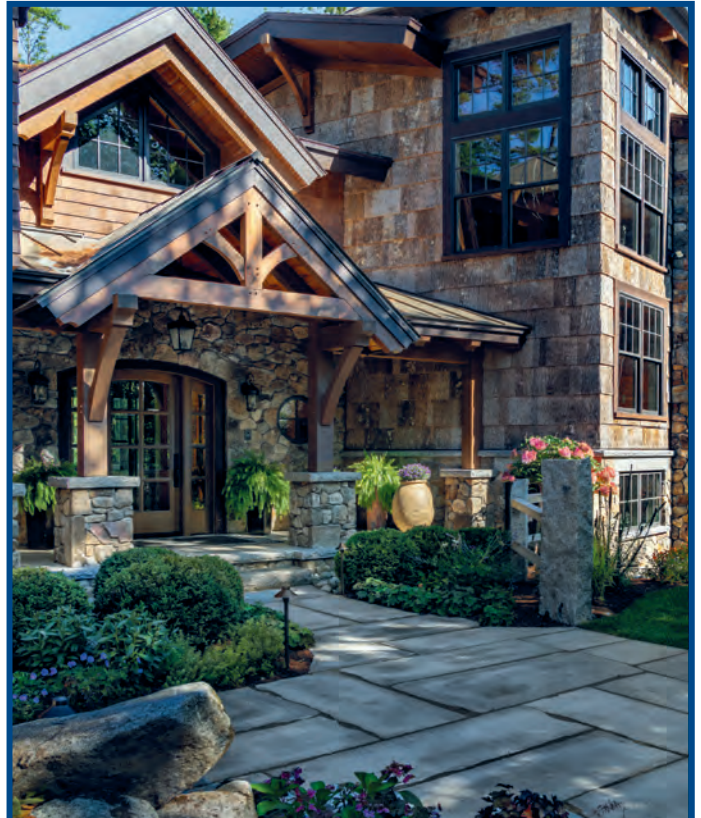
3. When was the Virginia opossum first spotted in New England?

- A. Early 1700s
- B. Early 1800s
- C. Early 1900s
- D. Early 2000s

4. How can we help the Virginia opossum?

- A. Lock up our trash
- B. Put away our pet food
- C. Be mindful on the road
- D. All of the above

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Answers:

- 1. C. *Didelphis virginiana*
- 2. D. 2 weeks
- 3. C. Early 1900s
- 4. D. All of the above



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