

SQUAM LAKES NATURAL SCIENCE CENTER

Summer 2013

P.O. Box 173, Holderness, NH 03245

Vol. 42, No. 2

NATURAL FRAGRANCE

By Margaret Gillespie, Illustration by Cheryl Johnson

Early this morning, I was awakened by my dog, Mica, barking and scratching frantically at one of the sliding glass doors. The previous evening, I had marveled at photos of some friends' trip to Tanzania, Africa. I still had zebras and giraffes walking through my mind as I got up quickly, rushed over and looked out over the dark landscape, somewhat brightened by patches of snow. A black bear, at least? I could

see no creatures. As I slipped back into bed, a pungent odor seeped around the door frames and into the room.

Recently I had been told that one could learn to appreciate the "spicy fragrance" of skunk spray and I worked on keeping an open mind. I should not have been surprised that the visitor was a skunk. The farm where I live seems like

a "skunk playground."

In February, I discovered
where they had been hiding,
dormant for about two months in the cold of
December and January. February is like an extended
Valentine's Day as skunks seek mates, leaving tracks

in the snow leading to and from their burrows. Here at the farm, that means lots of track activity around old groundhog burrows that the skunks adopted. They prefer dens bordering the field and under the garden shed. After a gestation period of a little over 60 days, about six to eight kits are born in late April and early May. By the time their eyes open three weeks later, young skunks can aim and spray tiny

amounts of scent. Soon they will be following their

mother, learning about catching insects and small mammals as well as finding fruits, turtle eggs, and carrion. The family tends to stay together through the summer.

Striped skunks (Mephitis mephitis) are in the skunk family, Mephitidae. Mephitis means "bad odor" in Latin so their name seems to be as strong as their reputation! The spray comes from two glands

located under the tail on either side of the anus. Each gland holds approximately one tablespoon of smelly fluid. Even

with this small quantity, skunks have the capacity to spray six times or more. When the skunk contracts muscles around the glands, spray is emitted, usually toward the face of the intruder. Spray travels close to 15 feet and further if carried by

wind. This tenacious liquid is oily, burning and temporarily blinding if sprayed into the eyes. The Great Horned Owl, flying in from above and lacking a good sense of smell, is the most effective predator of skunks.

Skunk spray defies most efforts at removing it completely from fur and clothing. The old remedy of tomato juice is really an illusion. Our noses become so overwhelmed by skunk spray—called olfactory fatigue—that we no longer process the odor. The new scent of tomato juice comes as a relief to us, but not to others coming in with fresh noses! There are commercial remedies for skunk scent as well as a homemade brew made from hydrogen peroxide,

Continued on page 10

FORGING TRAILS

TRYING NEW THINGS

At our annual staff retreat last December I asked the staff to brainstorm about new marketing ideas, new program themes, and just some new ways to think about and promote things we already do. It's important to keep things fresh. I always encourage our staff to try new things. Nothing ventured, nothing gained. Perhaps it's just using a different word – "training" or "feeding" instead of "enrichment." We in the captive animal care world know what enrichment means, but does the general public? We of course have to strike a balance between maintaining our scientific and professional integrity and dumbing the message down. I don't think we want to go as far as the cable networks where everything is "danger this" and "savage that" and "untamed whatever." How many shark attacks can you really watch? Do animals always have to "go bad" in order to be interesting?

So perhaps you'll notice a few new programs or a fresh twist on a program we already do. One completely new program is Dreamnight. It's an international program where zoos across the globe open their doors to offer free admission to chronically ill and disabled children and their families in early June. Lincoln

FORGING TRAILS continued from page 1

Financial Group and Bank of New Hampsire are sponsors of the evening. By pure coincidence our fellow newbie Dreamnight is the Highland Wildlife Park in Scotland — a place where I used to work, which I always include in my Scotland field trips.

We'll be doing more Loon Cruises this summer in partnership with Loon Preservation Committee staff (two per week instead of one), trying some family-oriented Squam Lake Cruises, and offering docent-led trail tours.

Look for new presentations about Project OspreyTrack (everyone wants to know about Art) and visit with our live program Osprey. Programs, Up Close to Animals, and docent trail presentations will include our lovely new Eastern Screech-owl. An immature Bald Eagle was recently added to the Raptor Exhibit.

So...there are lots of new things to do and see at the Science Center this season. I look forward to sharing them with you.

Forging Trails is written by Executive Director Iain MacLeod.

You may contact Iain at 603-968-7194 x 23 or iain.macleod@nhnature.org.

NEWSBRIEFS

- With sorrow, we note the passing of honorary trustee Barbara T. Ridgley on April 28, 2013. Barbara served on the Board of Trustees from 1985 until 1994 when she became an honorary trustee. Former Executive Director Will Abbott commented, "Barb was a wonderful woman and a model trustee... The Science Center would not be the place it is today had she not been engaged." She was an accomplished chef and photographer who loved to travel and frequently gave talks at the Science Center about her trips. She is remembered with appreciation and affection.
- We welcome our 2013 interns—three will be learning about our education programs and one about marketing. A junior at Husson University in Bangor, Maine, James Seager is studying Secondary Education (Life Sciences) with a double minor in biology and natural science. James grew up in Gilford and recalls visiting the Science Center with his family and school. Growing up in New Hampshire fostered his love of the outdoors and interest in the wildlife he saw in his own backyard. Rachael Sitzer hails from Rockaway, New Jersey. She attends Delaware Valley College in Doylestown, Pennsylvania where she is a senior majoring in Zoo Science with minors in biology and psychology. Her interest in wildlife was nurtured by travel to national parks and wildlife preserves. Rachael also interned at the Turtle Back
- Zoo in West Orange, New Jersey and has been a summer camp counselor for preschoolers. Aubrey Voelker is a junior at the University of Wisconsin majoring in Zoology. She is interested in animal behavior. She has previous experience working at a veterinary teaching hospital and a vet clinic. She also volunteers at the Henry Vilas Zoo in Madison, Wisconsin. Marketing Intern Tom Howe is a second year student at Hampshire College concentrating in contemporary graphic design. Tom grew up in Anchorage, Alaska but moved to Goshen, New Hampshire several years ago.
- Science Center members may visit The Fells Historic Estate and Gardens in Newbury, New Hampshire once in July at no charge while Fells members may enjoy a free visit here. Don't forget to take your membership card with you. See The Fells website (www.thefells. org) for hours and directions.
- Members may also enjoy a 10% discount on lunch or dinner at Walter's Basin Restaurant in Holderness on Tuesdays from May 1 through November 1.
- Clean Up Day on Saturday, April 20
 prepared trails and exhibits for the new
 season. Stonyfield Yogurt employees
 spent a day raking exhibits and
 Holderness School students worked
 with Belknap Landscape Company
 employees at Kirkwood Gardens
 during the week beforehand. Over 100
 volunteers and staff members painted,

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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. Our 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 all members. Comments are welcomed by newsletter editor Janet Robertson at 603-968-7194 x 12 or janet.robertson@nhature.org.

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TRUSTEE PROFILE

MARK GOLDSTONE



My wife Chris and I live in Newton, Massachusetts. I have worked for thirty-five years in real estate management as a senior executive for a property management company in Boston. My wife is a registered nurse.

We came to Squam quite by accident in March of 1986. We bought a house from a two-line ad that said

ski chalet "On Golden Pond." When we first came to see the house, there was a six-foot snow bank blocking the view of Little Squam. Little did we know just how beautiful Squam was.

The area became our year-round refuge from the city as we brought friends and family to enjoy the lake and experience the region.

As our family grew, we moved from our little chalet to a camp on Little Squam. During those years we made frequent visits to the Science Center, always enjoying the trails and exhibits. My youngest son Derek attended the weekly camps, and we still have a bird feeder he made. My daughter and son became camp counselors at Junior Squam Lakes Association, taking many children through the trails of the Science Center. Both enjoyed helping children to understand the connection of animals to their habitat.

Our family's love for the lake and all it affords continues with our three-year-old granddaughter (see photo) as she visits the Science Center with our children. Our favorite exhibit is the river otter where she can watch them above the water and then take the slide to see the otters swim below. This summer our son will work at Rockywold-Deephaven Camps, and our daughter will be married there over Labor Day weekend.

The Science Center has always been a part of our days at Squam so when I was asked to join a committee, and eventually became a board member, it seemed to be the natural thing to do. To me, the Science Center affords children the opportunity to be immersed in nature and have fun. By learning to understand it, they will help to preserve our environment.

Mark was elected to the Board of Trustees in 2009 and currently chairs the Buildings and Grounds Committee. Mark graduated from Boston University's School of Management and is the Senior Vice President of the D.L. Saunders Real Estate Corporation in Boston.

NEWSBRIEFS continued from page 2

washed windows, scrubbed, vacuumed, cleared debris, moved picnic tables, pruned branches, supplied baked goods, and more. Several groups turned out to help, including: The Friends, Plymouth State University Tau Omega Sorority, Plymouth State University Volunteer Club, and Plymouth Regional High School National Honor Society. Thank you also to area businesses for their in-kind donations for lunch for the workers: Bob's Shurfine Market, Ashland; Golden Pond Country Store, Holderness; Hannaford Supermarkets, Plymouth; E.M. Heath Supermarket, Center Harbor; Lakes Region Coca-Cola Bottling Company; Shaw's Supermarket, Gilford; and Stonyfield Yogurt. Thank you everyone!

- Dead River Company generously sponsored New Hampshire Day on May 4, with additional support from the New Hampshire Electric Co-op Foundation. Representatives from Dead River Company greeted guests and displayed an energy-efficient ductless air conditioning unit. More than 1,200 people turned out on a lovely day.
- Naturalist Jeremy Phillips attended the 2013 New Hampshire Water and

Watershed Conference at Plymouth State University in March. It kicked off with a speech from Governor Maggie Hassan highlighting the importance of water in our state. Breakout groups covered diverse topics ranging from watershed protection, volunteer invasive species removal, and why people buy fishing licenses.

- Dave Erler, Margaret Gillespie, Jordan McDaniel, Carol Raymond, and Amy Yeakel attended the New Hampshire Environmental Educators annual conference in April at the Margret and HA Rey Center in Waterville Valley. Amy, Carol, and Dave all presented workshops.
- Senior Naturalist Dave Erler and Education Program Director Amy Yeakel reviewed content for a new children's book called Ferdinand the Fox by Mary Holland, published by Sylvan Dell. You can find it for sale in the Howling Coyote Gift Shop.
- A meeting called the Squam Summit took place at the Science Center on April 18. Representatives from the Squam Lakes Association, Loon Preservation Committee, Plymouth State University, Squam Lakes Conservation Society, Lakes Region Conservation

Trust, Rockywold-Deephaven Camps, National Register of Historic Places and the Science Center gathered to network and discuss programs, upcoming initiatives, and challenges. It was agreed to make it an annual event.



Pictured: (1 to r) Tim Vaill (SLCS), Harry Vogel (LPC), Don Berry (LRCT), Roger Larochelle (SLCS), Tiffany Grade (LPC), Laurie Beeson (SLNSC), John Jurczynski (RDC), Betsy Whitmore (NRHP), Tony Halsey (LPC), E.B. James (SLA), Iain MacLeod (SLNSC), Joe Boyer (PSU), Peter Webster (SLA).

 NOTE: There was an error in the spring Tracks & Trails. The correct number in the following sentence about 2012 attendance should have been 8,600: "Educators taught an additional 86,000 people across the state in non-school outreach programs."



NATURALIST'S CORNER

EARLY MORNING RISER

By Eric D'Aleo

One thing about summer is that I have difficulty deciding whether to sleep in on a day off. Normally, I get up by seven o'clock; but if I'm trying to do any wildlife photography then I'm up before the sun rises. Like fishermen and hunters, I have favorite places I visit again and again. One of them is a mountain river that has a small dam. The area upstream is wide and shallow with a number of sandbars surrounded by shrubs and trees. Here I've seen bald eagles, kingfishers, herons, ducks, various songbirds, and beavers. I find myself returning here not so much for the birds, but for the beaver.

It started when I stumbled upon the spot where a beaver was feeding. I noticed its movement as I walked out on the sandbar 100 feet from where it was feeding in the water. I stopped, watched, and listened, afraid that any motion would startle it. I could hear the beaver chewing on the leaves of a branch it held in its front paws as it sat in the shallows. It became aware of my presence and started to swim away. Then suddenly it dove with a splash from its flat tail. I assumed it had gone. I moved along the sandbar to find a spot to set up my camera. I saw the beaver surface further away and took several shots with the camera, but it was too far away to capture a good image. Nearby a song sparrow began to sing, so I turned my camera and attention in its direction. I continued to focus on the bird until a movement out of the corner of my eye brought my attention back to the water. The beaver had returned and was swimming toward some low shrubs. I slowly turned in its direction and began to take pictures. As the beaver became accustomed to my presence, it began to forage for food. At one point it stood on its hind legs in the water and reached for a shrub with its paws. It placed its mouth on the branch and then in one quick snip, the branch fell into the water and the beaver began to feed. I could hear it chewing while I took more pictures. Although beavers will feed on woody vegetation during the summer, they mainly eat aquatic plants such as sedges, rushes, arrowheads, pond lilies, and various roots at this time of year.

As the time passed, the beaver swam repeatedly past the sandbar, seemingly curious about me kneeling in the sand but apparently more interested in feeding. About 20 minutes later the beaver seemed to determine that it was getting late. It dove underwater and swam to an overhanging bank as I watched the ripples on the water's surface betray its movements. Then it was gone. I waited and scanned the water; but as the sky became brighter, I realized that the beaver had slipped away to its bank lodge to spend the day resting inside. I looked down at my watch—seven-thirty. The beaver's day was over and so was my time to photograph. I packed up my camera and walked back the way I had come, glad I had chosen to wake up early.

Renew your membership online at www.nhnature.org

FROM THE HERON'S NEST

By Laura Mammarelli



In April, Blue Heron School students explored seasonal changes in land, water and air with Senior Naturalist Dave Erler. Children scooped water from the brook to 'paint' the boulders at the New Hampshire Geology Exhibit. The rocks were still cold enough for the water to form a frozen layer, which was interesting to see. The children also lifted feathers for the breeze to carry away and chased them to their landing places.

New! Full Day Program Starting in September 2013

We are happy to announce that Blue Heron School at Squam Lakes Natural Science Center is offering a full day program for the 2013-2014 school year and is currently accepting new registrations. Families can choose from 8:30 a.m. to 1:00 p.m. or 8:30 a.m. to 3:30 p.m. sessions. Extending our schedule until 3:30 p.m. will make it possible for children to spend more time outdoors and for other activities.

Blue Heron School, a nature-based Montessori school for children ages three to six, operates from Monday through Friday, 8:30 a.m. to 1:00 p.m. or 8:30 a.m. to 3:30 p.m., September to June. Interested parents may contact Laura Mammarelli at 603-968-7194 x 40 or blueheron@nhature.org.



- Flat screen computer monitors
- iPad or similar tablet computer
- · Laminating machine

- Umbrellas for admissions
- Clean pine needles for raptor enclosures
- Minivan in good condition
- Milk crates
- · Rocking chair
- Cloth napkins for Blue Heron School

GARDENER'S NOTEBOOK



WHERE HAVE ALL THE MONARCHS GONE?

By Volunteer Carol Stewart

...monarch butterflies that is. But before we get to that question, a review of some well-known and not so well-known facts about this beautiful orange and black insect might be in order.

Most people are familiar with the four stages of the monarch's life cycle: egg, larvae (caterpillar), pupa (chrysalis or cocoon), and adult butterfly (*Danaus plexippus*). But did you know that they go through four generations in one year?

In February and March, the fourth and final generation of the previous year comes out of hibernation, mates, and then migrates north and east to find a place to lay eggs. These must be laid on milkweed, such as the common milkweed, Asclepias syriaca. Milkweeds are the only plants the larvae can eat and live on. Once hatched, the yellow, white, and black-banded caterpillar (strikingly beautiful on its own) spends about two weeks eating the milkweed as it grows. Next, it attaches to a leaf, spins a cocoon, and undergoes metamorphosis in about 10 days, emerging as an adult butterfly. The butterflies consume nothing but liquids—nectar from flowers, drinking water from shallow ponds, even droplets of dew on plants—for two to six weeks. Then they die after laying eggs for generation number two.

The second generation is hatched in May and June; the third in July and August. These are the monarchs you generally see flitting around in the summer. They have the same short life span as generation one.

The fourth generation hatches in September and October. But instead of living only two to six weeks, this group migrates south to a warmer climate like Mexico because they cannot tolerate colder temperatures. Once there, they use the very same trees each and every year, even though they are not the same butterflies that were there last year. This is a new fourth generation. How do they know which trees are the right ones to hibernate in? This generation will live six to eight months until it is time to start the process all over again, migrating the 2,500 miles northward.

Back to our original question. The number of monarch butterflies has been decreasing steadily and at a rate that is causing concern. One of the principal reasons appears to be a significant decline in milkweed plants and overwintering sites. Remember, monarch caterpillars feed exclusively on milkweeds and need them to live. Milkweeds, nectar sources, and trees used in overwintering sites are being lost because of development such as subdivisions, factories, shopping centers, and so on (as much as 2.2 million acres each year). Genetically modified crops allow farmers to spray fields rather than use tilling to control weeds. Milkweeds survive tilling, but not repeated use of herbicides. Frequent mowing and use of herbicides along roadsides further diminishes availability of milkweed habitats.

One thing you can do to stem the tide is to plant

milkweeds (and nectar sources) in unused plots of land – even a small space in your yard. As a bonus, the flowers are sweetly scented and children love to play with the pods and silk in the autumn. At the Science Center, milkweed grows abundantly in meadow areas, and there is a small planting of them in Kirkwood Gardens, where butterflyweed (Asclepias tuberosa) and other plants also provide a liquid diet for these lovely insects. You can also look for foods labeled "non-modified GMO food;" some even have a monarch butterfly on the label.

See www.Monarch-Butterfly.com and www.worldwildlife. ocr/Monarch for photos and articles. Monarch Watch's website, www.Monarchwatch.org, has information on creating, conserving, and protecting monarch habitats. Let's not lose these beautiful butterflies.

Gardener's Notebook and Kirkwood Gardens are sponsored by the Belknap Landscape Company, Inc. www.belknaplandscape.com

NATURE TOURS

Shetland and Orkney Islands SCOTLAND

June 13-26, 2014







Join Iain MacLeod for a trip to Scotland's most northerly islands. We'll fly to Aberdeen and then take an overnight ferry to Shetland. We are so far north, that this is truly the land of the midnight sun, known locally as the "simmer dim." Some of the most spectacular seabird colonies in the world can be found on these islands, whose rugged moors and seacoast has an Arctic tundra feel to it. Otters, seals, puffins and ancient Viking settlements will be highlights. A nighttime visit to the Island of Mousa and its ancient "broch" (built 100 BC) is an experience you'll never forget. We'll travel by ferry from Lerwick to Kirkwall in Orkney for four more days of island exploration. We'll visit the village of Skara Brae, Europe's best-preserved Neolithic settlement — believed to have been inhabited from around 3100 BC, and our hotel is next to the Standing Stones of Stenness. Orkney is more wooded and more pastoral and provides an interesting natural and cultural contrast to Shetland.

Cost: \$5,500* per person.

All-inclusive cost includes hotel accommodations and all meals, roundtrip airfare from Boston to Aberdeen, van transportation in Scotland, ferry and boat trips and admission fees to nature reserves and other destinations listed on the itinerary.

*Assumes double or twin occupancy room.

There is an additional \$300 single room supplement.

For more details or to book a space, call Iain at 603-968-7194



> NATURAL ADVENTURES



SPRING BIRDING

Fridays • June 7, 14, 21, 28 7:00 to 10:00 a.m.

Adults and children ages 14+

In partnership with the Squam Lakes Conservation Society, the Science Center is offering weekly beginning birding ID programs. Learn to identify the huge variety of birds that fill our woods, meadows, and wetlands each spring. Explore a variety of habitats in the Lakes Region. Learn identification by sight and sound and build upon your bird ID skills each week. Iain MacLeod will lead the trip on June 7; Rick Van de Poll on June 14; Bob Ridgely on June 21; and Tony Vazzano on June 28.

Cost per program: \$12/SLNSC or SLCS member: \$15/non-member.

GROWING GREAT FLOWERS FOR NEW HAMPSHIRE

Including Old Favorites and Lesser Known Beauties

Monday • June 17 • 6:30 p.m. Adults

Garden writer Henry Homeyer will share tips and suggestions for growing a wide range of flowers in New Hampshire. He will share a slide show of his gardens and answer your questions. Henry is a lifelong organic gardener, a UNH Master Gardener, and a gardening columnist for 12 New England newspapers. A regular commentator on Vermont Public Radio, he has also taught sustainable gardening at the college level. He has written four books; some will be for sale after his presentation. This program is in the Red Barn adjacent to Kirkwood Gardens. Come early to stroll in the gardens beforehand.

No charge, but reservations are required. Donations are welcome.

BIRDS ON SQUAM

Tuesday • July 2 • 8:00 to 10:30 a.m. Adults and children ages 10+

Enjoy a morning cruise on Squam Lake and learn about the birds that live on or near the shores of this spectacular wildlife haven.

Cost: \$18/member; \$22/non-member



Limited space available; reservations and advance payment required unless otherwise noted. Programs are subject to cancellation if minimum enrollment is not met.

TREMENDOUS TREES

Wednesday • July 24 • 1:00 to 2:30 p.m. Ages 6 to 9

Learn about the amazing trees around us—how they work and who needs 'em! We'll spend most of our time in the woods and also meet a creature dependent on forests for survival.

Cost: \$7/member; \$9/non-member

INCREDIBLE INSECTS

Fridays • July 26 and August 16 10:00 to 11:30 a.m.

Adults and children ages 4+

With over a million kinds of insects in the world, there are bound to be some exciting ones right under our noses. Let's search for insects in some strange spots and discover the wild lives they lead.

Cost: \$7/member; \$9/non-member

MOUNT WASHINGTON **OBSERVATORY**

Home of the World's Worst Weather

Thursday • August 1 • 10:00 to 11:30 a.m.

Adults and children ages 8+

Why, for a mountain its size, does Mount Washington see the "World's Worst Weather?" Mount Washington is New England's highest peak and home to some of the most unpredictable and dangerous weather in the United States. Join Outreach Educator Will Broussard for a hands-on session that explores the life and work of the observers manning the Mount Washington Observatory.

Cost: \$7/member; \$9/non-member

MEDICINAL PLANTS WALK

Wednesday • August 7 10:00 a.m. to 12:00 p.m.

Adults and children ages 10+ Native and introduced plants have long been used for medicinal purposes. Take part in an easy hike around the Science Center grounds to learn more about the traditional and folk uses of some common plants found in fields and woods.

Cost: \$7/member; \$9/non-member

FORESTS, FUNGI, AND FLYING SQUIRRELS

Thursday • August 15 10:00 a.m. to 12:00 p.m.

Adults and children ages 8+

Join naturalist and forest ecologist Erik Hobbie for a walk through the woods looking for mushrooms and the animals that eat them. Learn how animals find mushrooms, what's special about a truffle, and how many trees and mushrooms help each other to thrive.

Cost: \$7/member; \$9/non-member

PRESCHOOL NATURAL **ADVENTURE SERIES**

MINDS IN **MOTION**

June 12 • July 10 • August 14 • September 11 9:30 to 10:30 a.m.

Adults and children ages 3 and under

The mind and body of a young child are constantly on the move. Foster your child's "natural curiosity" and explore motion from an animal's perspective jump like a frog, swim like a fish, crawl like a caterpillar, and fly like a bird. These adventures will build a foundation for a lifetime of enjoyment and appreciation of the natural world. Adult must accompany children at no additional cost.

Cost: \$5/member child per session; \$7/non-member child per session

The Story of **Art the Osprey**

Saturdays • June 8 and June 29 1:00 to 2:00 p.m.



Join Iain MacLeod to learn about Project OspreyTrack. Tracking Ospreys from New England to South America using GPS devices is revealing amazing new information about their survival, migration strategies, and the hazards they face along the way. Hear the whole story of Art, a male Osprey that nests in Bridgewater, New Hampshire and winters 5,000 miles away in Brazil. Learn about birds tagged this year and how you can follow along from your computer. Iain will introduce you to a live Osprey too.

This program is free as part of your trail admission fee.



NATURAL ADVENTURES 3



KIRKWOOD GARDEN SERIES

with Julia Steed Mawson

Programs are from 10:30 a.m. to 12:00 p.m. in the Red Barn by Kirkwood Gardens. Cost per program: \$7/member; \$9/non-member

For the Love of Compost

June 20 • Adults

Join us for a hands-on compost safari as we explore the many ways of making compost, investigating the wonders of its biology and talking about how to troubleshoot problems.

Exploring Gardening with Your Child

July 11 • Adults

Whether you are a parent, grandparent, educator, or childcare provider, more than a seed is planted when you work with youth in a garden. Explore tips and tricks for planning, planting, and tending a garden with children in mind. Try fun activities and games that keep children engaged in the garden all year round.

Garden Safari for Children and their Families

July 25 • Adults and children ages 3+

A garden is a wonderful place for kids as well as adults. We'll share songs, hands-on, minds-on games, and exploration activities to learn about and love gardening. Gardening is a great way to get exercise and wake up to wanting to eat more fruits and veggies!

I said, "Sheet Mulching," not "Sheep Mulching" August 8 • Adults

Together we'll talk about getting the garden ready for winter while exploring some basic ideas about permaculture. Learn how to try your hand at low maintenance gardening year round using sheet mulching.

Julia Steed Mawson is a University of New Hampshire Cooperative Extension Educator Emeritus and former coordinator of the New Hampshire Common Ground Garden Project and its 4-H Children's Teaching Garden. Julia continues her work as an Education Program Consultant and serves to provide training and educational programming in gardening and science education.

SKUNK QUIZ



- 1. True or False? The most effective remedy for skunk spray on pets is tomato juice.
- 2. Skunks are...
 - A. insectivores B. carnivores C. omnivores
- 3. What is the major avian predator of skunks?
- 4. Why would you expect to see skunk tracks in the snow in February?
- 5. Which is a skunk warning sign? A. stamping front feet B. raising tail C. black and white coloration D. All of the above

ANSWERS:

4. It is their mating season.

3. Great Horned Owl J. False

OUR DYNAMIC EARTH

BIRD'S EYE VIEW

— ADULT LECTURE SERIES —

No charge to attend, but reservations are required.

The world around us is constantly changing. This adult lecture series will explore research about birds that is helping us to understand Our Dynamic Earth.

Satellite Tracking of Ospreys

Monday • July 8 • 7:00 p.m.

Join Iain MacLeod to learn about Project OspreyTrack. Tracking Ospreys from New England to South America using GPS devices is revealing amazing new information about their survival, migration strategies, and the hazards they face along the way. Hear the whole story of Art, a male Osprey that nests in Bridgewater, New Hampshire, and winters 5,000 miles away in Brazil. Learn about birds tagged this year and how you can follow along from your computer. Iain will introduce you to a live Osprey too.

Bicknell's Thrush: Conserving a Bird of Two Worlds

Monday • July 15 at 7:00 p.m.

The Bicknell's Thrush is one of North America's most rare and vulnerable songbirds, which nests only in mountaintop forests of Vermont and other northeastern states. It winters primarily in the Dominican Republic and Haiti. Bicknell's Thrush faces numerous threats to its breeding grounds, including acid rain, ski area development, communications and wind power towers, mercury contamination, and climate change. Their limited winter habitats are under siege from deforestation caused by human population pressures. Chris Rimmer, Executive Director of the Vermont Center for Ecostudies will discuss the efforts he has led since 1992 to conserve the species and its habitats.

Peregrine Falcon Recovery in the Granite State

Monday • July 22 • 7:00 p.m.

Chris Martin has worked as a raptor biologist for New Hampshire Audubon for more than 23 years, focusing on monitoring and management of the state's endangered and threatened birds of prey in collaboration with New Hampshire Fish and Game. He trains and supervises a corps of volunteer observers who assist with fieldwork. Martin will discuss three decades of Peregrine Falcon recovery in New Hampshire and New England. He'll describe successes and failures, review management partnerships, and share what has been learned through banding Peregrine chicks.

Common Loons: New Research and Conservation Updates

Monday • July 29 • 7:00 p.m.

The Biodiversity Research Institute has studied Common Loons for 25 years. During that time nearly 5,000 individuals have been banded and uniquely color-marked. Science Director Jim Paruk will share some insights learned about Loons from those banded wintering in the Gulf of Mexico. He will give an update about key loon conservation issues, such as lead poisoning and mercury contamination.



Kirkwood Gardens Day

Saturday • June 8 • 9:00 a.m. to 1:00 p.m.

- Fine perennials from a prestigious New England nursery
- Silent Auction of desirable plants and garden items
- Plants from knowledgeable local gardeners
- Creative planters and handmade items
- Expert opinions and advice
- Coffee, cocoa, tea, cold drinks, and baked goods for sale

Generously sponsored by



Belknap Landscape Company

5 Country Club Rd., Unit 302 Gilford, NH • 603-528-2798 www.belknaplandscape.com

Story Walk TM

Sponsored by Meredith Village Savings Bank

June 27–July 31 • Daily 9:30 a.m. to 4:30 p.m.

This year's featured book: *The Witches* by local author Andy Opel.

Opens with family activities and refreshments on June 27 from 10:00-11:30 a.m. Andy Opel will sign your book; a limited supply will be available for purchase. StoryWalkTM is located in the field behind the NH Fish and Game parking lot (park in town or at the Science Center, not in the lot reserved for boat trailers).

No charge and no reservations are required.

Come Play the WILD Animal Way!

Tuesday, July 16 • Trails open at 9:30 a.m.

Ever get bored? Come to the Science Center and see how we keep our animals active and excited with enrichment. Enrichment means providing stimulating and challenging environments, objects, and activities. Whether it is scents, leaves, fish, or logs, the animals will have fun. You can take part by participating in crafts, demonstrations, and animal presentations.

Bring a new, unused toy or package of treats for our furry and feathered friends and receive a \$5 discount on trail admission per person per item.

Cost: \$15/adults, \$12/seniors, \$10/youth

No charge for Science Center members and children 2 and under

o charge for Science Center members and children 2 and under

Wiggle, HOP, Jul...
Smell, Taste, Touch...

17 Week-Long Adventures in Learning
June 24-August 16

Call 603-968-7194 for reservations.



Annual Meeting for Members

Saturday • August 10

PANCAKE BREAKFAST FOR MEMBERS • 8:00-9:00 a.m. BUSINESS MEETING • 9:00-10:00 a.m.

- · Elect Officers and Trustees
- Honor retiring board members
- Recognize employee service
- Present Horizon Award

For the Officer and Trustee election slate and biographies of nominees for election to the Board of Trustees visit

www.nhnature.org/programs/annual meeting.php

All members are welcome and encouraged to attend.
Please call 603-968-7194 to reserve your seat or
if you would like to receive paper copies of the agenda,
new trustee bios, and other meeting materials.



- Activities throughout the day at this enjoyable, family festival.
- Volunteer docents will be on hand with live animals and demonstrations.
- Learn about the wonders of flight and migration.

\$15/adults, \$12/seniors, \$10/youth.

No charge for SLNSC members and children 2 and under.

Sponsored by



Community Guaranty Savings Bank



How to Create Stories That Make a Difference

September 20 and 21 • 9:00 a.m. to 5:00 p.m. Adults

Judy Fort Brenneman, CIT, owner of Greenfire Creative, LLC and author of *The Art and Craft of Interpretive Writing* (forthcoming), is an award-winning writer and playwright, writing coach, and speaker. She will help you tell your stories as you learn the art and craft of interpretive writing through facilitated discussion, in-class exercises, and shared results. Gain tools for organizing, editing, and dodging writer's block.

Find out more at www.nhnature.org

Cost: \$395 pp (includes workshop materials, a copy of The Art
and Craft of Interpretive Writing, and refreshments).

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. If you are looking for a memorable experience, choose from one of these fabulous guided tours on beautiful Squam Lake.

EXPLORE SOUAM

Through June 30 — Daily • 1:00 p.m.

July 1 to August 31 — Daily 11:00 a.m. • 1:00 p.m. • 3:00 p.m.

September 1 to October 14

Tuesday, Wednesday, Thursday — 11:00 a.m. • 1:00 p.m. Friday through Monday — 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. View locations where the movie *On Golden Pond* was filmed 30 years ago. Watch Common Loons and Bald Eagles, regularly seen, but best viewed while nesting from May through August.

NATURE OF THE LAKES

July 2 to August 29

Tuesday, Wednesday, Thursday — 4:00 p.m.

September 3 to October 10

Tuesday, Wednesday, Thursday — 3:00 p.m.

Learn about the 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.

BALD EAGLE ADVENTURE

May 21 to June 25 — Tuesday • 3:00 p.m.

Join Executive Director Iain MacLeod for a special Bald Eagle Adventure to view these magnificent birds in their natural habitat. The cruise focuses on the recovery of Bald Eagles as a nesting species in the state, with particular discussion about the pair of Bald Eagles that has nested on a Squam island since 2003 and fledged 18 chicks.

LOON CRUISE

June 10 to August 30

Every Monday and Friday—3:00 p.m.

We are delighted to join forces with our friends and colleagues at the Loon Preservation Committee (LPC). Offered twice a week, these cruises focus on Common Loon conservation, biology, and monitoring. A Science Center naturalist joins an LPC biologist who guides the tour and discusses the work LPC does across the state and on Squam to protect these extraordinary birds. This special cruise route is designed to maximize Loon observations.

EXPLORE SQUAM • NATURE OF THE LAKES BALD EAGLE ADVENTURE • LOON CRUISE

Cost: \$21/adult member; \$23/adult non-member \$19/senior member; \$21/senior non-member (age 65+) \$17/youth member; \$19/youth non-member (to age 15) Not recommended for children under age 3

DINNER AND SUNSET CRUISE

Thursdays • July 11 to August 8
Dinner at 5:00 p.m. • Cruise
departs at 6:30 p.m.

Start your evening with a delicious, fixedprice dinner at Walter's Basin Restaurant, followed by a sunset cruise on Squam Lake. This guided tour showcases Squam's beauty as dusk falls. The guide discusses the natural history, wildlife, and people.

Cost: \$50.00 per person
Not recommended for children

LAKE EXPLORERS – A FAMILY CRUISE

new!

July 9, July 23 • August 6, August 20 10:00 a.m. Ages 5+

Experience the excitement of Squam Lake as active explorers. This family-style cruise gives children an opportunity to use binoculars, search for loons, collect microscopic life, watch live fish, participate in a scavenger hunt, and test their navigational abilities. Get on board for a cruise that could spark an interest to last a lifetime

Cost: \$15/member; \$17/non-member

SOUAM 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 Tom Klein will personally arrange your charter for any occasion.

Contact Tom Klein at 603-968-7194 x 10

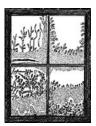
or tom.klein@nhnature.org for reservations.

All Squam Lake Cruises depart from the dock on Route 3 at the bridge, next to Walter's Basin Restaurant in downtown Holderness. Squam Lake Cruises are 90 minutes in length and are on canopied pontoon boats. Binoculars are available for wildlife viewing at no additional cost.

Space is limited on Squam Lake Cruises.

Call for information and reservations

603-968-7194



OPENING A WINDOW TO THE NATURAL WORLD

MAINS OF WHITE OAK POND FUND MERGES WITH LAKES REGION SCHOLARSHIP FUND

A scholarship fund was created in 2006 through gifts from many families that allows the Science Center to give financial aid to local students to attend summer Guided Discoveries courses. The fund was small at first but, since 2007, has helped seven children, distributing \$725 in scholarships. In 2007, the fund grew, thanks to a gift from Margie and Charlie Emmons and their children, Beth Lowenstein, Chip Emmons, and Matt Emmons, and Margie's parents, Arthur and Peggy Howe.

Now, we are pleased to announce that the Lakes Region Scholarship Fund has doubled through a gift from Betty Main Cannon. Mrs. Cannon established the Mains of White Oak Pond Fund in 1987 in memory of her parents and grandparents. Her intent was to provide scholarships for Holderness Central School students with an interest in natural science to attend summer camp at the Science Center. This March she agreed to merge the two funds, which will help to make it strong and sustainable for continuing scholarship awards into the future.

Betty Main Cannon now lives in California, but has deep roots in this area. She spent childhood summers in Holderness and lived here for a few years as an adult. Her grandfather, Charles T. Main (1856–1943), was an engineer from Winchester, Massachusetts. His daughter Alice encouraged her parents to buy property on Coxboro Road, where they later built a cottage called "Brushwood" overlooking White Oak Pond.

We are grateful to Betty Main Cannon and all donors to the scholarship fund that will help local children to experience and learn about the natural world.

You may contact Janet Robertson, Development and Communications Director at 603-968-7194 x 12 or janet.robertson@nhnature.org.

NATURALIST'S LEGACY SOCIETY

If you have already named the Squam Lakes Natural Science Center through your will or other estate plans, please let us know. As a member of the Naturalist's Legacy Society, you will be invited to donor recognition events and recognized in the Annual Report, unless you prefer to remain anonymous. Recognizing planned giving donors allows us to express our appreciation and may also inspire others to give support through their own estate plans.

SKUNKS continued from page 1

baking soda, and liquid soap. Beware of the hazards of the homemade version — it can explode in a closed container! As inconvenient as skunk spray may be, consider it an amazing defensive tool that is used sparingly and usually with plenty of warning.

Last fall, I had the opportunity to observe skunk warning signals on dark evening walks with Mica. Of course, our walks coincided with the skunks' nocturnal activities. With the added threat of my canine companion, we experienced more action than I would have on my own. On our first night, I shined my flashlight out over the hayfield, and saw a skunk foraging for insects quite close to the driveway. Its white stripes on a black background are warning coloration. I definitely took notice although the skunk seemed to ignore us. The second night, there was no skunk in the field. However as we walked past the garden shed, I heard distinctive stamping and movement in the dry leaves. With the aid of my light, I could see a skunk facing us, repeatedly stamping its feet and drawing them back. This was definitely a warning for Mica and me to move away. I knew that if I could hear this warning so clearly, it must be a broadcast for sharp-eared wildlife to retreat in a similar situation. On the third night, there were no skunks in the field or at the garden shed. Then as we rounded a corner on our return, there was a skunk planted firmly in the middle of the driveway, facing us with its tail raised and fluffy. We didn't wait for it to contort into a comma shape with both its head and spraying end pointed toward us. That is the "firing" position. As we took a wide detour, I saw the skunk scurrying away around the garden and into the woods. So far, we have missed the grand finale of experiencing a spray, with no credit going to Mica.

Among the natural fragrances, the scent of skunk is certainly dramatic. Perhaps, with some exploring in gardens, fields and forests we can find something gentler and more welcoming for the nasal palate. Are you ready?

We are grateful for these memorial and honorary gifts received from January 1 through March 31, 2013:

In memory of Anne and James Alvord
The DeHaven Family

In honor of Dale Lary Bonnie and Bill Webb

In memory of Allan Gavan
Dorothy Chekas

In memory of Richard May
James and Cynthia Reid
Lee and Mary Waples

In honor of Tashia and John Morgridge Melita Grunow

> In honor of Richard Wood Rockywold-Deephaven Camps

In memory of Greg Smith
Gail Smith and Frances Chalmers
James Talcott Fund/New York Community Trust
Christopher and Regina Wright

TRAIL'S END

WHAT BOARDS DON'T DO

Anyone who served on the board of Squam Lakes Conservation Society before 2002 knows how a non-profit with no staff operates: the board does everything. It's the "citizensoldier" model; very efficient and reasonably effective for some functions at some times.

At the other end of the spectrum, the boards of the biggest non-profits like CARE or United Way are more similar to corporate boards. They typically do just the core board functions: hiring, compensating, and occasionally firing a chief executive; setting goals and strategies; ensuring adequate financial resources; approving annual budgets and overseeing an annual audit.

We're a bit of a hybrid, but leaning toward the latter model. Our committee structure addresses the core board functions as follows:

- The Human Resources committee, which Nancy Beck chairs, organizes the annual salary review of our executive director and establishes personnel policies for the whole staff.
- Bruce Whitmore's Finance Committee leads the annual budgeting process, and—via subcommittees—oversees the annual audit and manages our investments. This latter "treasury" function is one that staff might handle in a bigger organization, but with the quality of financial management talent available to us on a volunteer basis, we'd be nuts to do it otherwise.
- The Development Committee, headed by John Fernandes, shepherds our fundraising and friendraising efforts.
- The Governance Committee, which David Martin leads, handles board replenishment and training, by-laws, and the committee structure itself.
- Strategy is handled by an ad-hoc committee on a periodic basis; we're kicking off another strategic planning cycle this year.

In the management of those functions we're much like the biggest non-profits. Here are two where we differ:

- The Education Committee, headed by Alan English, oversees the education component of all our public offerings—the bedrock of what we do.
- Mark Goldstone's Building & Grounds Committee reviews and approves the development and maintenance of our physical plant.

Iain (lucky Iain) sits on every one of those committees. The staff director for each function is invariably the prime mover for the relevant committee, e.g. Amy Yeakel for Education, $\operatorname{Tim} \operatorname{Curry} \operatorname{for} \operatorname{B\&G}$, etc.

The verbs are important here. What our board does is oversee, review, approve.....and we volunteer, attend, work, encourage, and applaud (the staff). What we don't do is manage, direct, hire/fire (except the staff head), or execute..... and of course, we don't get paid!

As you might imagine, the discussion about what the board should and shouldn't do is never-ending. There are trustees who would like to see the board more directly involved in some functions, and some staff members who wish the board did less. But from where I stand, the Science Center's board gets it just about right.

Trail's End is written by Laurie Beeson, Chairman of the SLNSC Board of Trustees. You may contact Laurie at 603-968-2409 or lbeeson@worldpath.net.

Meet the trustees, come to the...

Annual Meeting • August 10



Get Ready for...

Another Wild Saturday Night!

Comedy Variety Show • Cocktail Hob Nob • Auction featuring the return of local "celebrities" and some crazy critters

featuring the return of local "celebrities" and some crazy critters with your host, Lenny Pepperbottom.

Find out where the Two Wild and Crazy Loons spent their winter and what they have been up to this summer. Find out what the animals really do after the Science Center closes for the day.

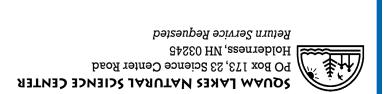
Variety of FABULOUS live and silent AUCTION ITEMS including:

A seven-night stay in a Tuscan Village!
Osprey Tagging with Iain MacLeod
Dinners prepared by famous chefs at private lake homes
Squam Lake Cocktail Cruises—and much, much more

Add "Big Bite" Hors d'oeuvres from The Common Man, with two drink tickets included, and it's a steal for \$50/pp

If wild is your style, make your reservations now! Call 603-968-7194

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