



The
NATURALISTS' CLUB
 NEWSLETTER

Springfield Science Museum at the Quadrangle, Springfield, Massachusetts

January to March
CALENDAR of EVENTS

January

- 10 Friday, Evening with Naturalists, *Blandford*
- 15 Wednesday, JANUARY MEETING: What we can learn from the shapes of animals
- 18 Saturday, Winter Wildlife in Bear Hole, *West Springfield*
- 25 Saturday, Hike in Knittel Conservation Area, *Blandford*

Groundhog Day
 February 2



February

- 9 Sunday, Dinosaurs and Edward Hitchcock at the Beneski Museum of Natural History, *Amherst*
- 15 Saturday, Hike at Lawrence Swamp, *Amherst*
- 19 Wednesday, FEBRUARY MEETING: The Black Bear in Massachusetts: history, research and status
- 29 Saturday, Hiking Dufresne Recreation and Conservation area, *Granby*

March

- 8 Sunday, How Sweet It Is!, *Granville*
- 15 Sunday, A Late Winter (Early Spring?) Walk, *Westfield and Southwick*
- 18 Wednesday, MARCH MEETING: Finding Really Old Things in Scotland
- 21 Saturday, Hiking McDonald Farm, *Wilbraham*
- 28 Saturday, Bear Hole Family Resort History Hike, *West Springfield*



Naturalists' Club Monthly Meeting

The Black Bear in Massachusetts: history, research and status

Wednesday, February 19, starting at 7 p.m.



NATURALIST'S CORNER

What I Need Is a Spider!

I walk into the downstairs bathroom, where I keep my worm bin for the winter, and find the tiny room swarming with fruit flies. Clinging to the ceiling, pendants, the night-light — they're everywhere! This massive emergence must have resulted from feeding my worms too many kitchen scraps at one time and not burying them sufficiently. In my years of managing a worm bin, this is a first.

A confounding factor was that I had company arriving the previous weekend and in preparation, I busily vacuumed up the unsightly webs and their makers. I tend to tolerate spider webs because I like the little buggers and they perform this insect-catching duty for me, but I felt a compunction of propriety at the time. I recall wondering, even as I did so, if I'm going to regret this. Indeed I do.

I began by setting four fruit fly traps. These are simply a cup with an inch or so of either cider vinegar - which the buggers have a penchant for; or Tom's home brew - which they can't resist. The flies are attracted to the liquid so much so that they eventually drown. Some sources suggest a drop of dish soap to prevent the flies from escaping. This may produce even higher results, but for me, the liquid sufficed. I experimented with placing plastic over the cup's rim with a hole in the center lower than the rim. This guides the flies in but they have trouble getting out. But, I'd like a more organic solution. I want to get my bathroom ecosystem functioning again. I need an efficient insect catcher to make me a web! So, I admit that I did a crazy thing. I went outside looking for a spider to invite back into my house to take care of my fly problem. It has been getting rather cold lately and I wonder if I can find a spider at all. When I am outside with students conducting a 'critter search,' I ask them, "Where would you hide if you were a spider?" They know: under bark; under leaf litter; within decaying logs. I now ask myself this question, and wish I had a kid or two to search with me. Peering behind the peeling bark of a few of my black birch trees I find a couple of candidates, but they are tiny. I usher them into my petri dish and bring them inside. I deposit them on the branch I hung over the bathroom sink. The fruit flies are four times their size. This just won't do.

A big, beautiful black and yellow garden spider - *Argiope* - with its magnificent orb web would be a perfect solution for me. Unfortunately, the adult of this species dies before winter, leaving the next generation to overwinter in silken sacs. I suspect that the adult garden spiders are, by now, all dead. I find silken cases tucked under the eave of my roof, each well-insulated with layer upon layer of tough silk. Whether it is of my intended quarry or another species, I'm not sure. Spider eggs don't overwinter well so often orb-weaving spiderlings hatch within their silken case and overwinter as juveniles, ready to chew their way out when spring beckons. Letting a legion of spiderlings disperse in my house is going way overboard, even for me. This just won't do.

Here in the Northeast, about 85% of the spider species enter diapause for the winter. This is a state of dormancy in which their bodily functions slow considerably. On a fall Naturalists' Club hike a couple years ago, I turned over a big piece of bark on the ground to find a silken tent, which curiosity provoked me to unveil. Inside was not eggs or juveniles, but an adult spider who cringed in the unbroken corner of his silken pod. After we all had a look at how this fellow intended to overwinter, I returned the bark and hoped that he would get back to work repairing the damage I caused.

With or without a silken encasement, most overwintering spiders produce substances that make them freeze-resistant. Ice crystallization in a living organism causes death by piercing cell membranes thereby destroying cells. But certain spiders, insects, bacteria, fungi and plants have a super power. At the first sign of a cold snap, they manufacture anti-freeze proteins (abbreviated AFP) in their bodies. These compounds bind to developing ice crystals and halt their growth. Because of this, spiders can withstand temperatures well below freezing. Scientists have documented a house spider who survived -4 degrees Fahrenheit. There is a species of jumping spider (my favorite spider!) that lives - permanently - on Mount Everest! Other antifreeze compounds have been "invented" by nature as well. Scientists continue to unravel the mystery of these important compounds that have promise in medicine and other applications.

I go back outside and turn my attention to the ground, and search under leaves and a couple of rotting logs. Interestingly, a very small handful of spiders stay active all winter in the subnivean zone. Here they slowly navigate that very thin layer between ground and snow hunting for springtails or other prey. Maybe one would like to hang out in my bathroom sink concealed by a few leaves so he can pounce on unsuspecting fruit flies for a time. He might get one or two. This won't put a dent in my fly population. This too, just won't do.

I further lament my fastidious cleaning actions. I sucked up spiders who were perfectly comfortable in my home. A study found that of the spiders in your house in winter, only 5% were ever outside. Yes, scientists have studied this! Most spiders have been there all along without notice.

My saga, alas, is not solved by spiders. Two cups of apple cider vinegar and two of Tom's special brew (Thank you Tom!) eliminated the buggers within a week. I set the worm bin outside in the cold for a few hours on three occasions to rid it of flies, but not freeze my worms, and my problem abated.

If you come visit me don't be surprised to see a few webs of my fly-fighting friends decorating my house here and there. I'm not a bad housekeeper, I'm just spider-friendly.
~ Nancy Condon

An Evening with Naturalists, Blandford

Friday, January 10, starting at 7 p.m.

Hosts: Debbie and Dave Lovejoy (413-848-2047)

Registration: Please call so we know how many are coming and for directions.

It has become a tradition for the Club to have a gathering for socializing and renewing friendships during the holiday season. There will be desserts and other dishes to share;

please let us know if you would like to bring something. We are located in the center of Blandford, just off Route 23 about 12 miles west of the center of Westfield. (Specific directions can be given when you call).

Valley dwellers should know that Blandford's weather can be considerably cooler and windier than the Springfield area; we'll use the registration list to notify everyone if extreme weather forces a cancellation.

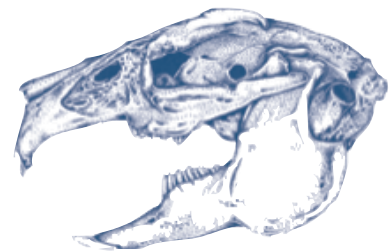


What we can learn from the shapes of animals

Wednesday, January 15, starting at 7 p.m.

Tolman Auditorium, Springfield Science Museum

Speaker: Dr. Jason Ramsay



Dr. Jason Ramsay, is functional anatomist and Assistant Professor of Anatomy and Physiology at Westfield State University. He has spent his professional career studying how the form of animals dictates their abilities to perform vital behaviors, such as catching and consuming prey and moving in their environment. Dr. Ramsay's lab closely examines the anatomical features of animals through the lenses of biology, physics, and art to reveal how the many unique natural shapes exhibited by animals can also be adapted for use in engineering, recreation, and works of art. Dr. Ramsay is also a biological illustrator and works in many forms of artistic media to display the beauty and complexity in the natural form of living things. His illustration above is of the skull of an eastern cottontail, *Sylvilagus floridanus*. In his talk, Dr. Ramsay will discuss many examples of how we are looking at the shapes of animals to address problems associated with travel, construction, cinematics and more.

Winter Wildlife in Bear Hole, West Springfield

Saturday, January 18, from 10 a.m. to noon

Leader: Dietrich Schlobohm (413-788-4125)

Registration: Registration is required and is limited to 20 people.

Meeting Place: Meet at the intersection of Morgan Road and Prospect Ave. in West Springfield.

Directions: Access Morgan Road directly opposite the Riverdale Shopping Center on Rte. 5. Take Morgan Road until it goes under the Mass Turnpike and comes to an end at Prospect Ave. The last part of Morgan is a dirt road. There are 3 forks along Morgan that require your attention.

Winter. A time when nature supposedly slows down and creatures large and small seek shelter from the harsh elements. While many animals are less visible, winter actually provides

us with a unique opportunity to study wildlife from a different perspective. Dietrich Schlobohm, an environmental historian, will lead us on a trip that will be a "journey of winter discovery" — especially if Mother Nature blesses us with a blanket of snow.

Depending on weather conditions and the area we visit, there is the possibility of observing a wide variety of animal life including deer, otter, beaver, fox, coyote, and perhaps even a migrant moose. Our observations will most probably not involve actual sightings, but rather the tracks and other signs these animals leave behind as they engage in their daily struggle for survival.

Be sure to dress for the weather including good footwear. Bring water and a snack.

Winter is not a season, it's a celebration. ~ Anamika Mishra

Hike in Knittel Conservation Area, Blandford

Saturday, January 25, from 10 a.m. to 1 p.m.

Leaders: Tom and Nancy Condon (413-297-0778)

Registration: Call or email (nancy@paddleforwater.net)

Meeting Place: Blandford Post Office

Winter is a great time to get out and explore new places. Join us to explore this recently-acquired 254-acre tract of land in Blandford. A series of trails will allow us to explore the fields, forests, and beaver ponds of this important ecosystem. The land is part of the Cobble Mountain watershed and its protection will help ensure clean drinking water for many of the valley's towns and cities.

Along our hike we will search for signs of those critters, who, like us, are out and about during this frigid season. An active beaver pond on the property will provide us plenty of opportunity to critique their engineering skills and winter survival strategies.

Bring along sturdy boots or snowshoes should the winter demand (check in for the latest a day or two before), walking stick, binoculars, water, and lunch. Registration requested.

Dinosaurs and Edward Hitchcock at the Beneski Museum of Natural History, Amherst

Sunday, February 9, starting at 1 p.m.

Leader: Dave Gallup

Registration: Please call Dave if you plan to come (413) 525-4697

Meeting Place: The Beneski Museum. Please call Dave for directions

Join us for a visit to the impressive Beneski Museum, a jewel in the valley at Amherst College. Admission is free. The Museum has an extensive and internationally recognized dinosaur track collections. The collections were established during the 19th century, and all of the tracks were found

within 30 miles of Springfield by the great geologist and Past President of Amherst College, Edward Hitchcock. We will also explore the natural history of the Connecticut River Valley, from the past when dinosaurs walked the land up to the present. After the visit, feel free to explore Amherst, which has some great restaurants and coffee shops!

Hike at Lawrence Swamp, Amherst

Saturday, Feb. 15 from 10 a.m. to 1 p.m.

Leaders: Tom and Nancy Condon (413-297-0778)

Registration: Please call or email (nancy@paddleforwater.net)

Meeting Place: Norwottuck Rail Trail parking area on Station Road (From South East Street in South Amherst—about 2 miles south of Route 9 – turn onto Station Road and drive east for just under a mile).

Lawrence Swamp Conservation Area is preserved by the town of Amherst as a water supply. We have a couple of hike options, depending on trail conditions. Most of the area is wooded with only some swampy sections, but much of it could be wet. There are well placed bog bridges, courtesy of the town over the longer swampy reaches. At this time of year, however, the trails should be frozen, making hiking pleasant and mosquito-free. Our preferred hikes will include the Robert Frost Trail and Beaver Trail, which makes a mile loop exploring field, forest, stream and wetland. Our second hike of the day will be along a forested trail looping around to join the rail trail back to our cars, again perhaps a mile in length. We also have the option of hiking along the raised rail trail, a lovely tree-lined corridor giving views of the swamp.

Dress for the weather. Bring ice-grippers for your boots. If you don't have any, we have a couple pairs to loan. Bring a snack and/or lunch. We will find a restaurant to stop at for lunch or hot chocolate on the way home.



The Black Bear in Massachusetts: history, research and status

Wednesday, February 19, starting at 7 p.m.

Tolman Auditorium, Springfield Science Museum

Speaker: James Cardoza



James E. "Jim" Cardoza received his B.S. and M.S. in wildlife biology from the University of Massachusetts in Amherst. He served on active duty as a Lieutenant in the U.S. Army and is a Vietnam veteran. Jim was employed as a wildlife biologist with the Massachusetts Division of Fisheries & Wildlife (MassWildlife) from 1969 to 2009 as the project leader for the black bear and wild turkey projects, with secondary emphasis on furbearers. Jim is a member of The Wildlife Society, the American Society of Mammalogists, and the International Association for Bear Research and Management. He is a Certified Wildlife Biologist and was elected a Fellow of The Wildlife Society in 2006. He and Drs. Tom French and Gwilym Jones are working on a book on the mammals of Massachusetts, for which specimens, data, and literature collection began in the late 1970s and active writing in 2016.

**Hiking Dufresne Recreation & Conservation Area,
Granby**

Saturday, February 29
Meeting place: 40 Kendall St.
Leader: Carole Dupont

Registration: Please contact Carole (413-896-0124;
carole0136@gmail.com) for meeting time

Join us for a late winter hike through the forested trails of Dufresne Park. The Park has fairly flat terrain, though we may encounter some inclines, depending on which trails we decide to walk. We will gear our hike to the ability of our group as well as the temperature and conditions of the trails in late February. A light snow coating would afford a wonderful opportunity to track wildlife activity.

Bring your binoculars, water, snacks, hiking boots, poles, microspikes if icy and dress according to the weather conditions.

How Sweet It Is! Sugaring Time at Maple Corner Farm, West Granville

Sunday, March 8, starting at 11:00 a.m.
Leaders: Dave and Suzy Gallup - Please call if you plan to come (413-525-4697)
Meeting Place: Westfield State University Commuter Parking Lot

It is once again the time of the year when we visit Maple Corner Farm in West Granville. This visit has become a Naturalists' Club tradition! The Ripley Farm has been in the family for over one hundred years. Enjoy breakfast or brunch with maple syrup from the Farm's maple forest.

After eating, we will learn about the process and history of maple syrup production. Then, conditions permitting, we'll hike to the maple sugarbush (about one-mile round trip) to see how the sap is harvested. For ages 8 and up. Rain or bad weather cancels.

A Late Winter (Early Spring?) Walk, Westfield and Southwick

Sunday, March 15, from 1 to 3 p.m.
Leader: Dave Lovejoy
Registration: Please contact Dave (413-572-5307 or *dlovejoy@westfield.ma.edu*) during the week of March 8, to learn where we will meet, probably somewhere along the bike trail running from Westfield into Southwick and beyond.

Few plants are likely to be in flower this early, but it may be nice to take a walk in "meteorological" spring, hopefully on a nice day. Terrible weather (heavy rain, snow or ice, cancels).



Of winter's lifeless world each tree now seems a perfect part;
Yet each one holds summer's secret deep down within its heart.
~ Charles G. Stater



Finding Really Old Things in Scotland

Wednesday, March 18, starting at 7p.m.
Tolman Auditorium, Springfield Science Museum
Speaker: Sonya Vickers

In Scotland, the ancient history of humans goes much farther back than here in North America. Scotland's geologic formations are even older, with some rocks that are 3 times older than those found here in New England. Sonya has been on a recent tour with Richard Little, exploring the geology and natural history of northern Scotland, and would love to share some of the ideas and pictures with you.

He who marvels at the beauty of the world in summer
will find equal cause for wonder and admiration in winter.
~ John Burroughs

Hiking McDonald Farm, Wilbraham

Saturday, March 21

Meeting place: McDonald Farm, 60 Washington Rd.

Leader: Carole Dupont

Registration/ meeting time: Please contact Carole (413-896-0124; carole0136@gmail.com)

Alton McDonald (the namesake of the Alton's Way Trail) was a city boy who fell in love with, and married, a country girl (Helen Brosch) and also fell in love with Wilbraham, serving as police sergeant, fire commissioner, etc. after moving to town in the 1930s. He loved this land and took over farming it as his father-in-law aged. Alton lived on the tractor trails that ramble through the open land and through the woods between the McDonald barn and the Wilbraham Middle School, walking them frequently until his late 80s.

Alton's Way Trail is a living lesson in ecological succession. The pond on the trail is changing to a bog on its edges. Its fields are showing a change from pine to hardwood (aspen, birch, cherry, and a lot of alder because the area is wet). We will hike the Jasmine, Oaks, & Alton's Way trails

Bring your binoculars, water, snacks, hiking boots, poles, microspikes if it's icy, and dress according to the weather.

Bear Hole Family Resort History Hike, West Springfield

Saturday, March 28, from 10 a.m. to 1 p.m.

Leaders: Tom and Nancy Condon (413-297-0778)

Registration: call or email (nancy@paddleforwater.net)

Meeting Place: Bear Hole Watershed main entrance at the end of Bear Hole Road off Dewey Avenue.

Bear Hole Watershed, a 1,320-acre open space, has remained undeveloped since the beginning of the 20th century to protect the drinking water supply for West Springfield. Prior to this era, it was home to farms and a favorite local destination called the Bear Hole Family Resort. Archival photos from the period when the resort thrived will help us envision this area as it looked over a century ago. Join us on this relatively easy hike down to the resort location, along the reservoir, over the dam, by the filter beds and pumping station and up the access road for a loop back to our cars. Total distance is 2.6 miles on wide, well-traveled trails.

Dress for the weather and snow conditions, including hiking boots or snowshoes. Bring water and lunch or a snack. Join us afterward for a stop at a restaurant for a cup of hot chocolate or lunch. Registration requested.

A snow day literally and figuratively falls from the sky—unbidden—and seems like a thing of wonder.

~ Susan Orlean

Spring Flower Shows

The Amherst Orchid Society Annual Show and Sale, Northampton

Saturday and Sunday, February 22 and 23

Smith Vocational and Agricultural High School, 80 Locust Street (Route 9, west of town), next to the Cooley Dickson Hospital. For further information, please visit <https://www.amherstorchidsociety.org>

Smith College Bulb Show, Northampton

Lyman Conservatory, 16 College Lane

Saturday, March 7 to Sunday, March 22, 10 a.m. to 4 p.m. weekdays, plus 10

a.m. to 8 p.m. on weekends. For further information about the show, please visit <http://www.smith.edu/garden/Home/events.html> or call (413-585-2740).

Mount Holyoke Annual Spring Flower Show, South Hadley

Talcott Greenhouse, MHC Botanic Garden

Saturday, March 7 to Sunday, March 22 from 10 a.m. to 4 p.m. For further information, visit https://www.mtholyoke.edu/botanic/flower_show or call Talcott Greenhouse at (413-538-2116).

In the cold dark days of the winter, dream about the flowers to get warmed up!

~ Mehmet Murat Ildan



Vanilla Planifolia

Vanilla is a genus of *epiphytal Orchideae*, natives of tropical America and Asia. They are distinguished from most other orchids by their climbing habit; they cling with their aerial roots to the stems of trees or to rocks, attain the height of 20 or 30 feet, and obtain their chief sustenance from the atmosphere. There are about 20 species comprised in the genus. The flowers are thick, fleshy, and fragrant, but dull in color. Vanilla is remarkable among orchids as possessing the only species of the order that has any economical value. A, a seed pod"— (Charles Leonard-Stuart, 1911)

Events Sponsored by MassAudubon

Most MassAudubon events require registration fees. For details, please visit massaudubon.org

Superbowl of Birding

Joppa Flats Education Center, Newburyport

Saturday, January 25

Winter is a wonderful time to bird in northeastern Massachusetts and southeastern New Hampshire. In celebration of this season, Joppa Flats is hosting the Superbowl of Birding XIV on Saturday, January 25, 2019.

Owl Festival

Broadmoor Wildlife Sanctuary, Natick

Saturday, February 1

Come explore the wonders of owls with friends and family! Go on a full moon owl prowl, or join us for an up-close and personal view of some of our local owl species.

Merrimack River Eagle Festival

Joppa Flats Education Center, Newburyport

Saturday, February 15

Winter's here, and the Bald Eagles have returned to the Merrimack Valley. Join us for this annual festival to celebrate these special winter residents of the greater Newburyport area. Please check newbury.com for dates.



There's no such thing as bad weather - only the wrong clothes.
~ Billy Connolly

Events at Laughing Brook Wildlife Sanctuary

These events are sponsored by Connecticut River Valley Sanctuaries and Laughing Brook Wildlife Sanctuary. Please call Laughing Brook at (413) 584-3009 or visit massaudubon.org for further information.

Introduction to Digital Photography, Hampden

Sunday, January 12 and 19 (2 classes), from 1 to 4 p.m.

Learn the basics of nature photography just in time to photograph the beauty of the season in this two-part program. We will discuss best practices for capturing an image, understanding exposure and focus, and using both manual and automatic exposure settings. After the first class, participants are encouraged to take photos for review at the second class.

Tracking & Animal Signs at Laughing Brook, Hampden

Saturday, January 18, from 10 to 11:30 a.m.

Saturday, February 15, from 10 to 11:30 a.m.

At one time, being able to read tracks was vital for survival. Tracking is more than simply finding a trail and following

it, and prints aren't always necessary to track an animal. The forest is full of signs that tell us about the wildlife within. Learn to read the tracks and signs left by animals that live in our area. (This walk is being offered on two different dates.)

Spring at Laughing Brook, Hampden

Saturday, March 21, from 10 to 11:30 a.m.

According to the calendar, spring has barely begun. However, the observant outdoor nature detective has likely noticed evidence of the new season for weeks. By this time of year, early arriving species such as red-winged blackbirds and turkey vultures have returned to our area. Join us as we look for other harbingers of spring: skunk cabbage poking its leaves from beneath the snow or soil (and warming the surrounding ground); early spring insects; and perhaps even early frogs.

Recommended Reading . . .

Braiding Sweetgrass by Robin Wall Kimmerer

This is a lovely book written by a woman who is both a scientist and a member of the Potawatomi Nation. Seeing nature through both scientific and indigenous lenses, she helps us to realize humans and nature have a binding and reciprocal relationship that once understood, can endure and thrive together.

~ Review by Nancy Condon

The NATURALISTS' CLUB

FROM THE TREASURER

Those with a date of "19-20" (or later) on your newsletter mailing label have paid for this year. Otherwise, your dues are owed for the year that started in September 2019. You may renew by sending a check (payable to The Naturalists' Club) to Dave Lovejoy, Westfield State University, Department of Biology, Westfield, MA 01086 or by giving the check to Dave at the next monthly meeting.

Note:

If your contact information has not changed, the form below need not be completed. We would, however, like to have your email address if you haven't sent it previously. Please direct changes or inquiries to Dave Lovejoy, who maintains our mailing list. And please let Dave know if you would like to receive your newsletter in electronic rather than paper form!

MEMBERSHIP LEVELS

\$20 per year for Individual or Family Membership

\$30 per year for Supporting Membership

\$50 per year for Sustaining Membership

\$300 for Lifetime Membership



Renew your membership

Name _____

Address _____

Phone Number _____ Email _____

Do you opt for electronic delivery of the Naturalists' Club Newsletter? Yes _____ No _____

Requests for programs/trips: Please send information per the above to: Club Treasurer, Dave Lovejoy, Department of Biology, Westfield State University, Westfield, MA 01086



The NATURALISTS' CLUB was founded in 1969 for the purpose of actively promoting knowledge, appreciation, and preservation of our natural environment.

It is an all-volunteer non-profit organization.

Education is a main focus of The NATURALISTS' CLUB.

Programming, with an emphasis on local natural history, is designed to create camaraderie among people of diverse interests through experiences deepening their appreciation of nature.

Activities are geared to acquaint the layperson with the natural world, mostly through field trips. Monthly meetings are held at the Science Museum at the Quadrangle in Springfield, Mass. Most field trips and programs are free.

2020 JANUARY to MARCH

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