



The NATURALISTS' CLUB NEWSLETTER

Springfield Science Museum at the Quadrangle, Springfield, Massachusetts

OCTOBER

5	Monday	Birdbanding with the Berkshire Bird Observatory, Great Barrington
11	Sunday	Columbia Greenway Rail Trail, Westfield
17	Saturday	The Fabulous World of Fungi: A Beginner's Guide, Russell
18	Sunday	Quabbin Hike, New Salem
21	Wednesday	OCTOBER MEETING: Winter Crows: Natural History and Roosting
24	Saturday	Hubbard River Trail, Granville

NOVEMBER

1	Sunday	Tree and Shrub Identification, Westfield
8	Sunday	Fire Towers and Funerals, Chester
14	Saturday	Lewis Farm Bird Sanctuary, Suffield
18	Wednesday	NOVEMBER MEETING: Snakes of Massachusetts
21	Saturday	Brimfield State Forest, Brimfield
29	Sunday	McCann Trail Hike, Somers, Connecticut

DECEMBER

5	Saturday	Goat Peak at Mount Tom, Holyoke
6	Sunday	Annual Late Fall Hike at the Quabbin, Belchertown
13	Sunday	Black Brook Reservoir Hike, Russell
16	Wednesday	ANNUAL HOLIDAY MEETING
19	Saturday	An Evening with Naturalists, Wilbraham

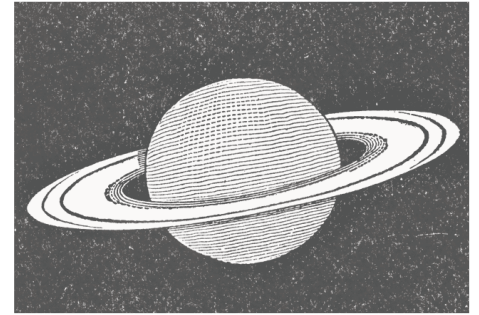
As long as autumn lasts, I shall not have hands, canvas, and colors enough to paint the beautiful things I see.

~Vincent van Gogh



NATURALIST'S CORNER

Tycho Brahe and the Birth of Modern Science



In late August, NASA launched its newest space telescope, the Nancy Grace Roman Space Telescope. Nearly a million miles from Earth, this extraordinary observatory will survey the universe using 18 sensors capable of producing images at 300-megapixel resolution. Scientists hope it will reveal distant galaxies, and help us to both understand the mysterious forces shaping the universe and discover exoplanets in our own galaxy. It almost makes you wonder what humans are capable of knowing.

Now look back about 450 years. Imagine trying to understand the universe without a telescope. No Hubble. No computer. No digital cameras. No spacecraft. Just your eyes, some ingenious instruments, a notebook, and a remarkably dark sky. That was the world of Tycho Brahe. And although Brahe never looked through a telescope, his work helped create the scientific world that eventually made telescopes like the Roman Space Telescope possible.

Tycho Brahe was born in 1546 to a wealthy noble family in what is now southern Sweden. His family was part of the Danish aristocracy, and his future seemed predetermined. Like many young noblemen of the time, Tycho was expected to attend one of Europe's great universities and prepare for a career serving the Danish Crown. His uncle sent him away to study law and diplomacy. There was just one problem: Tycho became fascinated by the heavens.

In the sixteenth century, people believed that the movements of the planets and stars could influence events on Earth—and even human behavior. Brahe became fascinated by the possibility of predicting celestial movements. But science was not considered a noble pursuit for an aristocrat, so Tycho kept his astronomical interests largely to himself. By day, he was preparing for a respectable career. By night, he was looking up.

Tycho soon discovered something that would change the course of his life: The astronomical tables were wrong.

On August 21, 1560, he watched a solar eclipse that astronomers had predicted would occur either a day or a week away from the actual event. In 1563, Jupiter and Saturn came together in the sky, but once again the predictions were significantly off. Then came another failure. In 1566, Brahe used a lunar eclipse in an attempt to predict the death of an Ottoman sultan. Unfortunately, the sultan had already been dead for several weeks. The universe, it seemed, was refusing to cooperate with the experts. Brahe drew an important conclusion: If humans wanted to understand the heavens, they needed better observations and better measurements. He was about to become very good at both.

Later, in 1572, a brilliant new star appeared in the constellation. This was Cassiopeia. Today we know it was a supernova. But Brahe didn't have that vocabulary, or even the scientific framework, to explain what he was seeing. The dominant view of the universe, inherited from Aristotle and Ptolemy, held that the heavens were perfect, eternal, and unchanging. The stars were supposed to be fixed in their celestial spheres. Yet here was a new star. Something had changed. Brahe carefully measured its position and, remarkably, determined that it was farther away than the Moon. The heavens were not the unchanging realm people had assumed them to be. The universe had just broken one of the rules.

And Tycho Brahe was paying attention.

continued on page 3

There is a moment after you move your eye away
when you forget where you are
because you've been living, it seems, somewhere else,
in the silence of the night sky.

~Louise Glück

Brahe invited talented mathematicians, astronomers, and other scholars from across Northern Europe to work with him at Ven, the small island between mainland Sweden and Denmark on which he was establishing a research complex. There, Brahe built increasingly sophisticated instruments and had his students test them for accuracy. And then there was dinner. Brahe and his students regularly ate together, discussing their observations, comparing results, arguing over ideas, and figuring out how to improve their work. This was science as a team sport rather than the solitary pursuit of a lone genius. And sometimes even the best team discovered that the problem wasn't in the mathematics. It was the wind.

Ven was a windy place, and Brahe discovered that gusts could make his astronomical instruments wobble just enough to introduce errors into measurements taken at Uraniborg, his first observatory on Ven. So Brahe built a new observatory. This one was underground. Stjerneborg was designed to protect the instruments from the wind and provide a more stable environment for observations. It is a wonderfully Brahean solution to a research problem: If the wind is ruining your data, build your observatory underground.

Brahe and his students became the last great astronomers to map the heavens without the aid of a telescope. Their observations were astonishingly precise. But Brahe's greatest contribution may not have been a particular observation or even a particular theory about the universe. His real legacy was the way he did science. At Uraniborg, Brahe helped establish several ideas that now seem fundamental to scientific research. Science should be collaborative. Ideas should be tested. Instruments should be calibrated. Observations must be repeated. And perhaps most importantly, error is inherent to measurement.

Brahe openly discussed the limitations of his instruments and the conditions under which his observations were made. When he published his work, he didn't simply announce what he believed to be true. He also discussed what he could not know with certainty. That may sound obvious today, but it was a profound change in the way people thought about knowledge. Science was becoming less about possessing the right answer and more about figuring out how much confidence we should place in an answer.

After Brahe's death, his assistant and former student Johannes Kepler gained access to the enormous collection of observations made at Uraniborg. Kepler used those measurements to discover the mathematical laws describing planetary motion. Those laws would later provide Isaac Newton with crucial evidence for his theory of gravity. And Newton's work would eventually become part of the intellectual foundation upon which modern astronomy was built.

From Brahe's island observatory to Kepler's equations, from Newton's gravity to modern telescopes, satellites, and spacecraft, there is a long chain of curiosity connecting them all. Which brings us back to the Nancy Grace Roman Space Telescope. Today, we can place an observatory nearly a million miles from Earth and ask it to photograph galaxies billions of light-years away. Tycho Brahe had few tools at his disposal. He had no telescope. He had no computer. He had no spacecraft. He simply stood beneath the night sky, carefully measured what he saw, questioned existing explanations, invited others to test his work, and admitted when his instruments had limits. That may be one of the most important lessons Brahe left us. Before science could reach the stars, someone first had to learn how to measure them.



Tycho Brahe



Johannes Kepler

~Tom Condon

Bird Banding with the Berkshire Bird Observatory,
Great Barrington

Monday, October 5, from 7 to 11 a.m.

Leader: Tom Condon

Registration: Please contact Tom (413-454-2331; or
science@condon.net)

Meeting Place: Jug End parking lot.

Back in Spring 2026, Ben Nickley of the Berkshire Bird Observatory came to a Club meeting and discussed the work he and his team are doing in Great Barrington. At the time, he described how he and colleagues set up mist nets early in the morning and gently capture migrating birds to band. Banding birds helps scientists learn about migration patterns and timing as well as the lifespan and health of birds. It is an important aspect of ornithological field work.

Well, I was intrigued and so I asked Ben if we could join his team for a day of banding (or whatever) and he said yes. Space is limited so you'll need to respond quickly and you should know that there is a half-mile hike that ascends, sometimes rather steeply, to the study site.

Ben has some tips on preparing for the day: "Wear layers, long pants, and sturdy footwear. Hiking boots or rubber boots are good—it can be wet, especially in the morning. Bring water and a snack if you like. We like snacks. There can be ticks and mosquitos." Prepare for all types of weather and to be away from civilization for a good portion of the morning.

Columbia Greenway Rail Trail, Westfield

Sunday, October 11, starting at 10 a.m.

Leader: Dori Dittmer

Registration: Please contact Dori Dittmer (917-346-0969)

Meeting place: We plan to carpool from the Westfield Stop & Shop

We will meander along a section of the easy paved path that crosses the Westfield River. We should be able to enjoy fall foliage colors from the plants that line the path. There are a few historical markers highlighting the contributions of this transportation corridor that was formerly a railway route and is now a multi-use trail. For our lunch stop, we'll find a lovely place overlooking the Westfield River. Wear comfortable supportive walking shoes or boots, and be sure to dress for the weather. Bring binoculars, camera, water and snack/lunch. Likely, hiking poles will not be necessary.

The Fabulous World of Fungi: A Beginner's Guide, Russell

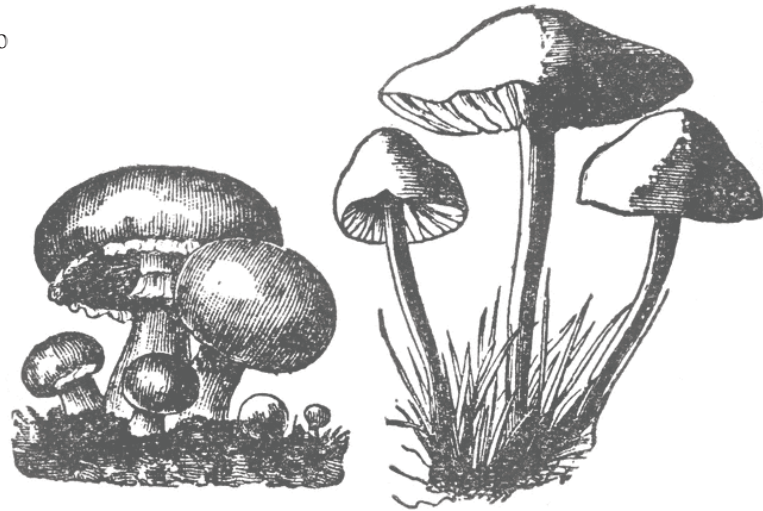
Saturday, October 17, from 10 a.m. to noon

Leaders: Tom Condon

Registration: Please contact Tom (413 454-2331; or
science@condon.net)

Meeting Place: Upper Parking Lot at Noble View Outdoor Center

Step into the secret world of fungi! On this leisurely walk, we'll discover mushrooms, brackets, puffballs, lichens, and other fungi hiding in plain sight. Along the way, we'll learn simple tricks for identifying what we find. We will explore the remarkable lives of these often overlooked organisms. Fungi decompose fallen trees, recycle nutrients, partner with plants, and help shape entire ecosystems. They also play surprising roles in medicine, food, agriculture, and biotechnology. Come discover why the forest would grind to a halt without them! This is not a foraging hike. We're here to observe, identify, and marvel, not munch!



The Mushroom is the Elf of Plants -
At Evening, it is not
At Morning, in a Truffled Hut
It stop upon a Spot

As if it tarried always
And yet it's whole Career
Is shorter than a Snake's Delay -
And fleeter than a Tare -

'Tis Vegetation's Juggler -
The Germ of Alibi -
Doth like a Bubble antedate
And like a Bubble, hie -

I feel as if the Grass was pleased
To have it intermit -
This surreptitious Scion
Of Summer's circumspect.

Had Nature any supple Face
Or could she one contemn -
Had Nature an Apostate -
That Mushroom - it is Him!

~Emily Dickinson

Quabbin Hike, New Salem

Sunday, October 18, starting at 10 a.m.

Leaders: Dave and Suzy Gallup

Registration: Please call us (413-525-4697)

Meeting Place: We will carpool from the CVS Plaza in Belchertown.

Join us for a wonderful October hike at the northwestern side of Quabbin (Gates 25-26), one of the area's most beautiful locations. From this northern edge of the reservoir, one can look across the calm water and spot a string of small islands. Every year, we have been lucky to see and hear loons here. We will travel an old loop road through mixed hardwood forest with October foliage. Bring a lunch or snack.

After the 3-mile hike, we will visit New Salem, a little village that looks just as it did in the nineteenth century, complete with a beautiful vista that you will love! Then we will visit a farm and orchard for hot apple cider. Rain cancels.

**OCTOBER
MEETING**

OCTOBER MEETING: Winter Crows: Natural History and Roosting

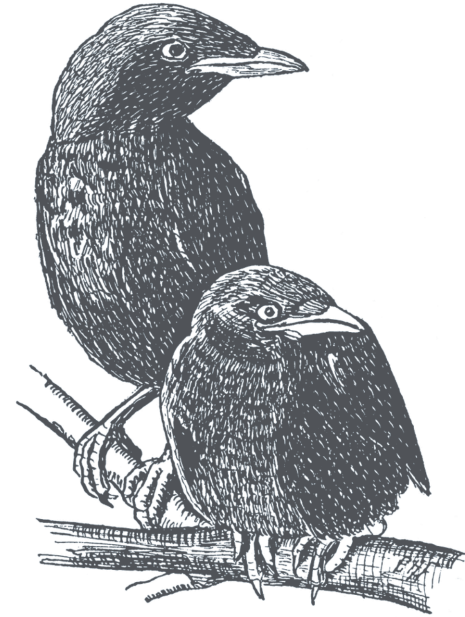
Wednesday, October 21, starting at 7 p.m.

Tolman Auditorium, Springfield Science Museum

Speaker: Patti Steinman, Mass Audubon

Crows are among the most intelligent of birds, and winter presents an opportunity to observe them at their urban roost sites. Springfield hosts one of the largest roosts in the state, with more than 7,000 birds estimated to gather each evening around sunset. Learn the natural history of crows, how to tell the difference between crows and ravens, and how best to observe their roosting behavior.

About the speaker: Patti Steinman is the Senior Naturalist at Mass Audubon's Arcadia Wildlife Sanctuary. She has been observing crows at the roost for over 25 years and is amazed by them each time she visits.



The way a crow
Shook down on me
The dust of snow
From a hemlock tree
Has given my heart
A change of mood
And saved some part
Of a day I had rued

~Robert Frost

Hubbard River Trail, Granville

Saturday, October 24, starting at 10 a.m.

Leader: Sonya Vickers

Registration: Please call us (413-218-7742).

Meeting Place: We will carpool from Table and Vine, West Springfield

Granville State Forest is on Route 57 in Granville, where the Hubbard River babbles through the forest. We will start our walk on what used to be a paved road, then proceed onto a path along the Hubbard River. The autumn woods will still be showing their colors, so be sure to bring a camera to capture the beauty. We will pause to observe the cascades, plus some stonework bridges constructed by the Civilian Conservation Corps. This is an out-and-back hike.

Tree and Shrub Identification, Westfield

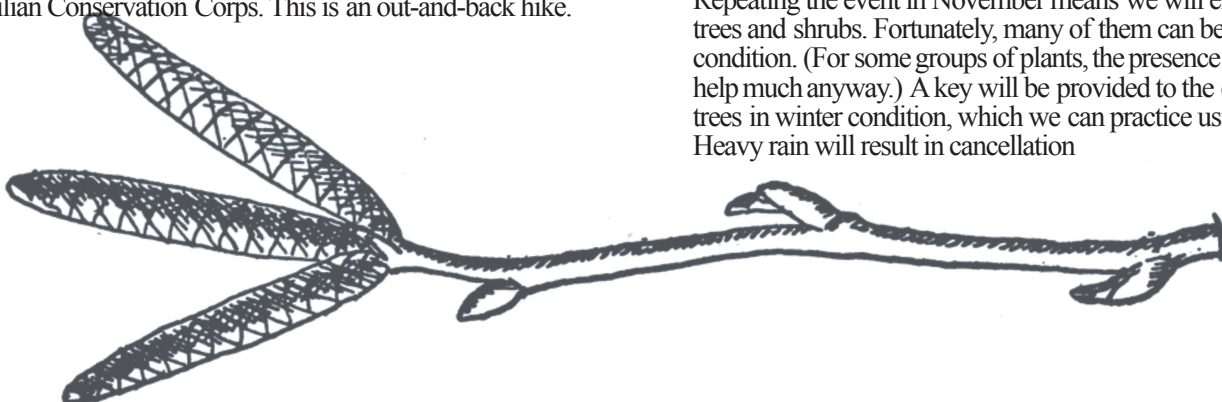
Sunday, November 1, from 1 to 3 p.m.

Leader: Dave Lovejoy (413-564-4251)

Registration: Not required. Phone number is provided so participants can call the leader if weather makes trip status uncertain.

Meeting Place: The entrance sign to the Frank Stanley Beveridge Memorial Sanctuary at Stanley Park. Enter using Gate 1 (across from the Westfield State Woodward Center), drive past the tennis courts and the picnic area, and watch for the Sanctuary sign on the right

This field trip was previously scheduled for July, when at least three participants showed up but could not find the meeting place. Repeating the event in November means we will encounter leafless trees and shrubs. Fortunately, many of them can be identified in winter condition. (For some groups of plants, the presence of leaves does not help much anyway.) A key will be provided to the common deciduous trees in winter condition, which we can practice using on the walk. Heavy rain will result in cancellation



Fire Towers and Funerals, Chester

Sunday, November 8, from 10 a.m. to 2 p.m.

Leader: Tom Condon

Meeting Place: Chester Elementary School

Registration: Please contact Tom (413 454-2331; or science@condon.net)

We'll first hike to the peak of Gobble Mountain, a Nature Conservancy Preserve. At 1657 feet, the peak offers stunning views of the Westfield River valley and surrounding hills. The trail stretches just over one mile, along an old access road. The road is steep and rocky in some place, so wear your best boots and bring along your poles. But fear not—we'll take our time ascending the mountain to learn about the forest and the mining history of the area, and we will rest to enjoy the views at the summit.

After descending, we'll hop in our cars for a short drive to another gem of Chester: the tomb of Hiram Smith. Mr. Smith did not want to be buried in the earth upon his death, so he had a tomb carved into a glacial erratic. This walk is an easy half mile stroll through a growing forest that was once the homestead of the dearly departed. Call to reserve a spot. Bring along a lunch and prepare for the weather.



Lewis Farm Bird Sanctuary, Suffield

Saturday, November 14, starting at 10 a.m.

Leader: Sonya Vickers

Meeting Place: Table and Vine in West Springfield

Registration: Please call Sonya (413-218-7742)

This Lewis Farm Bird Sanctuary, just a short ride from Springfield, is owned by the Hartford Audubon Society. We will stroll along a network of easy loop trails. The forest that now stands on Lewis Farm grew in after the property's use as a tobacco farm during the early 1900s.



NOVEMBER MEETING

NOVEMBER MEETING: Snakes of Massachusetts

Wednesday, November 18, starting at 7 p.m.

Tolman Auditorium, Springfield Science Museum

Speakers: Michael Jones and Halie Larkin

At this time of year, local snakes are beginning to settle into their hibernacula for the winter. However, our program tonight will focus on the snakes we can look forward to seeing in the woods once the weather warms again. Discussion will focus on the state-endangered timber rattlesnake. We will welcome attendees to observe the timber rattlers that we will bring to the meeting in plexiglass enclosures.

About the speakers: Mike Jones is State Herpetologist with the Massachusetts Division of Fisheries and Wildlife, where he coordinates amphibian and reptile conservation programs. Mike works closely with state and federal agencies, Massachusetts municipalities, and private partners.

Halie Larkin is a wildlife biologist with the Massachusetts Department of Conservation and Recreation. She conducts and coordinates wildlife monitoring and conservation at the agency's forests, parks, and reservations. Her primary focus is on state- and federally listed species, as well as those designated Species of Greatest Conservation Need. Her work spans several taxa, including birds, bats, turtles, and snakes.

Brimfield State Forest, Brimfield

Saturday, November 21, starting at 10 a.m.

Leader: Dori Dittmer

Meeting Place: We will carpool from the West Springfield Stop & Shop

Registration: Please text or call Dori (917-346-0969).

Our hike will start at Dearth Hill Road. From there, we will walk the easy Hemlock Gorge-Gleason Rd trail loop, which offers a great view of Dean Pond Dam. If the group wishes to, we will also veer off to explore another of the area's many trails. Wear sturdy hiking boots, dress in layers for the weather and bring hiking poles, insect repellent, binoculars, camera, water, and snack/lunch.

McCann Trail Hike, Somers, Connecticut

Sunday, November 29, starting at 10 a.m.

Leader: Dave and Suzy Gallup

Registration: Please call to let us know you are coming and for directions (413-525-4697)

Join us for a hike on the McCann Trail, which is maintained by the Northern Connecticut Land Trust. McCann is a unique, 84-acre property in the center of Somers, Connecticut that is pristinely maintained. The land is characterized by a variety of terrain, with stands of mature white pine and many other species of trees in a young-to-old growth forest. You will enjoy the diversity of the landscape!

We will be identifying species of trees and we will encourage everyone to share their knowledge. It will be a learning experience for all! Dress for the weather and wear sturdy hiking boots. It is an easy to moderate approximately two-mile loop hike. Rain or bad weather cancels.

Goat Peak at Mount Tom, Holyoke

Saturday, December 5, starting at 10 a.m.

Leader: Dori Dittmer

Meeting Place: Tentatively, the parking lot of Stop & Shop in Westfield.

Registration: Please text or call Dori (917-346-0969).

At 822 feet above sea level, Goat Peak in the Mount Tom Reservation features a cliff and an observation tower that offers beautiful, unobstructed views of the Valley this time of year. We'll hike ~2.4 miles along a paved road and a trail through the forest, encountering a few steep sections and stone steps. As we hike, we'll look for plants, birds, and mammals that are preparing for winter.

Wear sturdy hiking boots, dress in layers for the weather and bring hiking poles, binoculars, camera, water and snack/lunch. Insect repellent will be a good idea, too, as ticks are active year-round.

Black Brook Reservoir Hike, Russell

Sunday, December 13, from 10 a.m. to 1 p.m.

Leaders: Tom & Nancy Condon

Registration: Please contact Tom (413 454-2331; or science@condon.net)

Meeting Place: Russell Post Office, 58 Main Street, Russell

Join Tom and Nancy for a hike to the secluded Black Brook Reservoir in Russell. This tranquil escape strolls along a quiet forest road, where the path is framed by frosted trees and perhaps a soft blanket of snow. As we approach the lake, the world seems to hold its breath in the crisp air, revealing a mirror-like surface undisturbed by time. In the words of Robert Frost, *The woods are lovely, dark and deep*, capturing the serene and introspective nature of this winter journey.

We'll meet at the Russell Post Office and carpool to the trailhead. Parking is very limited here. Be sure watch the weather as mid-December can be a challenging time. Spikes may be necessary, though most of the trail is along a gated road and fairly level. If we get a blast of heavy snow, we'll make this a snowshoe adventure. We have plenty of snowshoes to share if necessary. Pack a lunch, and perhaps include something hot to drink.

**DECEMBER
MEETING**

DECEMBER HOLIDAY MEETING

Wednesday, December 16, starting at 7 p.m.

Springfield Science Museum, Tolman Auditorium

Presenters: You!

Emcee: Nancy Condon (413-297-0778)

Did your summer travels include a destination you would recommend to others? Do you have photos of Naturalists' Club events from this year? We want to hear from you! Our annual holiday meeting is an opportunity to share memorable and inspiring nature and travel experiences with other Club members. Show us some highlights by way of slides, PowerPoint, or photo album. Presentations should be no longer than 10 minutes.

This year, we would like to honor various cultural and family holiday traditions. Do you celebrate Christmas, Hanukkah, Kwanzaa, winter solstice, or another holiday at this time of year? Do you pass on the traditions of your nationality at your celebrations? Help us learn, honor, and celebrate together. You can bring a food item your family eats during this season, share a family story that resonates with you, show a presentation on how you celebrate your holiday, wear traditional or holiday garb, or bring in some traditional items to display. You decide.

Be sure to contact Nancy to get on the roster for presentations. Slide presentations need not be cultural in nature.

Annual Late Fall Hike at the Quabbin, Belchertown

Sunday, December 6, starting at 10 a.m.

Leader: Dave and Suzy Gallup

Meeting Place: CVS Plaza, near junction of Routes 9 and 202 in Belchertown

Registration: Please call Dave and Suzy (413-525-4697)

Late fall is a great time to get together and share a day. Our starting point will be Gate 15, which offers a wonderful hike with great views of the northern section of the Quabbin—lots of stonewalls and farm sites, plus remnants of an old gristmill. There is a chance we will see eagles and hear loons! Previously, we have seen moose tracks on Quabbin's sandy beaches. This is a great trail in an exceptionally beautiful area. Bring a lunch, hot drink, and binoculars. Dress for the weather and wear sturdy hiking boots. Rain cancels.

An Evening with Naturalists, Wilbraham

Saturday, December 19, starting at 7 p.m.

Host: Sonya Vickers

Registration: R.S.V.P. to Sonya (413-218-7742)

For many years now, we have gathered in December to celebrate our times in nature. Join us as we continue the tradition! Sonya lives in Wilbraham and invites you to her home to share stories of our encounters in nature through the past year. Bring a holiday treat to share. Be sure to call Sonya to register for this festive event. That way if there is a big snowstorm, she can call you to cancel. (This has happened in years past!) When you call Sonya to let her know you'll be attending, she will also provide directions to her home.

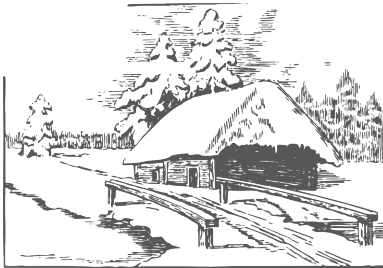


FROM THE TREASURER

Those receiving the electronic newsletter will find membership status listed in an upcoming email. For those receiving the paper newsletter, '26-27 (or later) on the mailing label indicates that membership is paid for this year; '25-26 indicates that renewal is due. To establish or renew membership, please send information/payment to:

Tom Condon
80 General Knox Road
Russell, MA 01071

If your address and contact information have not changed, the form below need not be completed, but please do email us to add your electronic address to our list and to indicate whether you'd like to switch from print to electronic newsletter, which helps us save both paper and postage.



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 _____

Please send information per the above to:

Club Treasurer, Tom Condon, 80 General Knox Road, Russell MA 01071



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.

OFFICERS & DIRECTORS

PRESIDENT

David Gallup
(413-525-4697)
davesuzy5@hotmail.com

VICE PRESIDENT

Nancy Condon
(413-297-0778)
nancy@paddleforwater.net

TREASURER

Tom Condon
(413-454-2331)
science@condon.net

CORRESPONDING SECRETARY

Suzanne Gallup
(413-525-4697)
davesuzy5@hotmail.com

RECORDING SECRETARY

Dave Lovejoy
(413-564-4251)
dlovejoy@westfield.ma.edu

DIRECTORS

Sonya Vickers
(413-218-7742)
sonya.vickers@yahoo.com

Carole Dupont
(413-896-0124)
carole0136@gmail.com

Dori Dittmer
(917-346-0969)
dordittmer@gmail.com

VOLUNTEERS

WEBMASTER

Tom Condon
(413-564-0895)
science@condon.net

NEWSLETTER EDITOR

Diane Genereux
(413-388-2830)
natclubnewsletter@gmail.com

PROOFREADERS

Nancy Condon
Dave Lovejoy
Debbie Leonard Lovejoy

The layout of this newsletter is based on a design by Loren Hoffman.