

2019



The ^NNATURALISTS' CLUB

NEWSLETTER

Springfield Science Museum at the Quadrangle, Springfield, Massachusetts

October to December Calendar of Events

OCTOBER

- 4-6 Friday – Sunday, Naturalists' Club 50th Anniversary Celebration, *Russell*
- 13 Sunday, Hawkwatch Atop Shatterack Mountain, *Russell*
- 16 Wednesday, OCTOBER MEETING: Trees, People & Places: Principles of Urban Forestry
- 27 Sunday, Quabbin Hike, *New Salem*

NOVEMBER

- 9 Saturday, Hike at Benedict Pond and The Ledges, *Monterey*
- 17 Sunday, Fountain Park Hike, *Wilbraham*
- 20 Wednesday, NOVEMBER MEETING: The Mystery of the Disappearing Dinosaurs
- 30 Saturday, A Peaked Mountain Hike – Hike Away Your Thanksgiving Holiday, *Monson*

DECEMBER

- 7 Saturday, Seecee Beecee Trail Hike, *West Springfield*
- 8 Sunday, Annual Late Fall Hike at the Quabbin, *Belchertown*
- 18 Wednesday, DECEMBER MEETING: Holiday Party



NATURALIST'S CORNER

Extinctions have a profound effect on us and on all living things.

Why Biodiversity Matters

As naturalists, we try to preserve species and their environments. But do we fully understand what is at stake? It is sad to see things disappear — the last of the tortoise species we saw on a Naturalists' Club trip to the Galapagos Islands, the last passenger pigeon, the last Golden Toad, the last Ivory-billed Woodpecker. However, our present predicament goes way beyond just the sadness of loss. We need biodiversity — essentially, the company of many different kinds of organisms on this planet — for our own survival.

Extinction is permanent. It is the death of an entire species or kind of organism. This planet hosts 1.3 billion identified species and probably another 7 billion we have not yet identified. Though calculated in various ways, biodiversity describes the total number of all the species on earth. Every day, 150-200 plant, insect, bird and mammal species become extinct. Extinction is the removal of a species from the total biodiversity. To date, 99% of all species that have ever lived on this planet have gone extinct. The rate of extinction is rising rapidly, and many biologists see this as the sixth great extinction on Earth in its 4.5 billion year history. The cause of this great extinction is not an asteroid or a geological collision. The cause is man.

Should we worry? How could extinction of a butterfly or a tree possibly affect humans, who imagine themselves as the culmination of evolution? The short, answer is yes, we should be worried. Extinctions have a profound effect on all species, including our own.

While biodiversity describes the number of separate species, a full understanding of impacts of extinction will require that we consider not just the total number of species lost but also the connections of those species to others. If a species goes extinct, those connections are lost. Bats eat mosquitos that grew up in the pond where fish depend on mosquito larvae for food — just to name two of the connections. Scientists have yet to discover most of the species that live on Earth and cannot be aware of all the connections of each species to others.

Do you know what animal is the most dangerous to man? Is it snakes, sharks, lions or spiders? No, it is the mosquito, which kills more humans than any other animal. Imagine if we were to exterminate all mosquitos. The network that connects mosquitos, birds, bats, and fish would be destroyed, and the collapse of those connections might result in the death of far more humans than do mosquito-borne diseases.

Edward O. Wilson has long championed the idea that biodiversity is essential for a healthy planet. He did a series of experiments on island populations, assessing whether the size of the island impacts its biodiversity. He defined island, broadly, as an area of land in the sea or a patch of forest left after logging or encroachment by construction projects. From Wilson's work emerged a mathematical relationship between an island's size and its biodiversity. Environmental fragmentation causes smaller islands, and smaller islands support less biodiversity.

Back to the importance of connections between species. A Finnish scientist, Haahtela, found that populations of certain butterfly species were declining. In parallel, the incidence of inflammatory diseases in the human population was increasing. The habitat that the butterflies needed was becoming fragmented into smaller "islands", altering the underlying connections. The declining butterflies were not the cause of human inflammation, but were the canary in the coal mine that signaled unseen disruptions.

A recent paper assessed the microbiome of teenagers and the diversity of native plants in their backyards. Teenagers whose backyards hosted a greater diversity of native plants (with, of course, a greater diversity of insects and microbes that live on those plants) had greater diversity of microbes on their forearms. Moreover, teens with a greater microbe diversity on their forearm had significantly fewer allergies. This is compelling evidence that kids need to experience the outdoor environment — and get dirty — in order to stay healthy!

Biodiversity is not just about the larger plants and animals. The soils in our forests contain 10,000 to 50,000 species per gram of soil. A gram is about the weight of a postage stamp or a pinch of salt. Imagine the interconnectedness among all those species!

There is a growing concern that the lowering biodiversity of our gut microbes is causing chronic illness in human populations. We used to think that bacteria were universally bad. Now, though, it is clear that not having enough different kinds — which is to say, having low microbial biodiversity — increases the likelihood of diabetes, Crohn's disease, obesity, allergies, colorectal cancer and high cholesterol. Recent studies link low microbiome biodiversity to Parkinson's disease, Alzheimer's disease, and even autism spectrum disorder. Indeed, biodiversity and the connections among organisms are very important.

Last month, Diane Genereux wrote an article on determining whether the red wolf is a species distinct from other wolves. If a group of organisms is determined to be a distinct species and is determined to be endangered it can qualify for protection. When biodiversity is high, it is likely that some subset of species will have the features needed to survive in a changing environment. If biodiversity is markedly reduced and connections among species are disrupted, environmental change has the potential to produce even more dire outcomes.

We all know the dinosaurs are extinct. However, a few species did escape extinction, and their descendants diversified into the birds we know today. Had there not been a large number of different dinosaur species — which is to say, high biodiversity — we might not have all the bird species we have today.

A healthy human is a person with a high biodiversity of gut microbes. A healthy forest is one with a high biodiversity of organisms from the soil to the trees to the insects and birds. A healthy planet is one with a high biodiversity and a low extinction rate. With a large number of different organisms there is the chance that at least some will escape difficult times to produce a whole new branch of life. This is worth fighting for and, yes, the extinction of one kind of fungus or bug could directly affect those uncharted connections with other organisms, with potential consequences for all species — including our own.

~ Sonya Vickers

CONGRATULATIONS!!!!

Naturalists' Club 50th Anniversary Celebration Friday to Sunday, October 4 to 6

Noble View Outdoor Center, Russell

Registration: Needed only for Saturday dinner and overnight. Contact Nancy (nancy@paddleforwater.net; 413-297-0778).

Join us to celebrate 50 years of exploring nature. October 4, 5 and 6 at Noble View Outdoor Center in Russell.

Invite your friends and neighbors. To see the schedule, visit <http://naturalist-club.org/50th-anniversary-celebration/>
See you there!

50th

Barred Owl, image courtesy of: <https://owips.com/sites/default/files/clipart/barred-owl-clipart-texas-521612-2116712.jpg>

Hawkwatch Atop Shatterack Mountain, Russell

Sunday, October 13, from noon to 3 p.m.

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

Registration: Not needed

Meeting Place: Russell Post Office, Main Street Russell

In mid-October, raptors are still heading south for the winter. Shatterack Mountain provides a great vantage point for watching them. Join Tom Swochak atop Shatterack to look for and learn about hawks and their behavior. Tom has been hawkwatching for 28 years, first from Mt. Tekoa, then from Blueberry Hill in Granville, and now — since 2005 — from Shatterack. We will carpool from the Russell Post Office, then drive most of the way up the mountain. The remaining quarter-mile hike up to the ridge is rocky in a few places, so be sure to wear sturdy hiking boots. Bring your binoculars, spotting scope if you have one, and a chair if you wish. Two scopes will be available for group use.





I cannot endure to waste something as precious as autumn sunshine by staying in the house. ~ Nathaniel Hawthorne

OCT.
Meeting

Trees, People, and Places: Principles of Urban Forestry

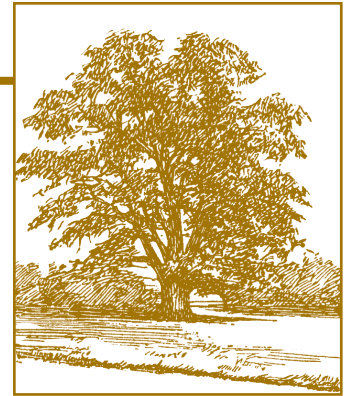
Wednesday, October 16, starting at 7 p.m.

Tolman Auditorium, Springfield Science Museum

Speaker: Alex Sherman, City Forester, Springfield Forestry Division

The talk will provide an overview of Urban Forestry concepts and how the City of Springfield Forestry Division is planning and managing the City's valuable tree resources.

Alexander Sherman is the City Forester of Springfield, Massachusetts. He is a Massachusetts- and ISA- certified arborist. He received a bachelor's degree in Forestry, Forest Ecology from the University of New Hampshire, a master's degree in Forest Resources from UMass Amherst, and a Geographic Information Systems professional certificate from Pennsylvania State University. Alex is also a past president of the Massachusetts Tree Wardens' and Foresters' Association.



Quabbin Hike, New Salem

Sunday, October 27, starting at 10 a.m.

Leaders: Dave and Suzy Gallup (413-525-4697)

Registration: Please call Dave and Suzy.

Meeting Place: CVS Plaza near the junction of Routes 9 and 202, 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. We will make a loop along an old road through mixed hardwood forest with wonderful October foliage. Bring a lunch or snack. The hike is about three miles. After the hike, we can go into the Town of New Salem – a wonderful little village that looks just as it did in the 19th century. From town, we will have the option to take a second, brief hike to some beautiful vistas that you will love! Then we will visit a farm and orchard in town for some wonderful hot apple cider. Rain cancels.

Hike at Benedict Pond and The Ledges, Monterey

Saturday, November 9, from 9 a.m. to 3 p.m.

Leaders: Tom and Nancy Condon

Registration: Contact Nancy (413-297-0778; nancy@paddleforwater.net)

Meeting Place: Blandford Post Office, Rt. 23, Blandford

Beartown State Forest in Monterey has two unique geologic features: Benedict Pond and the Ledges. We'll start our hike along the shores of the 35-acre Benedict Pond, a glacial remnant. Although most of the trail around the lake is relatively level, there will be places where a good pair of boots and a set of walking sticks will be very useful. The pond is home to herons, chickadees, and beavers. When we reach the southern end of the pond, we'll intercept the Appalachian Trail and take a short, moderate climb to an area known as the Ledges, which offers exceptional views of the western Berkshires. Our hike will take us back down the hill, then around the pond, back to where we started. Total hiking distance is about 3 miles, with an elevation gain of about 400 feet. Bring along lunch, water, and dress for the weather.

Little Grandmother

A dry-voiced chickadee reproves what's gone amiss.

From our crab-apple tree she gazes critically at autumn's entropy and quietly says this:
I am a Chickadee, and things have gone amiss
~ Ursula K. Le Guin in *So Far So Good, Final Poems*
2014 - 2018



Fountain Park Hike, Wilbraham

Sunday, November 17, in the morning

Leader: Carole Dupont

Meeting Place: Parking lot at 883 Tinkham Road

Registration: Please call or email Carole (413-896-0124; Carole0136@gmail.com) for start time.

Join us for an autumn hike to Fountain Park, a 144-acre preserve, known from 1913 to 1984 as the Massachusetts State Game Farm.

Following closure of the game farm, local citizens developed the property that is now managed by the Wilbraham Nature & Cultural Center. We will hike at a slow pace so we can enjoy the last remnants of autumn and adjust the distance according to the needs of the group. Bring your binoculars, water, snacks, hiking poles and boots as well as weather-appropriate attire. Our hike will run between 3 and 5 miles and be of low to moderate difficulty.

NOV.
Meeting

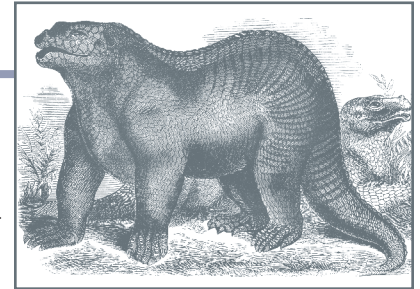
The Mystery of the Disappearing Dinosaurs

Wednesday, November 20, starting at 7pm


Tolman Auditorium and Seymour Planetarium, Springfield Science Museum

Speakers: Dave Gallup and Jack Megas

The full-grown iguanodon is estimated to have reached lengths of thirty feet.



This planetarium program, created by three members of the Naturalists' Club, presents scientific evidence for the events we believe happened 66 million years ago that wiped out not only the dinosaurs but most of life on Earth. This 30-minute program will explore what was happening on our Earth before the meteor hit, including volcanic eruptions and climatic changes. Afterwards, Jack will take everyone outside the planetarium to the meteorite display in Astronomy Hall and introduce this fascinating collection of meteorites millions of years old.

 What we're really talking about is a wonderful day when no one diets. I mean, why else would they call it Thanksgiving?
~ Erma Bombeck

A Peaked Mountain Hike - Hike Away your Thanksgiving Meal (say goodbye to the pie), Monson

Saturday, November 30, starting at 10 a.m.

Leaders: Dave and Suzy Gallup (413-525-4697)

Meeting Place: In front of Burlington at the shopping mall, Allen and Cooley Streets, Springfield

Join us for this annual hike and walk off those calories from Thanksgiving dinner! We will hike to the summit of Peaked Mountain with its incredible vistas of the valley below. From the summit, you can see Mt. Monadnock in New Hampshire! We will hike a few different trails. This is a moderately strenuous hike. Bring a lunch and plenty of water. Sturdy hiking shoes are recommended, and do not forget your binoculars!

cool air, hear the crunching of the dead leaves under your feet as we stroll along a less travelled trail. We will observe the natural beauty of Bear Hole, hiking at a slow pace and tuning the distance to the needs of the group. Bring your binoculars, water, snacks, hiking poles and boots, as well as weather-appropriate attire.

Seecee Beecee Trail Hike, West Springfield

Saturday, December 7 in the morning

Location: Bear Hole Reservoir & Watershed

Leader: Carole DuPont

Registration: Contact Carole (413-896-0124; Carole0136@gmail.com) for start time

Meeting Place: 4 Corners, Morgan Road

Join us for a late autumn hike as Mother Nature prepares the forest for its winter slumber. Feel the crisp

Annual Late Fall Hike at the Quabbin, Belchertown

Sunday, December 8, starting at 10 a.m.

Leaders: Dave and Suzy Gallup (413-525-4697)

Registration: Please call Dave and Suzy.

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

It is that time of the year again, a time to get together and share the day. Our destination is Gate 13 or 15, which takes us on a wonderful hike with great views of the northern section of the Quabbin – lots of stone walls and farm sites. There is some chance we will see eagles and hear loons! Previously, we've seen moose tracks on the Quabbin's sandy beaches. This is a great hike in one of the most beautiful areas to explore. Bring a lunch, hot drinks, and binoculars. Dress appropriately for the weather and wear sturdy hiking boots. Rain cancels.

DEC. Meeting

HOLIDAY MEETING

Wednesday, December 18, starting at 7 p.m.
Springfield Science Museum, Tolman Auditorium
Presenters: You!
Emcee: Nancy Condon (413-297-0778)

Our annual holiday meeting is an opportunity for you to share your most memorable and interesting nature and travel experiences with other club members. Have you visited someplace you would recommend to others? Do you have photos of Naturalists' Club events from this past year? We want to hear from you. Show us some of the highlights, by way of slides, PowerPoint, or photo album. Presentations may be no longer than 10 minutes in length. Please call Nancy to get on the roster for presentations.

This year we will continue a fun and successful book exchange event with the "Good Read" table. If you have enjoyed a good book and would recommend it to a friend, bring it in. For those willing to loan a book out to other club members, identification tags will be supplied so loaner and borrower can swap contact information. You may also just display a book that you enjoyed, without the option to loan. Either way, look through your library and try to bring at least one title to display. Bring a holiday dessert to share during the social hour so we can enjoy dessert while discussing intriguing books with other club members.

Book Corner:

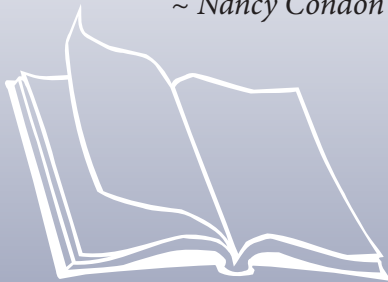
Review of ~


The Big Thirst: The Secret Life and Turbulent Future of Water

by Charles Fishman

Here in much of the U.S., clean, inexpensive water is taken for granted. It is available at the turn of a tap 24/7. Not so everywhere. The author examines India where women fetch water from great distances every day, limiting economic productivity and curtailing education for girls. Cities in the U.S. face water shortages too. I found the Las Vegas chapter to be especially fascinating, recounting how a creative water manager has greatly reduced water consumption in that desert city. With a healthy respect for water, we, like the many inventive water resource managers in this book, can help curb the water shortages predicted to occur with climate change.

~ Nancy Condon



 In the winter she curls up around a good book and dreams away the cold. ~ Ben Aaronovitchs

October Events at Laughing Brook

Please call Laughing Brook at (413) 584-3009 or visit massaudubon.org for further information on these events.

Nature Festival at Laughing Brook, Hampden

Sponsored by Arcadia and Laughing Brook
Saturday, October 19 from 10 a.m. to 2 p.m.

Registration: Not needed. Events are free of charge.

Celebrate the wonders of nature with walks, stories, live animals, crafts, and games. Autumn's crisp air and changing leaves make this a fantastic time to enjoy a hike along the sanctuary's trails. Search for signs of wildlife, listen for birds, and watch chipmunks and squirrels gathering nuts in preparation for winter. Wildlife rehabilitator Tom Ricardi will provide a live bird of prey demonstration. We'll have stories written by Thornton Burgess, the naturalist and author who lived at Laughing Brook.

Additional Events in November

Fall Chrysanthemum Show at Smith College,

Northampton

Saturday, November 2 to

Sunday, November 17

Location: Lyman Conservatory

Each fall as colors fade outdoors, a riot of color erupts indoors in the Lyman Conservatory at the Botanic Garden of Smith College.

Hours: 10 a.m. to 4 p.m. daily

Fridays – 10 a.m. to 8 p.m.

CONSERVATORY MEMBERS ONLY 9 to 10 a.m.

daily (please bring your membership card)

Suggested donation: \$5.

The annual Fall Chrysanthemum Show features an extraordinary display of blooms in a variety of shapes and colors. The Fall Mum Show has been a popular college and community tradition since the early 1900s and showcases the hybridization experiments of the horticulture class. The public gets a chance to vote on favorites.

The Fall Chrysanthemum Show always begins the first Saturday in November and runs for two weeks including the third weekend.

FROM THE TREASURER

The fall of the year is the time to renew Club membership. This year's January to March newsletter contained a Club finances report noting that rising costs and declining membership might necessitate a dues increase. The Board has determined that an increase is indeed necessary in order to prevent regular withdrawals from our endowed funds to meet operating expenses. Therefore, beginning with renewals for 2019-2020 (due in September), the Basic membership will increase to \$20, Supporting will increase to \$30, and Sustaining (\$50) and life membership (\$300) will not change. This is our first increase since 2002 and is still, we believe, quite a bargain.

Please renew (or join) by sending a check payable to The Naturalists' Club to Dave Lovejoy, Club Treasurer, Department of Biology, Westfield State University, POB 1630, Westfield MA 01086. As noted on the form below, we would like to have your email address on file even if you do not wish to receive the newsletter electronically. If none of your contact information has changed, you may send your renewal without the 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.

OFFICERS & DIRECTORS

PRESIDENT

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

VICE PRESIDENT

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

TREASURER

Dave Lovejoy
(413-572-5307)
dlovejoy@westfield.ma.edu

CORRESPONDING SECRETARY

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

RECORDING SECRETARY

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

DIRECTORS

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

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

Jack Megas
(413-782-3962)

Dietrich Schlobohm
(413-788-4125)

VOLUNTEERS

SOCIAL MEDIA COORDINATOR

Leo Riendeau
(413-224-1468)
facebook.com/Springfield-Naturalists-Club/420275528018838

WEBMASTER

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

NEWSLETTER EDITOR

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

LAYOUT & GRAPHICS

Loren Hoffman
(413-569-5689)
lkhgrdes@gmail.com