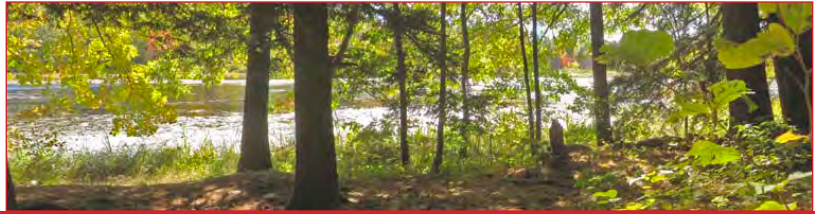


# BROAD BROOK COALITION



[www.broadbrookcoalition.org](http://www.broadbrookcoalition.org)

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## About Us

Broad Brook Coalition (BBC) is a nonprofit, all-volunteer organization incorporated in 1988 with the mission of preserving open space and promoting affordable housing. Under a memorandum of understanding with the Northampton Conservation Commission, BBC is responsible for the day-to-day management of the 850-acre Fitzgerald Lake Conservation Area. BBC's goals are to maintain and enhance the diversity and integrity of wildlife species and habitat at FLCA, promote outreach and education, and provide public access for passive recreation that is compatible with habitat protection.

Our work in trail maintenance, stewardship, education, and land preservation to expand FLCA is funded by the generous support of our members and occasional grants.

## President's Message: Animals On The Move

In its most general sense, the word migration connotes the movement of animals or humans from one place to another, usually for a purpose. Humans migrate for food, security, economic opportunities, and greater personal freedom; animal migration shares with humans the quest for food but differs in that the second main goal is often reproduction. Biologists and ecologists often use the word more narrowly, for periodic or seasonal movement between two sites, but the aim is the same: enhanced food resources and breeding opportunities. In his informative (but unsettling) book on animal migration, *No Way Home*, David Wilcove finds that of all the myriad kinds of migration, the two characteristics shared by almost all are *opportunism*—exploitation of abundant but often ephemeral resources—and *vulnerability*—exposure to the many and frequent perils of travel. As we have come to know all too well in the past few years, the benefits of human migration are burdened by borders, quotas, and hostility at the destination. Though animals don't have to deal with these impediments, they must surmount the threat of predators, storms, disease, and obstructions to navigation that are often inflicted upon them by humans.

Animal journeys run the gamut from extraordinary to mundane. Among the epic migrations are those of Arctic terns which nest in the Arctic during the summer and then head south to winter in the Antarctic, covering up to 44,000 miles in a year, and gray whales, which feast on the summer abundance of crustaceans in the Bering Sea and return south in the winter to give birth to their young in the warm waters off Baja California, a round trip of over 10,000 miles. Closer to home, our New England spring is enriched by the return of migratory birds, many of which reach us after traveling thousands of miles from wintering grounds in the Caribbean, Central America, and South America. Monarch butterflies appear later in the summer, after undergoing several rounds of reproduction on their annual northward journey from Mexico to complete a migratory cycle of as much as 5,000 miles. Some examples of animal movement that occur on the local scene include that of black bears and their cubs who spend spring in wetlands consuming plant sprouts, leaf buds, and skunk cabbage, summer further upland in search of fruit and berries, and in the fall scout for beechnuts, acorns, and hazelnuts at even higher elevations as they prepare to settle down for the winter. Also noteworthy is the spring migration of spotted salamanders from the dens where they overwinter to vernal pools where they deposit their eggs. For many of us, helping these salamanders cross busy roads on the "Big Night" in early spring when the temperature and rainfall are "just right" has become an engaging ritual.

Animals are constantly on the move. The conservation lands that encircle Northampton provide a corridor for the circulation of a wide variety of wildlife through different habitats at different times of year to forage, breed, raise their offspring, and find shelter. But the corridor is incomplete and the animals that use it face many challenges as they pass from one place to another. Some of the most daunting impediments we impose on animal circulation are roads. All too often, frogs, possums, raccoons, deer, and even bears misjudge the speed of a car or are blinded by headlights at night when they are on the move. One of the unfortunate consequences of this movement is roadkill, animals struck or crushed by cars and trucks along our roads. Roadkill is often concentrated along sections of roads that comprise parts of wildlife corridors, the preferred pathways that these animals and their predecessors have used for years to reach new habitats as the availability of food changes throughout the year.

*continued on page 2*

## President's Message, continued

The Massachusetts Department of Transportation is now partnering with MassWildlife to mitigate such perils by building crossing structures into our roadways as part of their Linking Landscapes program. We can help in such efforts by getting a better understanding of the patterns of animal movement in our own neighborhoods. See the article by Brigid Glackin below to find out how you can become involved in mapping roadkill and improving the safety of wildlife crossings in Northampton.

Bob Zimmermann

## Volunteers Needed for Wildlife Corridor Survey

Do you want to partner with BBC, MassWildlife, MassDOT, and UMass Amherst to improve wildlife habitat? We are seeking volunteers to document roadkill as a means of identifying hot spots where wildlife cross the roads between FLCA and other conservation areas in Northampton. The Linking Landscapes for Massachusetts Wildlife program maintains a database where you can easily record your observations of sites where animals are injured or killed trying to pass between habitats ([www.linkinglandscapes.info/wildlife-roadkill-database.html](http://www.linkinglandscapes.info/wildlife-roadkill-database.html)). It's important to note that western Massachusetts is underrepresented in the current database.

Linking Landscapes was initiated by MassWildlife and MassDOT in 2008; UMass joined in 2010. The partnership was formed to enhance the ecological performance of lands that abut our roads and highways. The data are being used to direct the installation of improved crossing structures, such as bridges and widened culverts for the migration of amphibians to vernal pools as well as for travel by other wildlife. Barrier fences have also been placed along roadways to protect turtles from crossing roads at dangerous sites. In addition, these efforts can enhance public safety by identifying areas for placement of signs warning motorists of animal crossing sites. You can learn more about the Linking Landscapes program in the informative article by David Paulson and Tim Dexter at: [www.massdot.state.ma.us/Portals/8/docs/environmental/LandscapeWildlife.pdf](http://www.massdot.state.ma.us/Portals/8/docs/environmental/LandscapeWildlife.pdf).

***"The state wants data on sites where animals are hit by vehicles to help identify wildlife corridors."***

If you are interested in helping BBC launch this project in Northampton, please contact us at [info@broadbrookcoalition.org](mailto:info@broadbrookcoalition.org) or PO Box 60566, Florence 01062. Please specify any particular road section that it would be convenient for you to survey. This could include routes where you routinely walk, bike, run, or drive. If you are involved with any walking, biking, or running groups that we might reach out to, please include that information as well.

We would like to monitor roads abutting FLCA, including North Farms Road, Marian Street, Coles Meadow Road, and Linseed Hill Road. Because of BBC's new areas of stewardship west of North Farms Road, Route 9 and even roads such as Chesterfield Road could be included in our survey project. Data on crossing hot spots will help DOT plan for future road maintenance and improvements.

Besides submitting our data to the Linking Landscapes database, we will also retain the data as one type of survey of the wildlife population at FLCA. In the future, we may be able to expand our knowledge of the movement of wildlife at FLCA and other conservation areas by recording successful crossings of wildlife corridors with the help of wildlife cameras and by documenting animal tracks at these sites. If you are interested in these types of surveys, please indicate this in your reply. The data gathered through the Linking Landscapes methodology should give us a good start. We hope you will join us in this effort.

Brigid Glackin



*January snowfalls inspired this whimsical rock art at the North Farms Road entrance to FLCA. (Michael Kesten)*

## Citizen Science

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Four years ago, in the Spring 2014 Newsletter, Bob Zimmermann devoted his president's column to the appealing idea that ordinary, nonexpert people could contribute in meaningful ways to ongoing scientific research in their community. In the years since then citizen science has only grown more popular, with new projects sprouting up across the country and around the globe. It seems like a good time to revisit this concept, especially with a view to how BBC and its members might best take advantage of citizen science opportunities in the Fitzgerald Lake Conservation Area.

Citizen science—also known as crowd science, civic science, and volunteer monitoring—refers to the gathering of observational data by amateur volunteers who then typically report their findings to a central database or other collection point. Scientists and other professionals such as educators and land managers can use the accumulated data to further their research or enhance their programs. Training to take part in citizen science projects is generally minimal, but, importantly, participants must follow a standard protocol in order for the data they contribute to be of value once it's combined with information from other observers.

Citizen science projects come in an enormous variety, from keeping a journal of unpleasant environmental odors (Air Pollution Odor Diaries), to monitoring parasitized bees (ZomBee Watch), to reporting on auroras (Aurorasaurus). Many projects, however, involve regular observation of the natural world much closer to home, and FLCA offers an ideal site to pursue this kind of activity. The 2014 newsletter mentions several projects of this nature. Birders can report their sightings on eBird, or take part in Audubon's annual Christmas Bird Count, which includes Fitzgerald Lake in its territory. Those interested in tracking seasonal changes, such as the leafing of trees and the first appearance of flowers or insects in spring—and in how these phenomena may be affected by a warming climate—can submit their observations to phenology websites such as Nature's Notebook and BudBurst. Other projects you can contribute to on your rambles through FLCA involve observations of animals (Wildlife Watch), butterflies and moths (eButterfly), amphibians (FrogWatch USA), even roadkill (Massachusetts Statewide Roadkill Database).

These and many other projects—relating to almost anything in the natural world that interests you—can be found on the internet on a number of central websites. One such site is CitizenScience.gov, which catalogs federally supported projects across different government agencies. Another is SciStarter.com, sponsored by Arizona State University, which also maintains a blog that follows topics of scientific interest in the news. And Scientific American lists a variety of projects under the education tab on its website. You can filter your searches on these sites by topic, location, age appropriateness, and other categories to find the project that best suits your interest and availability.

All of the projects mentioned so far are suitable for individual participation, letting you take part when and where you please and as often or seldom as fits your schedule. But there is another type of citizen science project—the bioblitz—that

involves group participation at a specified location and time, typically over one or two days. While they can vary widely in size and purpose, the typical bioblitz includes a trained naturalist or team of naturalists overseeing a group of volunteers in an intensive survey of all the living organisms that can be found or observed in a designated area. The first bioblitz—at least the first event to be called by that name—took place in 1996 in Washington, DC, and was sponsored by the National Park Service. Since then, many such surveys have been held across the country and around the world, sometimes called by other names, such as “biodiversity day.” While bioblitzes can have real scientific value, they are often seen as having an educational purpose that is at least as important as the data they provide. To this end they frequently seek to involve children, students, or community groups in the collection effort, with the goal of increasing awareness and understanding of the natural world.

*Dave Pritchard*

## We couldn't have done it without you!

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It is with deep appreciation that we acknowledge our volunteers who have spent many long hours pulling water chestnut from Fitzgerald Lake, maintaining the FLCA's 10 miles of trails, helping to build the wildlife blind at the Beaver Brook Greenway, and contributing in many other ways throughout 2017:

Fred Beddall, Alan Berkenwald, Bob Bissell, Hilary Caws-Elwitt, Rufus Chaffee, Julia Chevan, Alex Feinstein, Peter Flinker, Michael Grinley, Nick Harder, Steve Harding, Bruce Hart, Ken Howard, Virginia Irvine, Deb Jacobs, Carol Johnson, Jason Johnson, Robert Johnston, Patricia Jung, George Kohout, Dale LaBonte, Alexander Lane, John Langhans, John Lutz, Daniel Martinez, Bob Marvel, Peter Merian, Jack Morse, Mike Murphy, Alex Neubert, Holly Osborne, Ivan Oransky, Amy-Louise Pfeffer, Lewis Popper, Beth Powell, Jim Reis, Norma Roche, Bill Rosen, Margaret Russell, Garrett Sanders, Laurie Sanders, Jon Sass, Chris Schmidt, Pete Schoenberger, Steve Shea, John Sheirer, Mary Jo Stanley, Jon Steinberg, Paul Thaler, Matt Verson, and Gary Warner.

## Growing Membership

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While we haven't tried to track the number of visitors to FLCA, we've noticed an uptick in the number of cars at the parking lots at both the North Farms Road and Cooke Avenue entrances. At peak hours, in the morning and late afternoon, the North Farms Road lot is often full. We don't think it's a coincidence that membership in the Broad Brook Coalition has also increased in recent years: more visitors, more support. Since 2015, our membership has steadily climbed, with 235 donors at the end of the last membership year in September. The increase in support is important so that volunteers can keep up with the work to maintain trails and bog bridges, keep the mutt mitt dispensers filled (a major expense for BBC), and make other improvements. Our Land/Stewardship Fund is also steadily growing, so that we will be ready to help the City with a financial contribution for the next large acquisition to FLCA—whenever that day comes.

## Blight-resistant Chestnuts at the FLCA



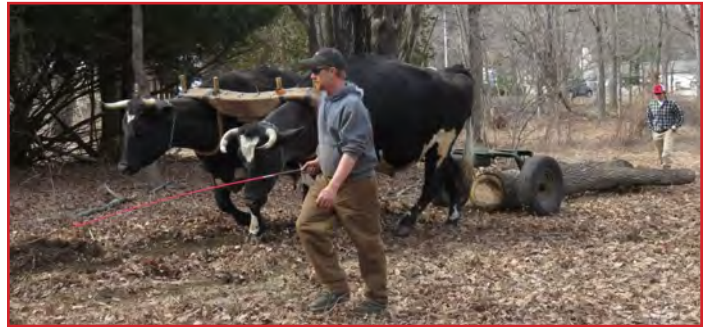
Northampton Tree Warden Rich Parasiliti, left, and BBC Board Member Dave Herships erect a deer barrier to protect a chestnut seedling. (Bob Zimmermann)

American chestnuts once dominated the forests of the Northeast, comprising up to one-fourth of the hardwood trees along the Appalachian Mountain chain. This tree was especially valued for its rapid growth and its abundant production of nutritious nuts that were at one time consumed in large quantities by humans, livestock and wildlife. It was also an excellent source of lumber as it is strong, straight-grained, lightweight and rot-resistant. Sadly, American chestnuts were struck by blight—caused by an Asian bark fungus—around 1900, and almost the entire population, which consisted of several billion trees, succumbed to the disease in the ensuing decades. Nonetheless, a few American chestnuts survived and there has been a concerted effort to preserve the species by genetically crossing them with blight-resistant chestnuts from Asia. Healthy trees have now been bred that contain the “Asian” resistance genes in a mostly “American” genetic background and are now being planted throughout their original range.

In November, BBC was offered the opportunity to host four blight-resistant American chestnut seedlings by the Northampton Public Shade Tree Commission. Needless to say, we were thrilled with the possibility of restoring the American chestnut to the FLCA and delighted to be included in this pilot program. The tiny trees, which had been grown over the previous summer by Madeleine Lombard from seed acquired by Stephen Jones from the American Chestnut Foundation, are 94% American chestnut and 6% Chinese chestnut. They were planted in Cooke’s Pasture by Todd Ford, Vice Chair of the Shade Tree Commission, Rich Parasiliti, Northampton Tree Warden, and a crew of BBC volunteers. Two levels of predator defense were also installed: a plastic shield around the roots to protect against voles and other rodents and a wire mesh fence around the planting sites to prevent deer browse. BBC will be responsible for making sure that the seedlings are well watered in the spring and summer. We very much hope that the seedlings have survived the unpredictable and rapidly changing weather we’ve had this winter and will grow vigorously in the coming year.

Bob Zimmermann

## Progress at the Beaver Brook Greenway



Tom Jenkins of Blue Dog Forestry leads his team of oxen hauling a huge log for the new wildlife blind at the Beaver Brook Greenway. (Bob Zimmermann)

In 2015, several members of the Leeds Civic Association and the Broad Brook Coalition came together to explore the possibility of rehabilitating and improving a roughly six-acre strip of the Beaver Brook Greenway lying between Haydenville Road and the Beaver Brook that was at one time the site of a farm. After a year or so of planning, the proposed improvements were approved by the Northampton Conservation Commission and the project was subsequently funded by an award of \$17,000 from the Community Preservation Committee.



Dave Pritchard, from left, Peter Flinker and Matt Verson raise the kiosk welcoming visitors to the Beaver Brook Greenway. (Bob Zimmermann)

Last year, an entrance kiosk was installed at the border with the Corrosion Control Facility off Haydenville Road where parking for visitors will be available. The next task was to construct a timber-framed wildlife viewing blind adjacent to Beaver Brook. A number of black locust, black walnut, and wild cherry trees were felled on site by Tom Jenkins of Blue Dog Forestry and hauled by his oxen to a landing near Haydenville Road. The trees were then sawn to lumber by timber-framer Neil Godden using a portable sawmill and the lumber transported to his shop for precise milling into the sills, posts, and beams needed for construction of the blind.



Volunteers with the BBC and the Leeds Civic Association teamed up for improvements, including this wildlife blind, to the 6-acre section of Beaver Brook Greenway. (Bob Zimmermann)

Last fall, the framework of the blind was assembled by a crew of volunteers and the roof and floor installed. This spring, siding and a stairway will be added to the blind, picnic tables will be installed, interpretive panels will be erected, and walking trails will be cleared and marked—at which point the area will be ready to receive visitors.

Bob Zimmermann

## Winter Happenings at Fitzgerald Lake

Fish slow down in cold water but continue to feed under the ice throughout the winter. There are two main techniques for ice fishing—jigging and trapping. Jigging uses a short rod and typically an artificial minnow-like lure called a jig. Trapping uses a baited hook lowered from an underwater reel attached to a trap, or tip-up, that is held in place over the hole by a crosspiece. These photos, showing the trapping technique, were taken at the east end of Fitzgerald Lake in mid-January. *(Dave Pritchard)*



*Positioning a freshly baited tip-up over the hole.*



*Tip-up assembly with baitfish ready for the hook.*



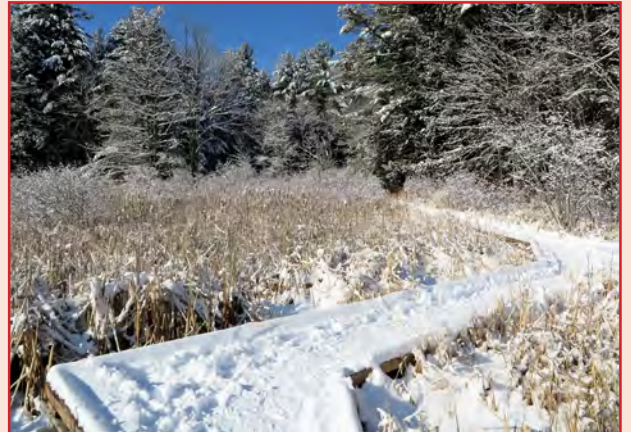
*Anglers show off their catch, a largemouth bass about 3 pounds, before releasing it back into the lake.* ▶

## Winter Happenings at Fitzgerald Lake

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*Deer parade through a back yard that abuts Fitzgerald Lake Conservation Area. (Michael Kesten)*



*The boardwalk zigzags through a snowy scene. (Dave Pritchard)*



*Two sets of bounding tracks cross the ice at Carmen's Cove. (Dave Pritchard)*



*Signs of foot traffic at the new dock. (Dave Pritchard)*



*A sapsucker hunkers down on a 2-degree-Fahrenheit day in early January. (Bob Zimmermann)*

## 2018 Walks and Talks

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Please check the Broad Brook website ([broadbrookcoalition.org](http://broadbrookcoalition.org)) for updates on any of these programs, or call David Pritchard (413-268-3668) or Bruce Hart (413-268-9391). All walks are free.

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### **Spring Is for Birds**

Mike Locher

Saturday, April 28: 8:30–10:30 a.m.

Cooke Ave. entrance (at the former Moose Lodge; park to the right)

Spring is the ideal time to go out birding, as residents and returning migrants alike busy themselves with the urgent task of finding mates and building nests. Join Hampshire Bird Club's Mike Locher as we walk through forest and wetland habitats and continue on to the more open spaces of the dam and Cooke's Pasture. Probable sightings include swallows, thrushes, woodpeckers, vireos, and early warblers as well as herons, ducks, and geese. Suitable for all ages and skill levels. Bring binoculars and field guides if you have them.

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### **Amphibians of Fitzgerald Lake**

Brad Timm

Saturday, May 5: 10:00 a.m.–noon

North Farms Rd. entrance

Learn about the fascinating species of amphibians at Fitzgerald Lake Conservation Area in this morning hike. Join Brad Timm, who has conducted amphibian research in New England for 15+ years, as we walk the trails and learn about the natural history and conservation of the amphibians that dwell in the streams, breed in the vernal pools, and inhabit the permanent wetlands of this region. Many amphibians are rather secretive, but we'll keep our eyes and ears peeled for the various frogs, toads, and salamanders that call FLCA home. All ages are welcome and encouraged!

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### **Forest for the Birds**

Jeff Ritterson

Saturday, May 12: 9:00–11:00 a.m.

North Farms Rd. entrance

Jeff is a field ornithologist at Mass Audubon, where his focus is on working landscapes and forest management, including the coordination of the Foresters for the Birds program. Originally from Delaware, Jeff attended graduate school at UMass Amherst, and remained in Massachusetts for the vibrant conservation community and magnificent forests.

Jeff will discuss the habitat needs of forest birds in Massachusetts, conservation concerns, and sustainable forest management techniques used to address those concerns. The forest surrounding Fitzgerald Lake will provide a mini case study to help illustrate what has or could be done to improve habitat conditions.

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### **Ticks and Their Environment**

Nolan Fernandez

Saturday, June 9: 1:00 p.m.

North Farms Rd. entrance

Join Nolan Fernandez, the outreach coordinator for the Laboratory of Medical Zoology at UMass, for an informative talk about ticks and the diseases they can transmit, including Lyme disease, babesiosis, and a number of newly emerging pathogens. He will describe ticks' life cycles and preferred habitats as well as the preventative measures that can be taken while walking or exercising outdoors. Nolan will lead a walk around a portion of the conservation area and flag for ticks, which is the process used to collect wild ticks. As this will show, ticks really are everywhere we go.

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### **Wildflowers**

John Burns

Saturday, July 28: 10:00 a.m. –noon

Cooke Avenue entrance

After the spring ephemerals and before the late bloomers of fall, there are the glorious flowers of summer. John Burns, of Burns Environmental in Cummington, will lead participants along Boggy Meadow Rd., past the beaver pond, and out to the dam in search of midseason wildflowers. Bring a hand lens and a field guide if you have them, but there will be enough to share if you don't. Sunscreen and repellent are also advisable. All ages welcome!

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### **Insect Tracks and Signs**

Charley Eiseman

Saturday, August 11, 1:00 p.m.

North Farms Rd. entrance

Insects are extremely specialized in their habits, and because of this it is often possible to learn which ones are around us just by noticing the characteristic patterns and objects they create as they go about their lives. Participants will search for signs such as egg cases, cocoons, webs, burrows, droppings, galls, leaf mines, and the various ways insects nibble, fold, roll, and tie leaves. Learning about insects through studying these signs will give participants a new appreciation for their complexity, diversity, and interrelationships with other living things.

*Charley is a freelance naturalist based in western Massachusetts and conducts plant and wildlife surveys throughout New England. He is the lead author of the field guide *Tracks & Sign of Insects and Other Invertebrates* and writes an insect-themed blog, "BugTracks."*

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### **Fungal Partnerships at Fitzgerald Lake**

Pat McDonagh

Saturday, September 8: 9:00–11:00 a.m.

North Farms Rd. entrance

Mushrooms are visible outgrowths of fungal networks that make our forest ecosystems possible. Take a walk in the woods to learn about the essential role that mushrooms play as recyclers and symbiotic partners to other forest life forms. Collecting edible mushrooms will not be a major focus of this walk, but we will learn to identify some common mushrooms and gain an appreciation of their many functions in the forest.

*Pat is a former BBC board member and enthusiastic mycophile. She has led mushroom walks at Fitzgerald Lake and Arcadia Sanctuary for many years.*

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### **History of Land Use at Fitzgerald Lake Conservation Area**

Laurie Sanders

Saturday, September 22: 10 a.m.–noon

Cooke Ave. entrance

From colonial times to the damming of Broad Brook in the late 1980s that created Fitzgerald Lake, the 850 acres of FLCA have undergone momentous changes. Laurie Sanders will lead a walk along Boggy Meadow Rd. to the dam and Cooke's Pasture, focusing on the economic, social, and environmental history of this area. While the woods and lake may look pristine to the casual observer, there is a long history of human intervention just below the surface.

*Laurie is the co-executive director of the Northampton Historical Society and a longtime friend of BBC. She is the author of *Rediscovering Northampton—The Natural History of City-Owned Conservation Areas*, which is available as a download on the BBC website.*

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## Recognizing Trees Transforms a Walk in the Woods

I've been walking almost daily at Fitzgerald Lake since family dynamics required us to move from the Hilltowns to the city over six years ago. The woods make it possible for me to live in town. Moving through them at a remove from residential streets and asphalted commercial areas soothes the missing, placates the sense of loss of my daily walk through the forested hills. Those walks embodied solace from the vagaries of the contemporary world and the challenges it presents at rippling scales, from the personal and familial to the workplace and community to the region, the state, the nation, and the globe. I believed that Hilltown forests would ease my mind for the rest of my life.

*"Over time, I have learned much that enriches my understanding of the woods."*

Now I travel the Loop Trail with its primacy of hemlock ascending from the brook. I climb Marian Street Trail that leads to Middle Path or the wildlife blind or Boggy Meadow Road. In this forest community matrix, Boggy Meadow Road functions as a central axis of the conservation area, stretching from the Cooke Avenue parking lot through a variety of forest patches, past the beaver pond, to the dam and beyond. Each of the trails nourishes my sense of well-being.

Over time, I have learned much that enriches my understanding of the woods. In earlier days, I could differentiate between a hardwood tree and a softwood conifer and distinguish a maple from an oak by their leaves. One sunny fall day a naturalist with several copies of Michael Wojtech's 2011 book *Bark* led a group up Boggy Meadow Road to Gate #2. She demonstrated, starting with red oak and black oak, that it is possible to identify a tree solely by its bark. The grooves in the bark of a mature red oak descend like ski slopes. Our guide compared black oak bark to crocodile skin. At the time, I felt skeptical of becoming fluent in tree identification.

Several years later, I know how recognizing tree species transforms a walk in the woods. In addition to attending to the monologue in your head or a conversation with companions, you engage with the nonhuman life that surrounds. A little knowledge of the ways natural communities grow and change allows you to experience the forest as distinct neighborhoods, as if walking from Florence Center to downtown Northampton. You come to notice slow transitions and sudden changes in aspect. And as you notice, you can begin to wonder at the causes and effects of the different community structures and their composition—stately mansions versus American four-square versus condos and ranches, for example. You can begin to interpret the history of this particular neighborhood of the forest, this particular patch within a larger forest community.

Natural communities are characterized by the plant species present, by the physical structure they create, and by the landscape conditions where they exist. Recognizing the tree species constitutes a first step in understanding the forest community through which you are walking. A second step involves noticing which species live together. They do so

because the physical conditions suit them; the water, light, nutrient levels, and climate are right

For this essay, I set out to study the woods along Boggy Meadow Road. At Gate #1, white pine and oaks—red, white, and black—dominate the canopy. Mountain laurel grows on a forest floor strewn with glacial till, boulders left behind when the last glacier retreated about 10,000 years ago.

Mountain laurel is an eco-indicator, a species whose presence establishes the type of natural community, a species indicative of what a naturalist I know calls "a classic H-BOP" (hemlock, beech, oak, pine). The presence of white and black oaks tells me this is not, in fact, a classic H-BOP. Only the red oak species grows in H-BOP forest communities. I am left to puzzle out how to classify this forest.

But I cannot solve the puzzle without considering population dynamics. I age the trees by their diameter at breast height (DBH). A rule of thumb tells us twelve inches approximates fifty years of age. Most of these trees have lived here for fifty to eighty years, growing from seed sometime between 1940 and 1970. One huge white pine stands 36" DBH, allowing us to date its birth to about 1870 and helping us understand the origin of the younger pines. The 100-year age difference raises a question. What happened to the other 150-year-old trees?

*"Knowledge of the ways natural communities grow...allows you to experience the forest as distinct neighborhoods..."*

That question leads us to consider community dynamics. What happens to change the community assemblage? Fire, wind, flooding, drought, and extreme temperatures, diseases, parasites, and invasive species disturb the status quo. Farming, logging, and other human interactions alter the landscape. Tom Wessel's 1991 book *Reading the Forested Landscape: A Natural History of New England* tells us how. It takes a good deal of studying to do so.

I walked from Gate #1 past both entrances to the Loop Trail to the intersection with Pines Edge Trail just before the beaver pond. I continued on along the waterlogged road up the rise to Gate #2, reading the landscape all the way. The woods change here as the road descends to the junction that leads to the blind and Middle Path. It changes again as you cross the brook and again at the intersection near the dam.

I hope to share my interpretation of the woods we walk through in another essay, not an expert interpretation but an inquiry based on some information about the ways trees and plants tend to associate, how their communities develop if undisturbed, and how disturbances alter them. May the inquiry nourish your conversations with yourself, with your companions, and with the nonhuman species you encounter as you pass.

Amy-Louise Pfeffer



## Workdays at the FLCA: Spring and Summer 2018

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### Shrubland Habitat and Native Plants

**Sunday, May 6, 9:00 a.m.–noon**

Between 2005 and 2007, we established three 'islands' of native shrubs in Cooke's Pasture to provide food and habitat for shrubland birds and small mammals. Each year we return to prune the shrubs, cut back competing undergrowth, and replace plants that have not survived the winter. For the past two years, however, we have been unable to access the area because of spring floods on Boggy Meadow Road. This year we want to catch up on maintenance and plant some new shrubs to fill in where needed. Tools will be provided, though additional clippers and loppers are always welcome. Wear long pants and bring along your favorite insect repellent. Meet at the former Moose Lodge parking lot at the end of Cooke Avenue at 8:30 a.m. or at the Fitzgerald Lake dam at 9:00 a.m. Contact: Bruce Hart at 413-268-9391.

### Annual Cleanup at the North Farms Road Entrance

**Saturday, June 2, 9:00–11:00 a.m.**

Each year we devote one day in the spring to cleaning up the North Farms Road entrance to the FLCA, including clearing winter debris from the path to the bridge and boardwalk, picking up trash in the parking lot, and removing by hand invasive plants such as garlic mustard, Japanese knotweed, and multiflora rose in the adjoining woods. Please help us spruce up this heavily used route to the conservation area. Contact: Dick Wynne at 584-7930.

### Removal of Invasives on Boggy Meadow Road

**Sunday, June 24, 10:00 a.m. –1:00 p.m.**

Last year, we surveyed and located many patches of invasive plants along Boggy Meadow Road, which connects the former Moose Lodge parking lot at the end of Cooke Avenue with the Fitzgerald Lake dam. On a warm Sunday morning in July, we worked our way along the road, removing a large mass of invasives by hand. However, since the "harvest" was greater than expected, we only managed to get halfway to the dam and we're eager to get back to finish the job this year. Please join us. Tools will be provided, but if you care to bring clippers, lopping shears, and pruning saws, it would be a help. And don't forget gloves, sunscreen, and insect repellent. Meet at the former Moose Lodge parking lot. Contact: Bob Zimmermann at 585-0405.

### Removal of Water Chestnut from Fitzgerald Lake

**Saturdays, June 16, July 7, July 28, August 18, September 15, 9:00 a.m. –noon**

Last year we implemented a new approach for controlling water chestnut in Fitzgerald Lake known as "Pull Early, Pull Often." As we began with a haul of over 400 lbs. of this aquatic invasive in June and wound up with less than 10 lbs. in September, we were cautiously optimistic about the effectiveness of the new approach and hope for

reduced yields this coming summer. Nonetheless, viable water chestnut seed can persist for up to ten years on the lake bottom, so we plan to continue our more aggressive technique. We'll start to organize crews in early May, scout for emerging water chestnut rosettes in late May, and begin pulling in mid-June. We will need volunteers with canoes or kayaks, but we can always use the help of those who don't have their own boats. Contact : Bob Zimmermann at raz@umass.edu or 585-0405.

## Trail Volunteer Joins BBC Board

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The opportunity to live adjacent to hundreds of acres of conservation land was a big plus when Michael Kesten bought his house on Emily Lane, near the Cooke Avenue entrance to the Fitzgerald Lake Conservation Area. He previously lived in Leeds on the Mill River, so he wasn't far from nature. Here, however, he said he's more surrounded by trees and sees more wildlife in his backyard.



*Michael Kesten*

The newest member of the BBC Board of Directors, Michael quickly took advantage of the nearby access to Fitzgerald Lake when he moved to Emily Lane. That led to a chance meeting two years ago with Dave Hershops of the Trails Committee. Since then, Michael has been very active on the committee, helping with the repair of the wildlife blind, major reconstruction of the bridge and boardwalk, and building bog bridges. In addition, last year he replaced Dave as co-chairman of the Trails Committee, serving with Jim Reis.

Michael is also a trail steward of Boggy Meadow Road and secretary of the Board of Directors.

Three years after moving to the Pioneer Valley in 1990, Michael started a company that provides video engineering services to clients that include city governments, colleges, and corporations. He continues as president of Michael Kesten, Inc.

Passionate about environmental stewardship, he is on the board of the Beaver Institute, a nonprofit founded by Mike Callahan of Beaver Solutions to conduct research and educate people about the benefits of beavers. "We're looking for the win-win solutions" when beavers cause flooding on a property. In addition, he volunteers his social media expertise to Feline Friends, Inc. in Feeding Hills.

*Margaret Russell*

**To receive occasional email alerts regarding BBC Walks and Talks, Volunteer Work Days and other news, go to the website and look for "email list" under the events tab at the top of the page.**

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Florence, MA 01062

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\$25 for Individual membership     \$35 for Family membership. *All contributions are tax deductible.*

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We are very grateful for membership dues, but want you to know that you can contribute in other ways.

Members and friends are needed to help carry out our goals.

***Please consider one or more of the following volunteer opportunities:***

\_\_\_ Trail Committee (maintenance and repair)    \_\_\_ Stewardship Committee (includes invasive species removal)

\_\_\_ Land Preservation/Acquisition Committee    \_\_\_ Occasional Work Days    \_\_\_ Education Outreach

\_\_\_ Newsletter writer    \_\_\_ Other (please specify) \_\_\_\_\_