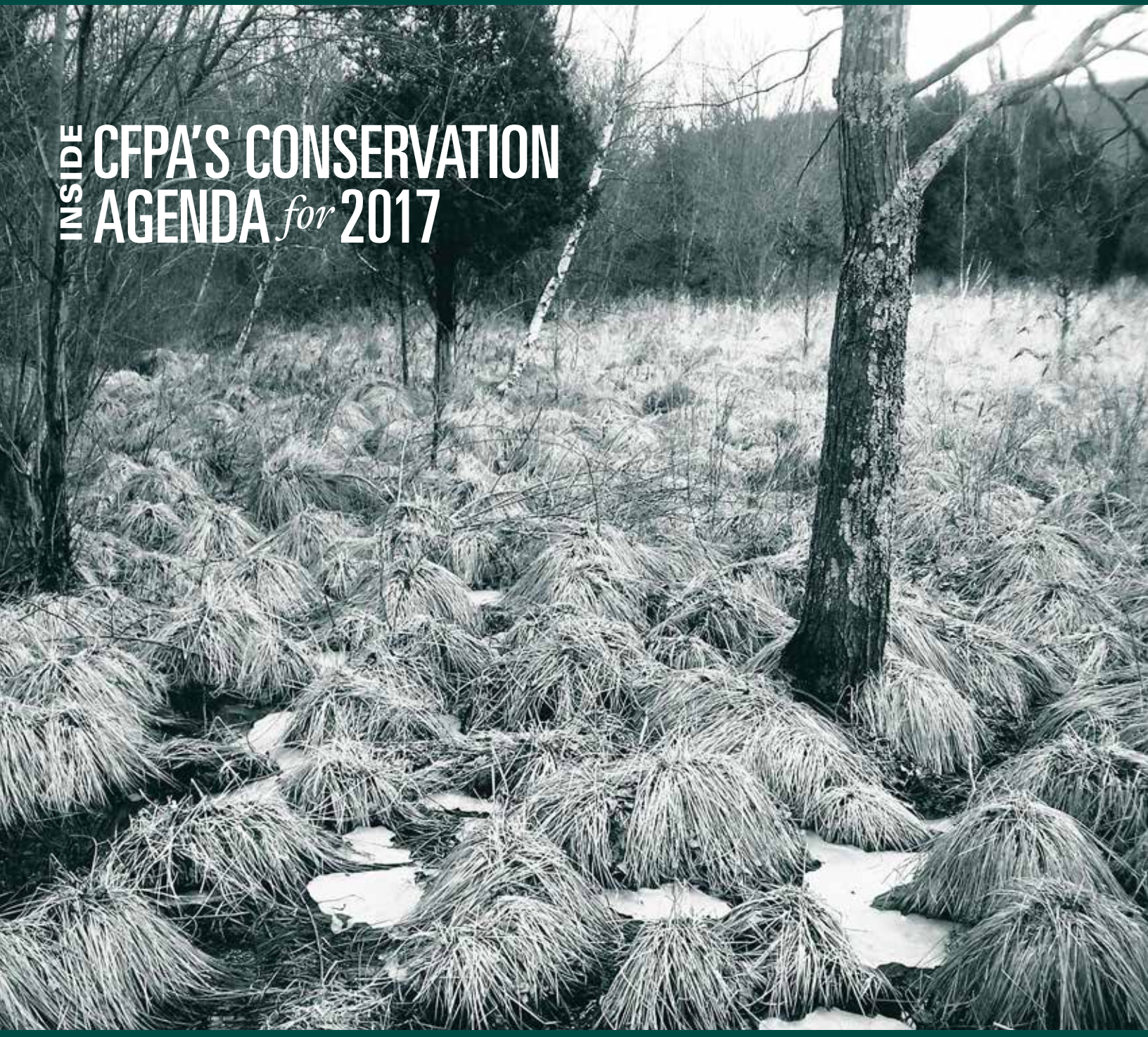
CONNECTICUT Forest & Park ASSOCIATION

CONNECTICUT
Woodlands
MAGAZINE



INSIDE CFPA'S CONSERVATION AGENDA *for* 2017

THE MISSING FENS: A RARE WETLAND

ALSO: DURHAM SAYS GOODBYE TO A TREE. COVERTS PROGRAM HELPS FOREST OWNERS

The Magazine of the Connecticut Forest & Park Association Spring 2017 Volume 82 No. 1

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TERESA PETERS

Limb by limb, the tree was taken down. *Story on page 9.*

Connecting People to the Land

Our mission: The Connecticut Forest & Park Association protects forests, parks, walking trails and open spaces for future generations by connecting people to the land. CFPA directly involves individuals and families, educators, community leaders and volunteers to enhance and defend Connecticut's rich natural heritage. CFPA is a private, non-profit organization that relies on members and supporters to carry out its mission.

Our vision: We envision Connecticut as a place of scenic beauty whose cities, suburbs, and villages are linked by a network of parks, forests, and trails easily accessible for all people to challenge the body and refresh the spirit. We picture a state where clean water, timber, farm fresh foods, and other products of the land make a significant contribution to our economic and cultural well-being.

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On the Cover:

Rare and beautiful, a calcareous fen in the Phillips-Lovdal Preserve in Southbury, a property of the Southbury Land Trust.

PHOTO BY KATHLEEN GROLL CONNOLLY

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DEPARTMENTS

CONNECTICUT Forest & Park ASSOCIATION

Happiness as defined by Danish people

BY ERIC LUKINGBEAL

Our Declaration of Independence says that "life, liberty, and the pursuit of happiness" are inalienable rights. Happiness is not defined, and we all have our own definitions. Most of us would probably agree that the absence of unhappiness does not result in happiness.

So, what does result in happiness? And, is happiness important? From an evolutionary standpoint, it is doubtful. Geoffrey Miller, an evolutionary psychologist at the University of New Mexico, observes, "Evolution is good at getting us to avoid death, desperation and celibacy, but it's not that good at getting us to feel happy." Still, the right to pursue it is one of our most important founding principles.

Happiness has been studied—a lot. A few years ago, the United Nations General Assembly invited countries to measure their national happiness. Using data from the Gallup World Poll, information from more than 150 countries was collected. The relevant data included real gross domestic product, healthy life expectancy, generosity, freedom to make life choices (such as marriage), and the country's perception of its corruption.

UN reports on the happiness measurements were first issued in 2012, and the same 13 countries consistently make the top of the rankings. The top 10 for 2016 were, from 1 to 10, Denmark, Switzerland, Iceland, Norway, Finland, Canada, Netherlands, New Zealand, Australia, and Sweden. Based on these rankings, happiness seems to have something to do with physical activity, fitness, and good health. The Netherlands reports the highest levels of physical activity on Earth. They are also the tallest people. Switzerland, which came in first in 2015, enjoys the lowest obesity rates in Europe. Taking a lot of saunas seems to help as well; Finland has 5.2 million people and 3.3 million saunas.

How do other industrialized countries stack up? The United States is number 13, Germany 16, United Kingdom 23, Japan 53, Russia 56, China 83. Countries at the bottom are from parts of the world with extreme poverty, very low GDP, and repressive governments.

According to the UN, seven key ingredients lead to a country rating high on the happiness scale. They are longer life expectancy, social support, freedom to make life choices, low perceptions of corruption, generosity, experiencing less inequality of happiness, and a higher per capita GDP.

Denmark bears additional scrutiny because it has finished first in three out of four years. A Danish word, *hygge* (pronounced HOO-ga), has no English equivalent but means something like "coziness."

The word was a finalist in last year's *Oxford Dictionary* word of the year contest. According to Charlotte Higgins, writing in the Guardian, *hygge* is "a feeling of calm togetherness and the enjoyment of simple pleasures, perhaps illuminated by the gentle flicker of candlelight." Some have suggested that the Danes invented the idea to get through the long, boring, cold, and dark winters. *Hygge* can be part of nouns, verbs, adjectives, or compound nouns. *Hyggebukser* are pants you would never wear in public but which you secretly love. In general, the Nordic countries do very well year after year. Their societies have several things in common: free university education, social security, universal health care, paid family leave, and a minimum of one month's annual vacation.

According to Meik Wiking, author of *The Little Book of Hygge: Danish Secrets to Happy Living* (William Morrow, 2017), the Danes are able to be happy because they recognize that, "After our basic needs are met, more money does not lead to more happiness."

Hygge's essence, in my mind, is at the heart of a really good hike on trails through the forest. I think I understand the essence of that word at the end of a good trudge, after all of the effort, bugs, sweat, and mud are behind me. Then I rest, eat, and drink with my companions. I feel a sense of peace and satisfaction.

Eric Lukingbeal is a retired environmental lawyer who lives in Granby with his wife, Sally King.

COMING IN THE NEXT ISSUE OF
CONNECTICUT WOODLANDS

GREENHOUSE GASES:
- ▶ Cars and buildings hurt
- ▶ School forests help

Also:
A sustainable timber harvest, New England Trail poems, and trimming around electric lines

When is your public land "protected"?

BY ERIC HAMMERLING

As you know, the Connecticut Forest & Park Association has been advocating for a constitutional amendment to protect your state-owned public lands, and your support has been essential to the considerable progress that has been made so far. As you might imagine, during this campaign I have been thinking a lot about what "protected" really means.

Like many of you, I used to believe that designation as a state park or forest would offer protection for public land, but lots of experience over the last several years has shown that these designations in themselves are not enough. Indeed, the Connecticut Council on Environmental Quality was prophetic as it wrote the following passage in the introduction to its outstanding 2014 report, "Preserved, But Maybe Not—The Impermanence of State Conservation Lands":

> When Connecticut residents visit a beautiful state park or wildlife area they often are contented by the knowledge that the land is set aside for forests, wildlife and all people for all time. Except usually it isn't. Recent proposals to exchange or convey state parks, forests and wildlife areas totaling hundreds of acres have highlighted weaknesses in the protections granted to Connecticut's conservation lands. These weaknesses could result in the sudden "unpreservation" and subsequent development of those lands.

I am convinced that three essential elements need to be in place for the true, sustainable protection of your public lands.

1. Legal Protection

A thoughtfully crafted conservation restriction such as a deed restriction (defended by the attorney general) or a conservation easement (held by a capable third party such as a land trust) is often critical to ensure the natural resource values of the land are protected.

2. Resources for Property Management, Monitoring, and Defense

Managing the property with a good plan based on a comprehensive baseline study of resources at the time of acquisition, monitoring the boundaries and natural resources of the property with regularity, and being prepared as the landowner or easement holder to defend the values of the land if violations occur help ensure the property is being adequately protected.

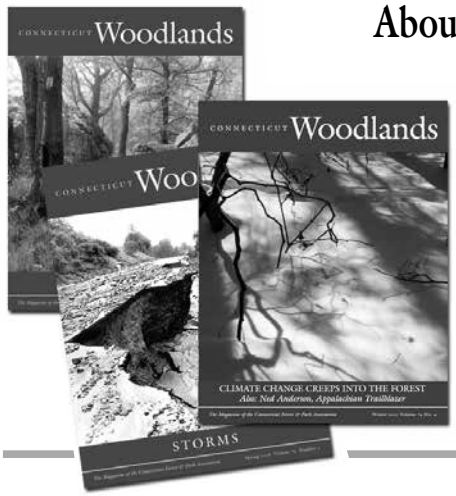
3. Local Advocates/Volunteers for Support

Local volunteers make a huge difference when they are willing to help with activities such as maintaining trails, providing eyes and ears to identify and nip potential problems in the bud, and advocating for resources to ensure properties are not neglected. About 25 state parks have started "Friends" groups, and these local stewards are becoming more and more valued for their efforts as state resources diminish.

Your support enables CFPA to keep fighting to ensure these three elements are in place for your public lands. The commissioners of the Department of Energy and Environmental Protection and Agriculture now have the legal authority to place conservation restrictions on lands they hold on behalf of the state (legislation that CFPA, the Connecticut Land Conservation Council, and others successfully fought for three years ago). CFPA and our partners are advocating for resources (staff and funding) to ensure public lands are adequately maintained, and this has been an enormous challenge as the state continues to reduce its workforce and program budgets. Finally, CFPA is supporting friends groups alongside the Friends of Connecticut State Parks, and by directly supporting the Friends of Goodwin Forest as well as encouraging new efforts such as a potential friends group for the new Auerfarm State Park Scenic Reserve in Bloomfield.

Your public lands deserve protection, and your ongoing support and involvement are essential to ensure that protection happens.

Eric Hammerling has directed the Connecticut Forest & Park Association since 2008. He lives in West Hartford with his family.



About Connecticut Forest & Park Association *and* Connecticut Woodlands Magazine

***Connecticut Woodlands** is a quarterly magazine published since 1936 by CFPA, a member-based nonprofit organization dedicated to conserving the land, trails, and natural resources of Connecticut.*

Members of CFPA receive the magazine in the mail four times a year.

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THE MISSING FENS: RARE AND GROWING RARER

The latest in an occasional series on the state's 13 imperiled ecosystems

BY JAMIE TOMMINS

From a snowy gravel road on the shoulder of Canaan Mountain, in Litchfield County, the flat Housatonic Valley looks like the work of a god-sized steamroller. A geologist, however, might revere this gulf between mountains more for its tectonic masonry. This immense stretch of lowland is Robbins Swamp, the largest inland wetland in Connecticut, but it is also perhaps the finest and most opulent marble sink that has ever been crafted, cut from the bedrock of the so-called marble valleys of northwestern Connecticut. Yet such elegant stonework does not explain the biologist who describes this region to me as "magical."

As I admire the view, snow melting down the slopes of the surrounding mountains pours into this sink like a faucet. In the process, the waters flow and filter over the calcium-rich, or calcareous, bedrock on its way to the valley floor. Since the drain of this sink is clogged by thousands of years of peat accumulation, the groundwater rises. When this happens—and only this exact sequence—conditions are ripe for the creation of what has been called the rarest habitat in North America: a small, unassuming patch of open wetland called a calcareous fen.

I'd come to glimpse this habitat before it disappeared. I would find it with the help of the Connecticut Critical Habitats Database and with a few tips from Kenneth J. Metzler, who had personally collected much of the data. Before retiring from his 30-year tenure as a botanist for the state geological survey, Mr. Metzler authored a paper with University of Connecticut biologist Dr. David L. Wagner that listed calcareous fens as one of the 13 most imperiled ecosystems in Connecticut. He'd warned me that the search would be difficult even if I knew exactly where to look. "I'm not sure what they even look like now," he said about the fens he'd mapped within Robbins Swamp a decade ago. "Ten years, even though it doesn't sound long, is a lot of time for the vegetation to change."

I was far from optimistic. A wildlife director with the Connecticut Department of Energy and Environmental Protection, which owns most of Robbins Swamp, had told me there were no intact calcareous fens there anymore. If that were the case, I wanted to see what had happened to them. It would help me understand what might become of the rest.

Found Only Here

In Connecticut, most fens go by the names of brooks, ponds, or swamps, to which they often bear an outward similarity. According to Dr. Erik Kiviat, a biologist and director of the Hudsonia wetlands research center, fens are characterized by low, shrubby vegetation on saturated but not flooded soils. However, unlike more common wetlands, classification as a calcareous fen depends on two specific criteria. First, the fen must sit on an area of calcareous bedrock, usually limestone or marble, and second, the fen must be fed by groundwater from subsurface seeps or surface springs. When the groundwater flows saturate the soil, calcium from the bedrock reduces its acidity, creating a habitat of either pH-neutral or slightly alkaline wetland—a calcareous fen.

Places where this combination can occur are extremely rare. The primary limiting factor is suitable bedrock, which in the Northeast is confined to a thin band of limestones and marbles called the Grenville Shelf Sequence running up the New York–New England border. Nearly all of the fens in the region occur along that line—but significantly, only where this bedrock is able to affect the chemical composition of a groundwater-fed wetland. Overall, such sites in Connecticut number somewhere between 10 and 15.

When geology matches hydrology, however, a fen can occupy a landscape in several ways, and most wetlands classification systems distinguish between multiple kinds of calcareous fens. The primary division is between "sloping fens," or spring-fed fens occupying hillsides, and "basin fens," which occur in saturated lowlands. Further distinctions exist between "rich" and "poor" fens, which are sometimes used to describe pH or nutrient levels, but Dr. Kiviat prefers simple

terminology to describe the complexity of fen habitats. "When I go out in a field and look at a fen, at least in this region, I see a mixture of different communities," he said. "I might see rich, medium-rich, and other stuff all mixed together."

To the previous criteria, Dr. Kiviat adds a third condition for identifying fens: vegetation. Perhaps the most important feature of fens is the habitat they provide for high numbers of rare plant species, many of which are found nowhere else—they are "faithful to fens," as Dr. Kiviat puts it. A common method of studying fens is to measure the presence and abundance of these species, which biologists refer to as "fen indicator plants." In Connecticut, these include a variety of sedges, notably the threatened Barratt's sedge, as well as flowering plants like spreading globeflower and the rare showy ladyslipper orchid, which was a favorite of Charles Darwin.

Like the presence of living corals in a coral reef, fen indicator plants are an indicator of the health of the fen ecosystem. By extension, their absence can signal degradation. In 2010, Dr. Kiviat published a study of fens in New York and Connecticut that selected sites based on the condition of their fen indicator plants. After narrowing his sample down to the healthiest sites available, the study included just two fens in the state of Connecticut.

A Habitat in Flux

The fens have existed in Connecticut since the end of the last Ice Age, but there is some debate about how they've remained intact into the present day. "These are not static habitats," said Tim Abbott, regional land protection and greenprint director at the Housatonic Valley Association. "They go through a process of natural succession."

Succession occurs when a low, open fen is colonized by taller and denser grasses, which in turn can give way to woody plants, tall shrubs, and, eventually, timber forest. Since most fen indicator plants are fairly short, the growth of a tall canopy deprives them of sunlight, driving them out of the habitat. To prevent this, fens need someone to pull the weeds—or perhaps eat them. "What probably kept these systems open historically was mastodons," says Mr. Abbott, "large grazers and browsers who went after the woody stuff." Later, the fens were sometimes cleared of woody plants by occasional Native American burning practices. Early European settlers drained many fens for crops, but remaining fens often benefitted from the presence of nearby farms. "What probably kept them open in the last 300, 400 years were a lot of cows."

The "really awful problem," as Mr. Abbot puts it, is that few of these disturbance sources occur in the fens today. "Most of them are on a new trajectory to a less diverse expression of a calcareous wetland complex with trees," he says. One question researchers try to answer is how long it takes to lose an open fen to natural succession. Without such disturbances as beaver, which can flood an area and revert a fen to an earlier stage, it typically takes just 15 to 25 years for succession into tall shrubland, and another 40 to 70 years for a forested swamp to predominate.

However, one study of a prehistoric fen in New York found evidence that fens have the potential to sustain themselves for thousands of years, raising the possibility that succession may not always kick in. Meanwhile, Dr. Kiviat's research suggests that one driver of rapid fen succession might be coming from modern humans. Undisturbed fens are low-nutrient environments, and most fen indicator plants have evolved to survive on relatively low levels of nutrients such as nitrogen and phosphorous. Yet these nutrients are also found in common sources of human pollution. Nitrogen is a component of many fertilizers, and runoff from developed areas can deposit those nutrients into a fen. Meanwhile, Dr. Kiviat explains that through a process called atmospheric deposition, phosphorous compounds emitted by Midwestern power plants arrive on westerly winds and settle in aquatic habitats on the eastern seaboard. He believes that increased nutrients levels from these sources can allow more common vegetation to move in and outcompete the fen indicator plants. In his research, Dr. Kiviat has found a correlation between high nitrogen levels and the presence of non-fen-specific vegetation. "It makes the habitats better for certain things, mostly common species"—tall marsh plants like cattails or woody shrubs—"but worse for any of the rare species."

A calcareous fen in the Phillips-Loydal Preserve in Southbury.

KATHLEEN GROLL CONNOLLY

The problem of invasive species, meanwhile, is unquestioningly the fault of human actions. The European variety of common reed, most often called by its Latin name *phragmites*, is a more robust strain of its native counterpart and grows rapidly in wetlands across the United States, including fens. Tall and dense, with thick roots, phragmites choke out virtually all other vegetation in an area when left unchecked. Other tall invasives such as purple loosestrife, barberry, and shrub honeysuckle seem to spread particularly quickly in the alkaline conditions of a fen. "They just go berserk in it," says Mr. Abbott.

Our most destructive impact on the fens, however, is likely still to come. Climate change is expected to bring both warmer and wetter conditions to the fens, which Mr. Abbott says will benefit many of the taller successional plants and invasives. And as Dr. Kiviat points out, many fen indicator plants reach the southernmost limit of their ranges in the fens of northwest Connecticut. Climate change will likely push those ranges north, removing species like the rare showy ladyslipper out of the state for good.

Endangered Gardens

Most of the remaining open fens in Connecticut today are the property of The Nature Conservancy, which began purchasing fens around the same time as Mr. Metzler and Dr. Wagner's "Imperiled Ecosystems" study. Mr. Abbott was a director of the conservancy's Berkshire-Taconic Program during this period, which operated with an emphasis on preserving the matrix of calcareous wetlands in the tri-corner region of Connecticut, New York, and Massachusetts. He describes this work as a good first step, but points out that considerable management is still needed to address the present and future threats facing Connecticut's fens.

"Your work is absolutely not done when you've put the 10-acre fen into conservation ownership," says Mr. Abbot. "If what you care about is the biodiversity of that rare system—the plant and animal species that they sustain, including one federally listed species—then there are a lot of stewardship implications."

That federally listed species is the bog turtle. Endemic to only two isolated regions of the eastern United States, bog turtles are so threatened that no sources for this story would confirm their present or even past locations. Small and described by Mr. Abbott as "adorable," the turtles are coveted

WIKIMEDIA COMMONS

Bog turtles thrive in calcareous fens. As invasive plants move in, they struggle to find open nesting sites.

targets for poachers, who sell them as pets on the black market. Dr. Kiviat characterizes the practice as "elephant ivory writ small."

In both their Southeast and Northeast populations, bog turtles depend on open, groundwater-fed wetlands with low vegetation for nesting sites. They also require the ability to move within a matrix of suitable habitat areas. In the Northeast, those habitats are calcareous fens, which means that bog turtle populations are deeply affected by incursions of invasives and successional plants in fens over time. "They live longer, sometimes, than their habitat does," says Mr. Abbott, who then mentions that the loss of one adult male per year from the largest single population in the state would be enough to wipe out that population relatively quickly. Ensuring the survival of the state's bog turtles will likely require managing the fens to protect and maintain open habitat where it still exists—again, pulling out the weeds. "You're gardening for rare plants," he says. "You're gardening for bog turtle."

But gardening in a fen is a bigger task than it might seem, and current practices to maintain the fens are limited. The Nature Conservancy actively manages phragmites on all of its fens, but David Gumbart, the land conservation director for the conservancy's Connecticut office, says that complete removal using herbicides is only feasible on a small scale; larger tracts are only mowed. Purple loosestrife is similarly hard to uproot, and doing so on a wide area can damage the soil; the next best thing is to merely cut the seed heads. In both cases, vegetation stature is improved for bog turtle nesting, but this comes at the expense of the rare fen plants. With limited resources, management of fens involves making choices about what is worth protecting.

There is, however, one agency in Connecticut with a mandate to protect the full suite of biodiversity in the fens. In 2015, the state DEEP released its updated Wildlife Action Plan, which listed calcareous fens among the 10 key habitats in need of future protection. The plan announces several actions to ensure the survival of fens, including "minimize habitat degradation from nutrient concentrations," "minimize habitat fragmentation," and "implement wetland restoration and enhancement projects," with the intent to implement these strategies over the next 10 years. Yet with the state currently dealing with a budget shortfall, the outlook for the Wildlife Action Plan is uncertain. Bill Hyatt, head of DEEP's Bureau of Natural Resources, informed me that because of the hiring freeze in place, positions vacated by retirements automatically disappear from the department. This applies even to positions that were created to fill a necessary role in the state's core environmental strategy. The department's most recent retirement, said Mr. Hyatt, was the position in charge of the phragmites control ward.

Today, a handful of fens in Connecticut remain outside either state or Nature Conservancy protection. Another state program, the Green Plan, provides incentives for DEEP or other conservation groups to increase the amount of land under conservation ownership, but neither it nor the Wildlife Action Plan include calls to purchase unprotected fens. At Robbins Swamp, a revised management plan in 2002 led to new parcels being added to the state's Wildlife Management Area there. Not included were the two fens identified at Robbins Swamp by Mr. Metzler's Connecticut Critical Habitats Database.

With the coordinates from the database in my phone, I parked at the marble quarry—Mr. Metzler's suggested entry point—and hiked north up the railroad bordering the swamp to the latitude of the fens. When I arrived at my bearing, the view was of an endless succession of trees.

I hiked in and around the forested swamp interior—technically trespassing, since this was unprotected land—but there was nothing else to see. Either the data was wrong, which did not seem likely, or the fen was no longer there. Ten years is a long time. What might the rest look like in 50?

I put the question to the man tasked with protecting most of the fens in the state of Connecticut. Mr. Gumbart's response: "Who knows?"

Jamie Tommins is a writer in Hartford. Connect with him at jamietommins.com. Our series on Connecticut's 13 imperiled ecosystems is inspired by a 1998 study by Kenneth J. Metzler and David L. Wagner for the state's Blue-Ribbon Task Force on Open Space.

TERESA PETERS

The copper beech in its last days. Church members considered it almost like a family member.

RIGHT TREE, RIGHT PLACE: AN ILLUSTRATION

A Durham church straddles the emotional fence between keeping a diseased giant copper beech and cutting it down

BY TERESA PETERS

A beloved giant copper beech tree stood on Main Street in Durham on the grounds of the United Churches. It was not the oldest or biggest, but this beautiful *Fagus sylvatica* had graced the campus since around 1870. Brides and grooms, the newly baptized, and confirmands posed for photographs under its spreading branches.

Surrounding the tree were Main Street, the historic Greek Revival-style sanctuary building, a parking lot, and a historic inn, now used as the church office. Directly under the tree's branches ran a sidewalk linking the buildings and parking lot. The tree had little wiggle room. Several years ago, a canker appeared on the once-smooth trunk. The church consulted an arborist. Treatments began, and that summer, John Andrulis, chair of the congregation's board of trustees, wrote to the congregation about "the declining state of our beloved copper beech tree." The arborist had applied the insecticide Xytect 2F and the fungicide Agri-Fos. A mulch of hardwood chips, donated by a member, was spread around the tree's base to provide nutrients. "The goal was to hopefully avert further decline of this estimated 150-plus-year-old tree," he wrote in an email to the parishioners, adding,

> Our tree has been in decline for some time due to a soil-born pathogen and began showing signs through bleeding cankers, small oozing spots dark in nature on the lower 5–6 feet of the trunk of the tree over the last couple of years.
>
> At the onset of the preventative applications and continuing during the summer months, unfortunately the liquid that drains from the bleeding cankers has an aroma that attracts the Ambrosia Beetle, and our tree was attacked.

TERESA PETERS

A crew from Allan's Tree Service removes limbs.

He explained that the beetles tunnel into the tree and release spores of a fungal symbiont, which attacks the already weakened tree. He went on in the email:

> Also noticeable during the summer months was wilted foliage mostly on the Main Street side of the tree. Borers are causing the wilted foliage on scattered branches, the foliage is wilting mainly on the street side of the tree and is discolored or turning brown prematurely. The branches and limbs affected will die and produce no foliage in the next year.

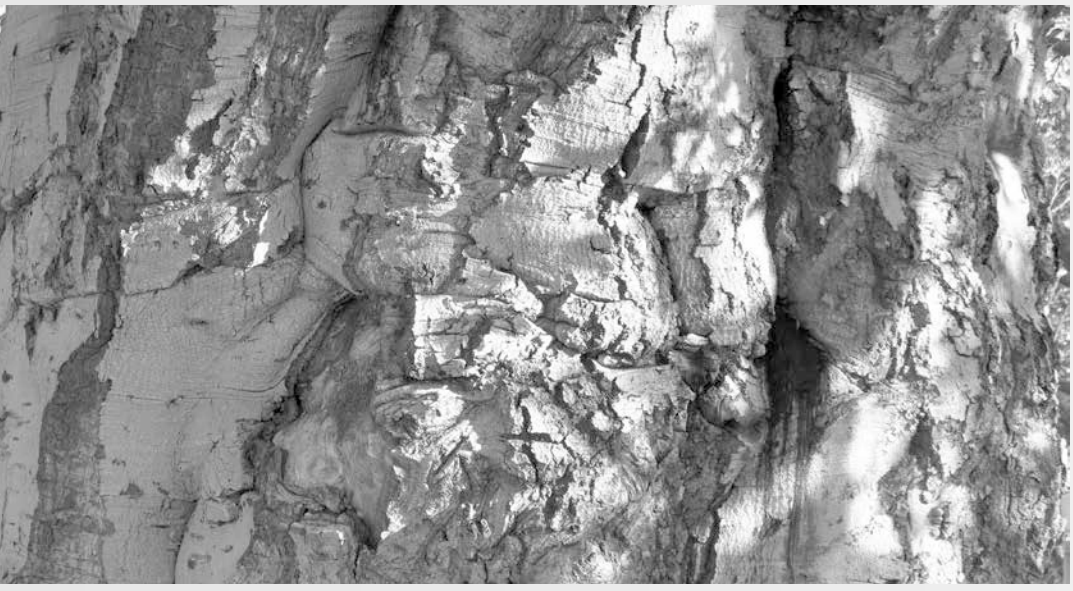
The council asked the arborist to look at the tree again. The news was grim. It was near the end of its life. It might live five more years at the most. Therefore, expensive treatments did not seem the right strategy. The arborist estimated the cost of removing it at between $4,000 and $5,000, and grinding the trunk an additional $1,000. The board of trustees met and decided to seek a second opinion because the tree meant so much, personally, to the congregation and its past generations.

Dying in Stages

Other professionals we consulted recommended elaborate, expensive treatment plans with no guarantees. As the office manager for the Connecticut Forest & Park Association, I knew several local foresters, so I joined the church's tree committee and sought second opinions from Chris Donnelly, a Connecticut Department of Energy and Environmental Protection forester and member of the Connecticut Urban Forest Council; CFPA Forester Tom Degnan of Burns & McDonnell, and Robert Marra of the Connecticut Agricultural Experiment Station. After checking out the tree, Mr. Donnelly emailed a response to the church:

> I agree with everything that you have written in the email sent to the members—it is a very good and succinct summary of a sad situation. I guess that the only thing that I might add to the discussion is that the tree does seem to be undergoing some sort of retrenching process, in which many of the lower limbs are doing well—and that the main problems seem to be largely isolated (at this point) to specific parts of the tree (one lead in particular). That may not be good news—trees often do not die all at once but often die in stages—which is what could happen with this tree, particularly if an effort is made to save those parts of the tree that appear to be doing well. I could envision a scenario by which continued treatments of the trunk keeps the lower branches alive, while the upper parts of the tree need to be sequentially removed as they die back. Probably not a great solution.

The church had very limited funds, and we continued with some inexpensive treatments, spreading oak chips around the base, watering during droughts, and prayer. Then, one day in September 2016, a huge bough broke off, crashing down onto the sidewalk, right on the spot where, that afternoon, volunteers had stood for hours loading supplies for the church's Durham Fair booth. It was not rainy or windy; this branch just fell. Now we had upset volunteers and an insurance liability issue on our hands.



TERESA PETERS

A pathogen attacked the tree, causing cankers.

An 8-Ton Trunk

The board of trustees contracted with Allan Poole, owner of Allan's Tree Service, to take the tree down. Mr. Poole had attended nursery school at the church and remembers playing under the tree as a child. The day his workers cut down the tree, October 24, 2016, Mr. Poole posted photos on Facebook. The crane operator who had been lined up to remove the tree trunk immediately backed out when he saw the photos. He did not think his crane could lift it. Measurement of the trunk calculated the weight at 16,550 pounds (8¼ tons). A wedding would take place on November 12. We had only three weeks to get the stump ground and get our campus cleaned up. Lining up a bigger (affordable) crane took up some of this precious time. Our plan was to have the trunk brought to City Bench, a sawmill specializing in making furniture out of large, historic trees. We had a generous donation designated for tree removal, so we had some money budgeted to transport the trunk to City Bench and cut some huge slabs, but we did not have enough to have the slabs kiln-dried. Without kiln drying, the slabs could warp.

As we looked for another crane, the huge trunk lying on Main Street caught the attention of Dylan Ward, a sawmill operator in Branford. He came into the church office and offered to move the trunk to his sawmill for free. The tree committee then let him know that we wanted some slabs for the church and that we wanted everything in writing. He agreed, but these negotiations took precious time from our timeline.

Professor Studies a Slab

Meanwhile, as the trunk lay waiting for a crane, a professor at nearby Wesleyan University contacted the church wanting a crosscut slab for his atmospheric research. We saved a slab for Dr. Johan C. Varekamp, who is busy studying it. He sent this update:

> We got the slab [to] Wesleyan (1050 lbs!) and planed it, ground it down, and polished it, and then put polyurethane

TERESA PETERS

Tree workers stand with an enormous cross-section of the trunk.

on it. It looks great. It will go on display with markers for "significant historic events," as voted by the student body and by the faculty for the last 120 years (that is my social experiment). On the back side, I am drilling out holes from every annual ring which we analyze for mercury, lead, nuclear bomb remnants and for stable carbon isotopes. The latter will tell us about the addition of CO^2 to the air from the burning of fossil fuels. The Hg [iron] and Pb [lead] records give a 120-year history of pollution for a tree next to the road in Durham. We expect to see the onset of the use of leaded gasoline and Hg pollution from coal burning. Someone else will study the width of the rings, their volume and mass, and reconstruct a climate record for the last 120 years (all with 1-year resolution).

I will use the slab as a class project ("Living in a Polluted World" class in Environmental Studies) that I teach this spring. The students will do most of the analyses in my lab.

Right Tree, Right Place

I won't go into detail about all the other moving pieces, among them: How to get pieces of wood from the beloved tree to parishioners who want to make a keepsake. Should we commission a bench to be made from the trunk? Possible fundraising to pay for kiln drying the slabs. Planning and conducting a memorial service on the tree's last day standing. Dealing with upset townspeople who did not realize it was coming down. Dealing with hate mail and, yes, even a death threat: "Whoever cut that tree down should be shot." (Did I mention that I joined the tree committee because I wanted to save the tree?)

Many in the congregation want to plant another copper beech there. They want to propagate and plant an offspring of our beloved tree from collected beechnuts. But copper beech trees are often called the "manor tree." You plant them out on an open part of your sweeping manor lawn so they can spread. Our tree was surrounded by a cluster of historic buildings, and we were lucky no storm caused it to fall on the buildings. If our tree had been lucky enough to be planted on a sweeping lawn—it might still be standing.

Teresa Peters of Durham is the office manager for the Connecticut Forest & Park Association and a member of the United Churches of Durham parish. She thanks Rick and Pam Huntley, Lorrie Martin, Pastor Jeanette Cooper Hicks, the Eames family, John and Lou Ann Andrulis, Nancy Manzara, and Allan Poole. She apologizes to Alex and Shiloh Estrom, whose wedding photos could not be taken under the tree they had loved.

A TREE THAT FELT LIKE A FAMILY MEMBER

This tribute and eulogy, written just before the copper beech was removed, appear on the website of the United Churches of Durham. Visit the page at ucdurham.org/copper-beech-tree.html.

Durham's cherished copper beech tree stood beside our congregation for about 125 years. From generation to generation, the tree witnessed countless baptisms, confirmations, weddings, and worship services. Many moments were captured under her boughs. Unfortunately, the beloved tree suffered from disease and insect infestation causing dangerous falling limbs. Arborists tried to treat these problems, but for safety reasons, the tree had to be cut down in October 2016. The tree trunk circumference was 184 inches and she stood 62 feet tall with a branch spread 92.5 feet wide. The spirit of the copper beech tree lives on as a cross section of the trunk is being studied in a course at Wesleyan University and will be on permanent display at their College of the Environment.

EULOGY FOR OUR COPPER BEECH TREE

This historic copper beech tree came on a boat in the form of a small sapling, along with a few others from England. Copper beech trees are ancient, slow-growing trees. All over Europe you can find them planted at crossroads as sacred symbols of wisdom, a reminder to take the wise path in life. This tree loved this land and grew. She grew proud, strong, majestic, and pointing toward the heavens. She stood as a witness to countless births and baptisms. Children have climbed her limbs and played in her shade. She has withstood storms and gales, floods and droughts. She loved this corner of the world. She watched a small community picnic grow into a booming award-winning fair. She has seen horses and buggies become all sorts of automobiles. She has witnessed many brides and all their changing fashions. Many a confirmation class has stood proudly photographed beneath her boughs. She has mourned our losses and heard the bells ringing from the church tower all these many years. She has loved this land and this community. And we have loved her in return. We are grateful for her ever-present wisdom, her shade, and her strength. Now as she drops her leaves, as her bark fades and her branches fall, she speaks clearly that her days are numbered. With heavy spirits, we must shepherd her into the next phase of being. She never really belonged to us, but she belongs to God's creation. She will return to the earth. Like all living things that are loved, her spirit will remain vital to us and we will grieve like any other loss.

A TRIBUTE TO **NORM SILLS,** APPALACHIAN TRAIL LEADER

A quiet Salisbury farmer led a major trail relocation

BY CHRISTINE WOODSIDE

Last summer, the Connecticut trails community lost a quiet leader who donated years of his life to the project of protecting the route of the Appalachian Trail and preserving its former route as the Mohawk Trail, now one of the Blue-Blazed Hiking Trails. Norman Sills of Salisbury, a farmer and later the town historian who volunteered for the AT's maintaining organization, laid out a 15-mile relocation along the Housatonic River between Cornwall and Falls Village in the late 1980s. He died August 28, 2016, in Salisbury at the age of 94.

Like other Connecticut trail leaders in his time, Mr. Sills made great strides in building and saving trails because he stayed active in three important volunteer organizations. He served on the Connecticut Forest & Park Association's Trails Committee, maintained the AT with the Connecticut chapter of the Appalachian Mountain Club, and was a member of the Appalachian Trail Conference board of directors during the history-making period when that group worked with the federal government acquiring land to protect the AT, during the 1980s and 1990s. He switched hats from his roles in one organization to the other effortlessly. At times, he wrote letters to one on the letterhead of another.

Mr. Sills coordinated a committee joining hiking volunteers and officials that researched how the federal government could permanently protect the AT in Connecticut. This group recommended moving the AT to the west, off private land (today's Mohawk Trail). Mr. Sills wrote to then CFPA director John Hibbard on December 29, 1987. "We are all very interested in retaining the present trail as a Blue Trail," he wrote, "and I believe our trails committee (CFPA) has agreed to accept it." The next summer, he appealed to Leslie Carothers, then the commissioner of the Connecticut Department of Environmental Protection, for help protecting trail access points for the Mohawk.

Mr. Sills walked, mapped, and cut a new route for the AT that, although flatter than the Mohawk route, provided hikers on the famous trail between Georgia and Maine stunning views of the river.

CFPA

Mr. Sills cut a new route for the Appalachian Trail in the 1980s and advocated for the saving of its former route as a Blue-Blazed Hiking Trail called the Mohawk Trail.

WIKIMEDIA COMMONS

The route of the Appalachian Trail along the Housatonic River, a project Norm Sills spent years realizing.

Saw Hikers from the Farm

Mr. Sills was born on June 29, 1922, in New York City. He graduated from Hamden Hall Country Day School, Mount Hermon School, and the University of Connecticut, where he studied agriculture. He served in the U.S. Navy during World War II and finished his degree after the war. Mr. Sills ran a dairy farm in Salisbury for 24 years, then worked as AT coordinator for the Appalachian Mountain Club for five years. He hiked the entire AT during 1984 and 1985. He completed the Long Trail twice and climbed multiple peaks throughout the Northeast.

Mr. Sills told me in 1992 that he had known nothing of the AT until he started noticing people walking along a section that

crossed a farm he rented in Salisbury for 17 years, near Rand's View. Seeing those hikers obviously changed his life. Besides his trail maintenance and committee work, he was a field editor of the Massachusetts–Connecticut section guidebook that the ATC publishes.

Mr. Sills remained calm during a turbulent time for the AT. A 1968 federal law established it as a national park, and throughout much of the 1970s and 1980s, the National Park Service worked with states and hiking clubs, identifying, buying and (at times) condemning land around the trail to protect the trail corridor. The groups recommended the western route. Some of the townspeople and property owners were not happy about the trail project, and the controversies ended up in the local press. NPS public hearings on the trail could be contentious, with people yelling, "Get it out!"

Thus, Mr. Sills became a public figure in the trail world. He knew every landowner along the Mohawk and AT routes, and he met with them and corresponded with them.

He told a reporter for the New York Times in 1988, "Even though some people are temporarily unhappy, in the long run this trail will be of benefit to the public forever." A decade and a half later, Mr. Sills told the Times that most people in Salisbury accepted and liked the AT.

Mr. Sills was predeceased by his wife, Nancy, and two brothers. His children are Peggy Huckel, Jeffrey Sills, Mark Sills, Ginny Filkins, and Jim Sills. He also leaves in-laws, nieces and a nephew, and seven grandchildren.

In 2010, I corresponded with 88-year-old Mr. Sills, who had a gmail account. He was trying to sell his collection of Appalachia journals (which I also edit). He was moving to Noble Horizons, a residential health care facility near the AT, to join his wife of 60 years, who was ill. He told me that he had written a privately printed book called *Love Letters from the Trail or Hiking the Appalachian Trail in the 1980s.* "That is intended for my children and grandchildren in case they might be interested. Books on hiking the AT are a dime a dozen, as you probably know."

Not a dime a dozen. I'll be contacting his family to see if I may read his book.

Christine Woodside is the editor of Connecticut Woodlands.

HOLLY DRINKUTH

Thomas Worthley shows Coverts seminar participants lumber made on a portable mill during the Saturday afternoon tools and equipment demonstration during the 2012 weekend seminar.

THE COVERTS PROJECT FOR FOREST LANDOWNERS

It's between you and me

BY STEPHEN H. BRODERICK

Connecticut's forests are vital to the health of our land. They clean our air and water. They provide homes, food, and cover for our wildlife. They provide timber and a host of other products we all need. In forests, our cherished hiking and other recreation activities take place. The list of reasons goes on.

Almost three-quarters of Connecticut's forestland are in private hands. Thousands of individuals and families own most of these woods that provide so many essential benefits. Sound stewardship of privately owned forestland is in everyone's interest. To put it another way, private forests do the public good.

Good forest stewardship requires informed decision making and an ability to sort through a daunting and often confusing array of choices: Is my forest currently good wildlife habitat, or could I be doing something to make it better? What should I do about this person who wants to buy my timber? Why are the leaves on my sugar maples turning brown? Such questions are challenges even for forestry professionals, and very few Connecticut forest owners are professionals. Further, with every passing year, fewer professional foresters are available to help the tens of thousands of woodland owners in the state. Currently, the state of Connecticut employs three foresters whose job descriptions include education and assistance for private forest owners. In a few years that number could well be 0.

Forest Owners Teach Each Other

Enter the Coverts Project. Created simultaneously in Connecticut and Vermont 34 years ago, the Coverts Project is designed to create and foster landowner-to-landowner communication channels through which forest stewardship information can flow. At its core, the Coverts Project is crafted on one simple, research-proven communications principle: People are most apt to adopt a new idea if a trusted peer has already done so and affirms its value.

For example, I love to fly fish, and I enjoy browsing through fishing tackle shops. Often, a shop owner will show me a new fly and wax eloquent about how it just catches fish like crazy. I'll take that under advisement and may or may not buy one. But if I get

on the water and my fishing buddy has that fly and is catching fish like crazy, you can bet the next time I'm at the tackle shop I'll be stocking up.

For almost 40 years, I've stood up in front of private forest landowners as a professional forester and tried to convince them that active, sound forest stewardship would be rewarding for them and good for the forest. Over the years, we've often followed up with some of them to see who actually acted on our advice. Many, many times, those who did had a neighbor or friend who was already practicing good forest stewardship and finding it rewarding. It was this affirmation by trusted peers, who had no other reason than their own satisfaction and fulfillment for promoting good stewardship that ultimately inspired others into action.

The goal of the Coverts Project has been to create and support hundreds of experienced, informed peer forest landowners, called Coverts cooperators, around the state. Cooperators are unbiased, volunteer stewardship ambassadors who share information and their experiences with others. They provide good examples of proactive forest management. They help bridge that gap between interest and action by their woods-owning neighbors.

The Three-Day Seminar

How does it work? Each year, a select group of woodland owners and environmentally concerned individuals are accepted to participate in a three-day training seminar. There they learn about Connecticut's forests and about where, how and why they grow as they do. They learn about different wildlife species, their needs, and how to provide for them. They learn about the many natural resource professionals and organizations available to help them, and how to put this knowledge to work on their own woodlands.

For many years the Coverts Project seminar has convened at the Yale Camp, a remote facility located in the heart of the Great Mountain Forest in Norfolk and Canaan. Imagine cabins and bunks and massive stone fireplaces, healthy and hearty meals, indoor and outdoor classrooms, and dramatic natural surroundings. Seminar participants gather on Thursday evening for introductions, orientation, and conversation by the fireplace. Most of the next three days are filled with lessons in the field and inside, covering forests, wetlands, and wildlife. Scientists, foresters, and other experts guide the field exercises and stimulate interaction among seminar participants. New Coverts cooperators leave the seminar with personal action plans to guide their stewardship activities at home and in their communities. Many cooperators establish long-term relationships with motivated and like-minded friends.

The seminar is offered at a very reasonable cost and includes meals, lodging, training and reference materials, and periodic follow-up workshops that are free to participants. The Coverts Project has always been and continues to be supported primarily by generous private donors—most notably, for many years, the Connecticut Chapter of the Ruffed Grouse Society, led by John Millington, Harry Henriques, Tom Ettinger, and Pete Kunkel. For 14 years now, Connecticut Forest & Park Association has been among those donors.

Cooperators Share Knowledge

In exchange, participants agree to volunteer as Coverts Project cooperators, returning to their communities and sharing what they've learned with others. Cooperators agree

- To develop a sound forest and wildlife stewardship plan for their own woodland or for a woodland that they are involved in managing
- To maintain, for at least one year, an up-to-date set of reference materials (provided by the Coverts Project) and be available to answer questions other landowners have
- To make an active effort to reach out to and motivate other woodland owners in their community

Although the initial commitment of a Coverts Project cooperator is one year of participation, many cooperators continue their interest and affiliation long after the year has passed. Today there are hundreds of them, some who have remained with the program for decades. Through this network of informed, enthusiastic individuals, many thousands of Connecticut landowners have learned about and are practicing sound forest and wildlife conservation. The seminar is just the beginning. The work these land stewards do on their own land and in their own communities makes a positive difference for our woods and wildlife.

Today, the Connecticut Coverts Project is one of approximately 20 similar programs in various states, some of which go by different names: Master Woodland Stewards, Master Forest Owners, and the Keystone Program, to name a few. All are based on these same principles and were built on the success of the original Coverts Projects in Connecticut and Vermont.

Change Your Life

If you are a woodland owner, land trust member, local land-use commissioner, or environmentally motivated local volunteer, and you are not already a member of this uniquely qualified group, please consider it. As several past Coverts cooperators have asserted, it might just change your life.

The Coverts Project is a proven, cost-effective means of promoting and fostering sound forest stewardship on thousands of forested acres in our state. The costs of the program are remarkably small compared with the benefits it consistently produces both for individual participants and the Connecticut public. In this era of shrinking public resources, the CFPA is playing an ever-increasing role in keeping this critically important program alive. From where I sit, CFPA and the Coverts Project are an almost perfect fit: an organization with 100 years of excellence in training and supporting forest-based volunteers, and a program that relies on such volunteers to effect sound management of our state's forests. Once again, CFPA is proving itself to be a conservation leader in an area where critically important impacts extend across our state and beyond.

Stephen H. Broderick is a certified forester. He was formerly the extension forester at the University of Connecticut, forester and program director at the Goodwin Forest Conservation Education Center, and the CFPA forester. He cofounded and directed the Connecticut Coverts Project for 25 years. Assisting in this article was UConn Cooperative Extension Assistant Professor Thomas Worthley, who directs the annual Coverts seminar.

Editor's note: For earlier articles about the Coverts Project, see "Under Coverts," by Thomas Worthley, Volume 75 no. 4 (winter 2011), page 16; and "The Coverts Project," by Christine Woodside, Volume 66 no. 3 (Winter 2002).

2017 CONSERVATION AGENDA
FOR THE LAND & PEOPLE OF CONNECTICUT

2017 POLICY PRIORITIES

1. * Support necessary second passage of a Constitutional Amendment bill that would protect State lands from being sold, traded, or given away by the Legislature without appropriate public process.
2. Maximize retention of healthy trees in the public right of way and ensure public notice requirements are followed.
3. Support authorizing legislation (a.k.a. "Project Green Space") that would enable municipalities to collect up to 1% of real estate conveyance fee on buyers to support local open space and farmland acquisition as well as park, forest, and trail management projects.

2017 FUNDING/RESOURCE PRIORITIES

1. * Publicize impacts to the public and critical conservation programs from enacted and proposed state budget cuts.
2. * Establish a new, secure source of funding for State Parks operations and maintenance.
3. Protect the integrity of the Community Investment Act (CIA) fund against raids and earmarks.
4. Support bonding for the State Recreational Trails & Greenways Program, Open Space and Watershed Land Acquisition program, Farmland Preservation Program, and Recreation and Natural Heritage Trust Fund.
5. Support funding and positions at CT DEEP essential for managing and acquiring parks, forests, and open space lands.
6. Support key Federal programs (e.g., Forest Legacy; Land and Water Conservation Fund; No Child Left Inside Act; New England Trail funding through the National Park Service; the U.S. Department of Transportation/ FHWA Recreational Trails Program and others) that further the conservation of forests, open space, and trails.

Sign up for Policy Alerts at www.ctwoodlands.org and/or contact our Executive Director, Eric Hammerling, via 860/346-TREE or ehammerling@ctwoodlands.org.

CFPA Public Policy Committee

Chairman David K. Leff	Eric Lukingbeal
William D. Breck	John C. Larkin, Lobbyist
John E. Hibbard	
Lauren L. McGregor	Eric Hammerling, Staff
Hon. Astrid T. Hanzalek	

POLICY PRIORITY #1: AMEND CT CONSTITUTION TO PROTECT PUBLIC LANDS

Resolution Act 16-1 – "A Resolution Proposing an Amendment to the Constitution of the State to Protect Real Property Held or Controlled by the State" – was passed in the 2016 session (as Senate Joint Resolution 36), and, as required for proposed constitutional amendments, must be passed a second time to allow the public to vote on this important referendum question in 2018.

This Resolution would amend the state constitution to require that State-owned public lands must receive a public hearing and a two-thirds vote before being given away, swapped, or sold by an act of the General Assembly. In our region, Maine, Massachusetts, and New York constitutions already include similar protections for public lands.

It is important to note that this constitutional amendment would not change the existing statutory processes that allow State agencies to administratively transfer public lands or convey surplus lands. These processes are well-summarized on the CT Council on Environmental Quality website on the page entitled "Guide to the State Lands Transfer Process."

Following are a few critical reasons why a more public process for selling, swapping, or giving away public lands is necessary:

Honoring Land Donors: Many public lands were donated to the state by families and individuals with the expectation that their generous gifts would benefit the public. A public process is an important way to ensure that the history of the land and donor intent be considered.

Preserving Benefits: Public lands are important to protect air and water quality, provide wildlife habitat and recreational opportunities, and serve as demonstration areas for positive land management. A public process helps to consider what values could be lost, and how potential losses would be mitigated or avoided.

Protecting Valuable Assets: State Parks like Hammonasset Beach or Talcott Mountain draw tourists, increase home values, improve public health, harbor wildlife, and both attract and keep businesses in Connecticut. Our state may be in fiscal crisis now, but thoughtful protection of public lands should help the economy rebound.

Securing State Investments: Public land is one of the best investments we have made in Connecticut over the past 100 years. State Parks and Forests attract over 8 million visitors, generate over $1 billion, and support over 9,000 jobs every year. The public lands that provide these and other benefits should not be given away without due consideration and public input.

Providing Places for Everyone: Public lands benefit those who have less. Many in Connecticut cannot afford to travel to the Grand Canyon, Yellowstone, or Yosemite National Parks. Connecticut's State Parks and Forests, most of which are accessible for free, are our local places for inspiration and an important part of our legacy to our children and future generations.

***Detailed write-ups on priorities with an asterisk are found on the following pages.**

FUNDING PRIORITY #1: SAVE SEASONAL WORKERS AND AVOID IMPACTS

Connecticut's State Parks draw 8-9 million people each year and are one of our most important economic, historical, and recreational assets, but they are chronically underfunded and now rank 49th in the country in the percentage of the overall state budget that they receive. Parks are also 100% reliant on the General Fund (only one other State in the nation is funded so lopsidedly), and are extremely vulnerable to cuts in tough times.

If CT DEEP is forced to reduce its General Fund budget by 10% in FY 2017-18, they would have to eliminate all seasonal workers. Seasonals perform a majority of DEEP's critical field functions, collect entrance fees, maintain public lands and buildings, and are the least expensive personnel with minimal fringe benefits, but their positions are completely reliant on the General Fund.

Without seasonals, the General Fund would lose over $6 million in Park and Campground entrance fees and other revenues which they currently collect.

Eliminating seasonals would impact public health and safety, recreation and facilities maintenance, and ultimately hurt CT's economy in the following ways:

Public Health and Safety Impacts

- 8-9 million annual visitors to State Parks and Forests would be on their own without lifeguards, trash collection, or public services.
- No wetlands management to respond to an outbreak of mosquito-borne disease such as Eastern Equine Encephalitis (EEE) which occurred in CT in 2013.
- No beach/water quality monitoring or informing the public when water quality is hazardous.
- No safety patrols by seasonal workers at campgrounds, boating areas, parks and forests, and other areas to help focus DEEP's understaffed environmental law enforcement officers.
- Increased response time to clean up hazardous materials spills, and minimal investigation into claims of environmental violations.

Public Recreation & Facilities Impacts

- All campgrounds would be closed, and DEEP would only be able to staff a limited number of park facilities for supervised day use only.
- Fish stocking and hatchery operations would be dramatically reduced, and no field data would be collected on the health of freshwater fish or their habitats.
- No Child Left Inside, the Summer Fishing Program, which provides outdoor education and urban fishing experiences, and other popular programs for families would end.
- Public amenities like the new nature center at Hammonasset Beach SP, museums, and nearly all park buildings would eventually be closed to the public.

Economic Impacts

The economic benefits currently generated and supported by State Parks, Forests, Wildlife Management Areas, boat launches, and other facilities could be lost if these public assets become liabilities through neglect. The current benefits to Connecticut are enormous:

- CT State Parks generate ~$1 billion/year and support 9,000 jobs.
- CT Forests (state and private) generate ~$3 billion and support 13,000 jobs annually.
- In Connecticut, 1,570,000 people participate in fishing, hunting, and wildlife watching activities which generate a combined $1.67 billion every year.

FUNDING PRIORITY #2: GENERATE REVENUES FOR CONSERVATION

To avoid cuts like eliminating seasonal workers that would hurt Connecticut, the General Assembly and Governor should support ideas that would generate revenues and permit revenues to be placed in a dedicated account for Parks to protect the value of CT's investments.

There are several ideas that we briefly describe here:

Passport to the Parks

A $10 charge added to 2-year DMV Vehicle Registrations would generate $14.3 million/year in new revenues for State Parks, offset the proposal to eliminate seasonal workers and seasonal operating costs, and help stabilize the level of service provided by Parks. For $5 per year, all residents with Connecticut vehicle registrations would get unlimited access to the State Parks and Forests. For comparison, one visit to a shoreline Park is $13, and a season's pass to the State Parks is $67. This would help CT DEEP redistribute more seasonal workers to managing land, wildlife, and water resources for the public since fewer seasonals would be needed to staff entry gates.

Dedicated Conservation Account

If State Parks and Campgrounds were able to use the $6 million they generate to maintain and improve Parks, they would be incentivized to be more entrepreneurial and provide additional or improved services to the public. A dedicated conservation account (which existed before it was swept in 2009) funded by revenues generated by the Parks and Campgrounds would also help CT DEEP plan further ahead in hiring seasonal workers and meeting ongoing operations and maintenance needs that bridge fiscal years. New revenues, such as rental fees for the cabins built for the State Parks' 100th Anniversary, and other relevant sources could be directed to this Conservation Account.

Iron Rangers or EZ-Pass

It is worth investing in Iron Rangers or another suitable technology such as an EZ-Pass that would enable people to pay a parking fee without having seasonal staff standing in toll booths all day. This would operate similar to the parking machines currently used in many towns that provide a receipt that you could put on your dashboard. There would be some moderate upfront equipment costs, but it would enable the State Parks to re-allocate their staff resources from toll booths at less well-visited parks, and generate revenues through adding Iron Rangers at State Parks that currently do not charge parking fees. These funds would have to be placed in a non-lapsing dedicated account for the program to pay for itself and then pay dividends for the Parks.

Eliminate Free Park Passes

The current policy of providing free Charter Oak season's passes to citizens over 65 is well-intentioned but is simply not sustainable. Connecticut is the 7th oldest state in the nation with a current median age of 40.5 years. Also, Connecticut residents rank 3rd in the nation for good health and longevity. More than 15% of our population is older than 65 today, and that percentage is expected to grow more than 100% over the next few decades. A discount on park passes is reasonable, but free passes are an unnecessary drain on state resources. Another option is to raise the age of eligibility for these special passes from 65 to 70 or even 75. Of course, if the Passport to the Parks is adopted, all expenses associated with Park passes can be eliminated.

CONNECTICUT STATE LIBRARY PRESERVES CFPA'S ARCHIVES

BY JAMES W. LITTLE

The history of the Connecticut Forest & Park Association is the history of how Connecticut forests were protected, how state parks came into being, how trails became a significant part of the landscape, and how a small but determined group of conservationists rescued Connecticut's land. Now the documents telling that inspiring story have been preserved and organized.

Five years ago, CFPA donated its archives to the Connecticut State Library so the public and researchers could more easily access the documents and photographs documenting CFPA's long and fascinating history. Now we're delighted to announce that the collection is organized, and we urge the public to visit the library and study these valuable papers. The finding aid for the archives has been posted online at ctstatelibrary.org/RG169_007.html.

Two individuals have been instrumental in organizing and preserving the files. Allen Ramsey, assistant state archivist, has taken a personal interest in the CFPA documents since the first day he arrived at the Middlefield headquarters on December 17, 2012, and took away boxes and boxes of papers, minutes, photographs, and artifacts. In short order, he returned copies of the minutes to us, and organized and catalogued paper files for easier access.

The documents are a wonderful way to learn how conservation developed in Connecticut. The Board and Trails Committee minutes are examples of how history is often made by just a few committed people.

► Old brochures explain the issues with deforestation and the danger of fire—a big concern in the early 20th century when tens of thousands of acres burned in the state all summer long.

► Papers recount the inspired process that went into the creation and expansion of the Blue-Blazed Hiking Trails.

► Letters tell why state officials approached CFPA in the 1920s, back when we were called the Connecticut Forestry Association, to ask for help in promoting state parks. And so we amended our name to the Connecticut Forest & Park Association.

► An original typescript of the pageant to celebrate the opening of Peoples State Forest, written by Elliot Bronson and performed by Hartford's social glitterati, captures the spirit of 1920s amateur theater and the enthusiasm of that grassroots land preservation campaign in which CFPA took a leading role.

There is just way too much to list here. The accomplishments of CFPA are really mind-boggling and too often forgotten. The library now offers a wonderful way for researchers to find information and continue the work of detailing, as a model for future action, the work done by CFPA pioneers.

The especially challenging part of the collection was handling the great number of photographs and slides. A dedicated volunteer, Marcia Furman, sorted and preserved these visual records. Ms. Furman, a student at the Simmons College Graduate School of Library and Information Science, worked as an intern at the state library, and continued working on the CFPA photos and slides after her internship ended. "I feel a strong personal connection to the photograph collection," she said. "Many of the images are of places familiar to me, including trails I had hiked with my children. I never knew who maintained the trails. . . . I now greatly appreciate the difficult work they do. Because trails were preserved and accessible to the public, I have my own photographs and many memories to cherish."

We thank the state library and especially Mr. Ramsey and Ms. Furman. Please visit the library and tell your state legislators you support continued funding of its good work. Like state parks and forest, the library is an essential resource so often taken for granted.

The secured Archives Reading Area in the state library's History and Genealogy Unit reading room is open Tuesday through Friday 10 a.m. to 4:15 p.m. and Saturday 9 a.m. to 1:45 p.m. If you do not already have an archives pass you will need to get one at the H&G reference desk. The reference staff will assist you with the researcher application process. For more information, please see the library's online guide to using archival records, libguides.ctstatelibrary.org/hg/using-archival-records.

James Little is the development director of the CFPA.

TRAILS DAY

Over 5,000 Connecticut families, friends and neighbors will lace up their hiking boots to enjoy the variety of outdoor activities scheduled for Trails Day 2017.

This event helps promote the beautiful trails, parks, open spaces and special places around the state. Many visitors will visit these sites for the first time.

Trails Day also supports CFPA. Be part of the celebration.

Visit the CFPA website to find an event near you and join in the fun!

Participate! Join us on the trails and discover something new.

Visit our online event directory to see what's in store this year.

* All photos contributed by Trails Day leaders.

Give Back! Trails Day is a great opportunity to volunteer and help make our trails and open spaces better.

CFPA'S PREMIERE EVENT JUNE 3 & 4, 2017

Register your event today at ctwoodlands.org/TD2017Reg

Family hike
Orienteering
Trail run
Historic walk
Long-distance hike
Paddle
Bike ride

Lead! Share your passion and lead an event.

Variety! It's not just about hiking . . . on the water, the mountain or in the city, Trails Day events have something for everyone.

Questions, contact Trails Day Coordinator Chuck Toal, trailsday@ctwoodlands.org.

LAND CONSERVATION

Amazing woman, amazing gift

BY LINDSAY SUHR

One could not find an individual who better embodied community and the importance of land conservation than Lois Barlow Cox Query. Mrs. Query's "fierce love of life" was witnessed by all who crossed her path, and she instilled in all her "spirit of adventure and can do approach" that was visible right up to her final months of life.

Mrs. Query was a founding member of the Tolland Conservation Commission (1998) and was elected vice chair. She served on the open space rating subcommittee, helping develop the property rating system and visiting and rating every property proposed for subdivision or potential preservation. She also served on the education subcommittee, conducting outreach to Tolland schools, organizing invasive plant seminars, and sharing her knowledge of the various tools for removing them. She also helped write the Tolland conservation plan, served on the town council's land acquisition subcommittee, helped write management plans for town preserved open space, and helped write and submit more than 10 Department of Energy and Environmental Protection Open Space grants that the town submitted and received. Mrs. Query also laid the groundwork for establishing an agricultural commission in Tolland by hosting a meeting of Tolland farmers in her garage to discuss promoting agriculture and ways they could work with the town to enhance the farming community.

Mrs. Query was the type of person who practiced what she preached. She owned a 100-acre parcel of mixed grassland and woodland that she actively managed for 25 years. Since the 1990s, Mrs. Query made sure that her land was properly managed by hiring forestry consultants and applying for grants to guide timber harvests and habitat restorations. She was an active owner and an Environmental Quality Incentives Program and Grassland Reserves grant recipient. Mrs. Query could regularly be seen building and maintaining bridges and trails on her property and throughout town. She cut and treated invasive plants throughout her property, maintained her pond, and managed her grasslands for rare bird species.

Mrs. Query never ceased to make life and conservation fun. She was an award-winning Coverts Cooperator volunteer who led many walks to teach people about conservation and forest management and was consistently invited back to speak with new Coverts volunteers about her successes. Friends remember the year she reserved a spot in the local Memorial Day parade, decorated her all-terrain vehicle with Coverts Project signs, and rode down Main Street passing out literature on forest stewardship. You could also find her dressed up as an invasive plant for town functions while handing out invasive plant brochures. She was an avid hiker and loved sharing nature with her many hiking group friends, always using her wonderful sense of humor to keep the treks fun and upbeat.

She seemed to have endless hours in her day, dedicating time not only to the environment, but also to various social and humanitarian efforts. Mrs. Query was a nurse by trade who taught nursing and disaster nursing for the American Red Cross. She managed and organized shelters during natural and human-made disasters. Mrs. Query also served in the United Congregational Church of Tolland, donated time to the Eastern Connecticut Health Network and local nursing home, and was an active member of the Tolland Library Association, the Tolland Garden Paths Club, and the Tolland Historical Society.

Even as Mrs. Query's health was declining, she made sure that the property she managed and cherished so much would be protected forever from development by donating it to the Connecticut Forest & Park Association in her will. Mrs. Query died in January 2014. CFPA took ownership of Mrs. Query's 100-plus-acre woodland at the very end of 2016 and hopes to enhance the trails and continue the forest management that Mrs. Query so dearly loved. Her legacy "of strength and vision, service and good works, and a commitment to the community she loved" will live on in the protection of this property and in each person she touched.

COURTESY OF THE FAMILY

Lois Barlow Cox Query

Quotes from Friends and Colleagues

► "Just a wonderful person, full of great energy, fantastic attitude, and fun to be around." —Dan Donahue, Forester & Director of Land Protection & Stewardship at the Norcross Wildlife Foundation

► "Her knowledge of the town and friendship with many landowners has helped in conveying the message of conservation and preservation of land" —Philip Moreschi, former Chair, Tolland Conservation Committee

► "I cannot think of Lois without thinking of the outdoors. Hiking, gardening, or in her antique racecar crossing our great country. She adventured everywhere and we all lived the adventure vicariously through her. The oceans, rivers, mountains but most especially the woods called to her. I'm not sure whether it was the joy of planning the next trip or the execution of it that brought her the most happiness. Those adventures could be as grand as Machu Picchu or as humble as her trails in Tolland. Lois loved the land and was not timid in sharing that love with those lives that she touched. We are all blessed to know her and share her adventures. We are blessed to share her legacy." —Kathy Bach, Neighbor and Friend

Lindsay Suhr is the land conservation director of CFPA.

JOHN HIBBARD DONATES 105 ACRES

John Hibbard, whose pivotal career directing the Connecticut Forest & Park Association ran from 1963 to 2000, has continued his lifelong dedication to conservation with a gift to CFPA of 105 acres of his family forestland in northern Woodstock.

The land is a rolling mixed hardwood forest with stone walls and extensive wetlands, making it very valuable for conservation. It abuts 23 acres owned by the town of Woodstock. CFPA sees potential for a future trail loop and educational events on this land.

Mr. Hibbard grew up in Woodstock, graduated from the University of Connecticut in 1958, and in the five years before beginning his career at CFPA he served in the U.S. Army and worked for the U.S. Forest Service. Among his achievements while leading CFPA were his work with a coalition to acquire Talcott Mountain State Park, his work for the 1971 Landowner Liability Law that encouraged the expansion of hiking trails, work on the effort to protect the Appalachian Trail in Connecticut, leadership in the effort to acquire Haley Farm State Park, and his work toward the state's Forest Practices Act.

Mr. Hibbard's example inspired CFPA's establishment in 2001 of its Hibbard Trust for Land and Trails, which provides a readily available source of funding for CFPA to act quickly in acquiring critical properties and easements. One of the trust's significant acquisitions came in 2010, when CFPA joined with the University of Connecticut and the Norcross Wildlife Foundation to conserve 531 acres of forest, part of which surrounds a three-mile section of the Blue-Blazed Nipmuck Trail.

CFPA

A stone wall in the forested 105-acre parcel in Woodstock John Hibbard has donated to CFPA.

Throughout the year, the New England Trail poet-in-residence, **David K. Leff** of Collinsville, Connecticut, presents poetry in this space to amplify understanding of the 215-mile-long trail. The NET is the first of the 11 national scenic trails designated by the U.S. Congress to get its own poet. The trail begins at Long Island Sound in Guilford and continues north through the traprock ridges and backcountry of Connecticut and Massachusetts to the New Hampshire border.

Featured poet:

AMY NAWROCKI

Amy Nawrocki is the poetry editor for *The Wayfarer* and the author of five poetry collections, including *Four Blue Eggs* and *Reconnaissance*. Her work has appeared in many print and online publications including *Fox Adoption Magazine*, *Sixfold*, *Coastal Connecticut Magazine*, *The Loft Poetry Anthology*, and *Wildness: Voices of the Sacred Landscape*. She is the co-author of *A History of Connecticut Food, A History of Connecticut Wine,* and *Literary Connecticut*. She teaches at the University of Bridgeport and lives in Hamden with her husband and their two cats.

RAVENS OF WEST ROCK

Along the ridge, the Old Baldwin Parkway
lays the augury of lost asphalt, but I trek
over the Blue Trail, preferring the variability
of stepping stones and scrub oaks, forgoing
the straight path of buzzing mosquitoes
for the low chuckle of unseen birds.

Unknowingly, I believe first in grouse and turkey
then predict crow forms, unaccustomed
to the throaty, mechanical gurgle of their calls.
Ears betray them before the eyes do.

Emerging from the blazes, I see their outlines
stenciled on high tension wires, scanning the valley
and screaming at my intrusion. Big as hawks
and burly as storks, they circle, landing
with deliberation on iron trees. In my feet,
I feel their *gronks* and *kraa-kraa-kraas*
vibrate and unsettle the cloudless day. I follow

their cries with my eyes. I want to distinguish
them from others, to prove my ornithology,
to understand the echo of black and the vision
of voices tactile in their cacophony. As I watch
they turn into metaphors, witches whose wings
signal the purple of bruises, demons' kin fit
for gothic poems and graveyards.

The nest is nearby; the mother is angry.
Spells are cast. They are, after all, soul devourers
who tear me apart with their darkness,
who send me back to the forest wanting
evermore to be one of them.

OTHERWISE TUNDRA

The turn off to Lake Otherwise is wet
and treacherous. We hike along the margins
where thick flat stones teeter over sod
and loose bramble, otherwise
pulling tired legs and twisting ankles.
Pausing to share water and dried berries,
we tighten laces and call out
to far away caribou gods who otherwise
would not hear us.

The ascent is too migratory for humans
prone to uneven suffering who
otherwise ignore visions of glacial talus
drying in cloud cover. Such failures demand
engineered wood planks, a succession
of stairs, sequestered small rocks
that otherwise pile like unsorted souvenirs.

The final split foresees the lookout
but the lake is invisible and we must navigate
by cairns and consider lichen
in the empty sage-gray hyperbole
where otherwise herds would come
in hungry flocks to paw
at tundra with boreal hooves.

WIKIMEDIA COMMONS

Woodcocks arrive in New England in early spring and then begin their fascinating rituals.

SPRING AT THE SINGING GROUND: THE AMERICAN WOODCOCK

BY KATHERINE HAUSWIRTH

Early one spring, so early we still needed to zip our winter coats to our chins, I took my 12-year-old-son Gavin and his friends to a talk and walk in Westbrook. We were at the Stewart B. McKinney National Wildlife Refuge's Salt Marsh Unit, and it was time for the annual presentation on the American woodcock. A small troop of interested souls gathered in the refuge's stone headquarters as dusk started to encroach.

American woodcocks are listed by the International Union for Conservation of Nature and Natural Resources as a species of "least concern," owing chiefly to their extensive native range, which includes the United States, Canada, Mexico, Saint Pierre, and Miquelon. After a winter in warmer climes, these birds start northward migration early in the new year, arriving in the Northeast from mid-March to early April, when courting and breeding begin.

I felt jumpy inside. Before seeing the birds, there was a slideshow to view, and I knew that missing dusk would mean missing the magic of these birds' springtime courtship ritual. But after a while, I relaxed into it. I knew that the presenter, Patti Laudano, has been giving these talks for more than 10 years and has her timing down to a science. Ms. Laudano, president of the Potapaug Audubon Society based in Essex, helps monitor the local population of this particular species to inform Connecticut Department of Energy and Environmental Protection data.

I wasn't the only one who was jumpy. My gaggle of boys squirmed, and this was no reflection on the presentation. They were just being their age, overflowing with boundless energy. And they wanted to meet these birds, live and in person! But we became more attentive when the audience was asked to play a visual game with the projected photographs: find the American woodcock! Both sexes of the bird are virtually indistinguishable from the leaf litter. They sport a mottled brown camouflage, which comes in especially handy when the females make their shallow nests on the ground. Even when a camera lens captures them front and center, we can only detect them with a great show of peering and squinting at what appears to be a nondescript pile of leaves.

Woodcocks may blend in, in terms of color, but they break the typical bird mold in other ways. They have short legs and an overall chubby look, and their exceptionally long, thin beaks—designed for digging up earthworms—help even amateur birders identify them. It's not only looks that make them stand out from the avian crowd. The males are rock stars, in terms of their courtship performance. In fact, the birds require an open tract of "singing ground" to make it all happen.

Our group stepped out into the chilly air and our footsteps crunched toward a flat, grassy section adjacent to the forest. My eyes adjusted to the grainy gray of the evening, and I watched the shapes of the boys doing their adolescent thing—making little jokes, bumping into each other, checking their phones. I worried about whether they'd be able to hold still long enough to fully take in the moment (and not disturb the older members of the crowd). Soon, though, we all fell silent. With a bit of direction from Ms. Laudano and other folks in the know, we strained to hear the first clue that a male was nearby and ready for love: "*PEENT! . . . PEENT! . . . PEENT! . . . PEENT*!"

This male woodcock, who remained hidden from view, was projecting his somewhat nasal voice in all directions, calling while slowly turning in a circle on the ground. And then he shot up into the sky. We craned our necks and swiveled our heads. Fingers pointed and hushed voices gave a play-by-play—"there he is!"—"no, *there*!"—"he's over there now!!"

His flight had an erratic pattern, and the surprising whistling sound made by his feathers in flight helped us locate him. As he descended, he emitted another noise, which some describe as "whimpering chirps." Then he landed about where he started, repeating the ritual in the hopes that a female might respond. Eventually his performance stopped, so I hope he had some luck, although it would be hard to tell in the dark what exactly happened. His success would have meant that the pair mated—and let's leave this part of the story discreet.

The brown, pink, and gray mottled eggs that result from woodcock pairings hatch within about 20 days, and the small families on the forest floor (which lack the regular presence of a father) stay in the nesting area until it's time to fly south again, in October.

The mothers are quite protective over their nests. Ms. Laudano remembers her first encounter with a woodcock—a mother bird who must have stayed with the nest until Ms. Laudano practically stomped on

continued on page 25

QUINNEHTUKQUT COOKING STORIES

ADOBESTOCK.COM

BY JEAN CRUM JONES

Shortly after marriage, I found a box of arrowheads in my husband's desk. Jones family members through four generations collected arrowhead chips from one area, not far from a stream near the southeast border of our farm. Availability of game, fish, a large fertile field, and nearby firewood indicate this spot might have been a good village site for a small band of American Indian families. Not far away is a hill that would have provided a windbreak from the winter winds. The Jones family believes that American Indians must have camped here.

We have a high hill on the farm that is called Israel's Hill. How did it get its name? The story goes that there was a Native American guide in the late 1600s to whom the Stratford settlers gave a Christian name, Israel. In the late autumn, Israel would lead some Stratford men to this hill to hunt for deer. Invariably, they were all successful and returned with venison for their families. Even today, this place remains a good place for us to harvest deer.

From the Jones family, I inherited a small collection of ash woven baskets made by a Native American farm worker who lived in the small farmhouse down on our valley farm. My father-in-law, Philip Jones, remembered visiting "Indian John" in the 1920s. The upstairs attic was full of leaves and herbs drying on long strings strung across the whole space.

The invisible presence of Native Americans is everywhere in Connecticut. Our state name is from the native word "Quinnehtukqut," which means land beside the long, tidal river. The tribal past seemed to surround me on the farm, and as soon as I moved there I wanted to know more about the people who shared the land of which I, too, was now a caretaker. Fortunately, my new next-door neighbor, my father-in-law, had long held the same interest. Philip was a great admirer of the native peoples of Connecticut and their nature knowledge as well as their respect for the land. He served as a Connecticut Forest & Park Association director for many years, then he went on to become a founding trustee for the Institute of American Indian Studies in Washington, Connecticut. This is a unique educational and research center for Indian life in New England. The institute is dedicated to discovering, preserving, and disseminating the pre-European history of Native Americans. I learned much from Philip as he shared stories about the Native Americans in Connecticut while he served on this board of trustees. I was especially impressed by the core spiritual belief of the Native Americans that the goodness of the land was for all.

Native Foodways: Hyper Seasonal

Philip gave me an American Indian cookbook called *Native Harvests* by ethnobotanist E. Barrie Kavasch. From this book, I began learning about American Indian foodways. Ms. Kavasch, who lives in Bridgewater, published the book first in 1979 (Random House), expanded it in 1998 (Birdstone Publications), and made further additions in 2005 (Dover Publications). The Native Americans who greeted the first European settlers to New England preceded them by more than 9,000 years. Over the centuries, the Native Americans had learned the secrets of cultivating and living off the bounty of the landscape. As a dietitian-nutritionist, I became impressed by the superb diet of these pre-contact New England natives, based on the variety and abundance of healthy foods they ate. They consumed a hyper-local and hyper-seasonal diet. The early European explorers testified to the agile and vigorous bodies of the natives, who demonstrated remarkable endurance and stamina. The squaw cooks were skilled and knowledgeable in gardening, gathering, and preparing foods in a wide variety of ways. The women experimented with herbs and developed intricate methods of soaking, grinding, stewing, and baking that maximized the flavors of the natural ingredients that came from their homelands. They fed their families well.

To the very early English settlers, the Native American diet and way of life was strange. They did not graze livestock. Cows, pigs, sheep, and chickens were European animals, nor did the Indians consume dairy products. The Native Americans did not grow wheat or any other grain that English settlers recognized, nor did Native Americans fence any farm fields. The Native American gardens looked rather untidy to English eyes. Their bark homes seemed impermanent, as did the custom of many of them, moving from a summer camp to a winter shelter place. But, as the first English newcomers began starving after their arrival in the early 1600s, they began to eat the unfamiliar foods offered by their hospitable Native American hosts. Eventually, many of these Native American foods have come to define our iconic New England way of eating today. These include our clambakes and lobster dinners, raw and stewed oysters, clam and corn chowder, baked beans, corn on the cob, cornbread, roast turkey and duck, succotash, pumpkins, squash, berry cakes, nut breads and cranberry sauce.

Of all the natural food sources for the Connecticut native, the most dependable was fish. Generally, Native American villages were located near a harbor, lake, or stream. These waters furnished valuable, readily available sources of high-protein fish year-round. Fishing by the river yielded herring, shad, salmon, bass, pike, perch, trout, turtles, eels, and much more. By the sea, Native Americans harvested oysters, clams, scallops, crabs, and lobsters. Out in a canoe, they caught cod,

bluefish, swordfish, halibut, and seal. During winter, they would engage in ice fishing on frozen streams and rivers.

Game was also important and well liked. Their woodlands were regularly burned once or twice a year and appeared open and park-like. A primary purpose of the regular ground fires was to drive game for hunting (though there were many other ecological benefits). Venison meat was one of their staples, and they hunted for a supply each fall. Bear furnished juicy steaks as well as a delicious fat to use for cooking. Raccoon, beaver, otter, skunk, rabbit, woodchuck, squirrel, rattlesnake, frog, whale (if washed ashore)—they ate meat of many animals and wasted no part of the animal. Native Americans did not eat carnivorous animals, such as wolves. Also enjoyed by the natives were the multitude of wild birds that lived in the marshes or woods—ducks, geese, partridge, woodcock, quail, pigeons, and turkey.

Daily Grinding of Maize

In southern New England, the staff of life was maize, and there were innumerable ways of preparing it. Maize could be cooked by itself or in a variety of combinations with fruits, vegetables, nuts, flesh, and fish. For many dishes, the kernels had to be ground into meal or flour, so grinding was a daily activity. As valuable as maize was for natives' diet, beans were just as important. Most often, beans and corn were cooked together—"sutsguttahhash." Today's dietitians refer to combining corn and beans together as complimentary proteins, because each plant furnishes a missing amino acid for the other, so together the mixture is as nutritious as an animal protein serving. Succotash was the central feature of Quinnehtukqut cookery and the most common meal. Also produced in the garden were squash and pumpkins. They had an important place in the diet and were used—young or mature, fresh or dried—as a main dish or mixed into bread or porridge. Squash and pumpkin seeds were a delicacy and were either roasted or dried for multiple cooking or medicinal uses.

The native peoples accumulated an extensive knowledge of wild plant usage through thousands of years of observation and experimentation. Some "wild" vegetables they used in their cooking included Jerusalem artichoke, fiddlehead ferns, lambsquarters, chickweed, purslane, milkweed, cattails, wild leeks, groundnuts, arrowhead plant, and yellow pond lilies.

Children were enlisted to harvest the wild berries of the meadows and open woods. They gathered strawberries, raspberries, blackberries, blueberries, huckleberries, gooseberries, and elderberries. Berries were eaten fresh, added to breads, or dried for winter use.

Another very important source of food for the native peoples were food nuts. They conserved acorns, beechnuts, black walnuts, butternuts, chestnuts, hazelnuts, and hickory nuts. These were enjoyed raw or roasted, and if ground, they could be mixed with water to create a beverage or they could be used as a seasoning in cooking. Sugar and salt were not available so were not used in native cooking. (Northern New England tribes tapped maple trees for syrup.) The hickory tree was especially prized for its sweet-tasting nuts. The starchy and protein-rich American chestnut was easily harvested, and these nuts were enjoyed for their sweet taste. Chestnut meal was commonly used in making breads and puddings.

TASTING NATIVE CONNECTICUT FOOD

It seems that Native American cooking has the makings of a culinary trend, but relatively few restaurants in this country focus on American Indian dishes. When the federal government forced tribes to move to new areas, this upended the tribes' foodways. There are almost as many cuisines as tribes, and Native Americans have preserved their way of cooking mostly through oral tradition and within families.

A highly regarded café, Mitsitam, operates at the Smithsonian's National Museum of the American Indian in Washington, D.C. The food is set up in a series of stations, each dedicated to a different region of the country. Here in Connecticut, the Mashantucket Pequot Museum runs a café that serves some authentic food dishes of the Eastern Woodlands Indians. Chef Sherry Pocknett, a member of the Mashpee Wampanoag tribe of Cape Cod, is the food manager. She also teaches indigenous Connecticut cooking classes in the winter.

From the woods, meadows, waters, and cultivated fields, the native Connecticut tribes enjoyed a wonderful diversity of foods from this fruitful land and lived well. Catastrophically, their way of life disappeared. Their place names for our rivers and hills remain and remind us of them. Their invisible presence is challenging us today to love our earth and to remember their heritage. A hike along one of their ancient trails restores our senses and our souls. We remember the sacredness of honoring the land that feeds and belongs to us all.

Jean Crum Jones lives with her farming family in Shelton.

WOODCOCKS *continued from page 23*

her—suddenly flew up into her face. I hope for such an exciting moment one day, willing to risk the palpitations it may invoke.

Although this species is of "least concern," it's worth noting that the American woodcock population is decreasing overall in its usual areas of occupancy. Fewer and fewer old farms are reverting to forests, and these have been the best locales for providing the multiple habitats that the bird needs. According to the Connecticut DEEP, no less than four habitats are needed to support the woodcock. The open areas that are singing grounds for these birds are needed for courtship, and they are also favored for nighttime roosting in the summer and early autumn. Young, open hardwood stands that primarily contain seedlings and saplings serve as nesting and brood-rearing areas. Similar stands with a dense overstory are used by the whole age gamut for daytime feeding and resting, and fertile, moist areas hosting alders and second-growth hardwoods can supply the many earthworms needed for nutrition.

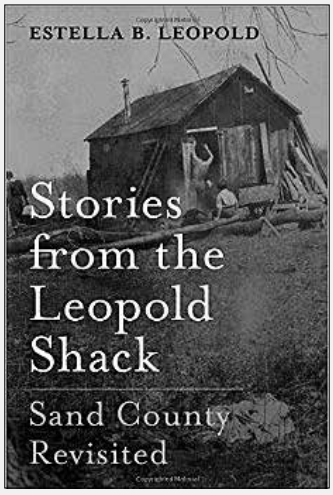
When spring arrives, bringing the American robin, tree buds, and fresh trickles of water, the very particular needs of the American woodcock require us to do more than simply look out our windows to see if these awkward and endearing creatures have appeared yet. But the pilgrimage to their territory has, for me, become a much-beloved milestone that marks how I welcome spring. I hope I'll see you at the singing ground, or trodding the leaf litter extra carefully, as the pace of our Connecticut spring begins to quicken.

Katherine Hauswirth lives in Deep River and blogs at fpnaturalist.com. Her new book, The Book of Noticing: Collections and Connections on the Trail *(Homebound Publications) will be available in May.*

STORIES FROM THE LEOPOLD SHACK: SAND COUNTY REVISITED

By Estella B. Leopold.
New York: Oxford University Press, 2016. 325 pages

BY DAVID K. LEFF



Anyone who has honed his or her sense of wonder or found inspiration in Aldo Leopold's iconic *A Sand County Almanac* (1949) will delight in this heartening memoir by his daughter. Aldo Leopold (1897–1948) was a graduate of the Yale forestry school, an employee of the U.S. Forest Service in the Southwest, and creator of the discipline of wildlife management while teaching at the University of Wisconsin in Madison. He was first to establish a moral basis for conservation by asserting a "land ethic," which "simply enlarges the boundaries of the community to include soils, waters, plants, and animals, or collectively: the land." He became a pioneer in ecological restoration after purchasing 80 acres of degraded farmland in central Wisconsin where he turned a decrepit barn into a family retreat called "the Shack."

Born in 1927, Estella first came to the Shack with her father, mother, three brothers, and sister in 1935 when she was 8 years old. The greater part of the book is devoted to rebuilding the Shack and the family's efforts to restore the land with trees and native prairie plants. It was, she writes, "a reciprocal exercise in restoration—every weekend we worked on restoring the land; every weekend it restored us." She also covers a natural history of the land, its ongoing restoration to the present, the permanent preservation of the property, and the creation of the Aldo Leopold Foundation to continue her father's work.

The whole family pitched in to fix up the Shack. She lovingly recounts her father reframing windows, her brothers searching for building materials at the Madison dump and for driftwood lumber along the nearby river, and the women mixing cement for the chimney. They built bunks for sleeping and various pieces of furniture, including the Leopold bench, a simple structure of six pieces of lumber. The endeavor joyfully "carried us all, a family of seven, into a communal work project."

"The place became a theater in which we could live simply, experience what was growing around us, and enjoy all of it." Year after year, they spent days planting pines, tamaracks, mountain ash, and other trees as well as prairie vegetation they often found along railroad and highway rights of way where cow, plow, and mower hadn't wiped them out. In their attempt to restore native plants, they experimented with burning their fields and other techniques.

At the Shack, the family chopped wood and enjoyed the "vinegary smell" of freshly split oak. They hunted, practiced archery, fished, banded birds, kept a phenological journal, gardened, and swam. They watched a variety of wildlife from a muskrat swimming beneath ice to the sky dance of a woodcock. We meet the family's pets from dogs to a raven to a fox squirrel. We share their enjoyment using simple hand tools and their evenings of singing accompanied by guitar.

Readers also gain insight into Aldo Leopold as a man of compassion and kindness. Estella calls him "a great storyteller," which "made him a good teacher." He was a humane person who sought release of two men jailed after vandalizing the beloved Shack in 1939. Her mother (also Estella) is vividly rendered and a full partner in the Shack enterprise. Author Estella finds in her parents "the nucleus for the pervasive harmony" of their lives and "the happiest married couple I ever knew."

Young Estella and her mother were the last family members to see Aldo Leopold alive after he assigned them tasks to help control a fire on a neighbor's farm. He marched off to the conflagration with a backpack pump and suffered a fatal heart attack. After the news broke, "a heavy weight hung over the two of us. . . . we felt an emptiness that cannot be described."

The book tells how Aldo Leopold's legacy was both broad and deep. All five children went on to become distinguished scientists interested in ecological systems. They preserved the Shack and its land, and each adopted what Estella calls "the Shack idea." In places as far as Costa Rica, each found a rural retreat "for feeling close to the land, a place to work with the land" and "observe the ecosystem and its fauna."

Estella's story "is about two things: familiarity with nature and togetherness." It is told with insight and tenderness. She ends with the observation that "natural beauty can set the stage for discerning poetry in the land. It can also be a basis for perceiving ethical values in one's life."

David K. Leff, the poet-in-residence of the New England Trail, is the author of many books about New England, adventure, and the sense of place. He lives in Collinsville.

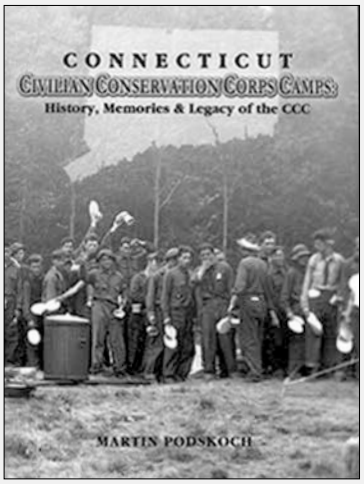
CONNECTICUT CIVILIAN CONSERVATION CORPS CAMPS: HISTORY, MEMORIES, AND LEGACY OF THE CCC

By Martin Podskoch.
East Hampton, Connecticut: Podskoch Press, LLC, 2016. 543 pages

BY DAVID K. LEFF

The Civilian Conservation Corps, better known to most as the CCC, was an initiative of President Franklin D. Roosevelt's New Deal. The CCC was the outdoor component of the public work relief program. The CCC put unemployed, unmarried men to

work on natural resources projects, primarily in state and federal forests and parks. Between 1933 and 1942, the federal program helped families survive the Great Depression when civilian jobs were unavailable by providing training, direction, food, shelter, and a small salary for more than 3 million young men. Martin Podskoch's voluminous book about Connecticut's CCC camps was a labor of love. Mr. Podskoch outlines the history and organization of the CCC, both nationally and in Connecticut. His most important contribution is his recording and presenting of the personal stories of CCC alumni and their families.



A good place to start this book is to sit down in a cozy place, turning the pages randomly, looking at the many pictures and their captions. Doing this I found myself delving deeper and better understanding Podskoch's approach. He includes a touching treasure trove of recollections and memories of a generation that fought World War II. Here are their stories, mostly told by themselves; other times by friends and family. The author devotes 37 pages to the history and organization of the CCC. Next, he covers the histories of each camp. In, for example, in the chapter "Clinton/Chatfield Hollow State Park/Killingworth," he describes Camp Roosevelt, beginning with details of its location, purpose, organization, and administration structure. He then quickly presents the lives of the first enrollees who arrive. Next, Mr. Podskoch tells in detail the projects the CCC men at that camp worked on. He concludes each chapter with detailed (some long, others quite short) recollections by the former workers. These are accompanied by remembered poems, songs, sketches, pictures, and other rich memorabilia. The chapters are liberally peppered with narratives and sidebars wherever and whenever he wishes. These digressions, though sometimes interrupting reading flow, are wonderful because they are rich with interesting tidbits of local knowledge and curios.

Camp Roosevelt was of course named after FDR and was located in Cockaponset State Forest in south-central Connecticut. Much of the CCC work from this camp was in building or enhancing Chatfield Hollow State Park. Mr. Podskoch writes that 250 enrollees arrived on May 23, 1933, and pitched their canvas Army wall tents in a large field near Chatfield Hollow Brook. Soon five wooden barracks were built, and the enrollees moved in. Next begins an example of one of Mr. Podskoch's fun sidebars telling the story of a significant vehicular accident involving enrollees. After four paragraphs of this story, Mr. Podskoch restarts his narrative of camp projects. He tells, for example, that three crews were sent to Hammonasset Beach State Park to build and improve entrance roads. In 1934, crews built a masonry dam that created seven-acre Schreeder Pond (Mr. Schreeder became state forester in 1948). The enrollees built or repaired many hiking trails and built Oak Lodge in 1936; today the lodge is a natural history museum. Many of the culverts, graded sections, and stone steps they built on roads and trails are still there. The camp closed March 31, 1937.

Then begin the recollections, the richest part of the book. Most of the young men came from poor families or had no families at all. They were mostly unskilled, unemployed, often homeless, poor, and sometimes destitute. The New Deal was developed specifically to help people like these young men, and the CCC helped most, but could not save everyone. Following their stint with the CCC (typically two years), they entered the workforce as the economy slowly recovered. Many went to serve in World War II. Many describe their CCC days as preparing them well for the war. The stories are full of rich nuggets of experience. Enrollee James Gassinger's poem, "Reincarnation," is just plain wonderful. Printed in the "Camp Fechner News," January 1937, the poem is really a story of this man's redemption.

Robert M. Ricard is a senior extension educator for the University of Connecticut Cooperative Extension.

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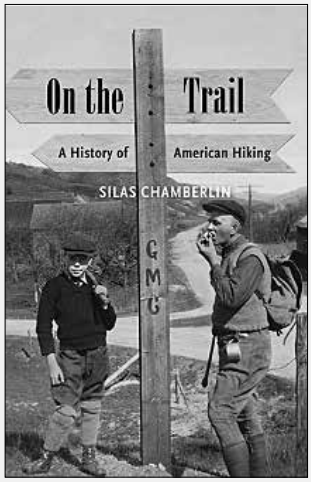
ON THE TRAIL: A HISTORY OF AMERICAN HIKING

By Silas Chamberlin. New Haven: Yale University Press, 2016. 230 pages

BY DAVID K. LEFF



This concise, compelling history of hiking begins in the mid-19th century as urban walking morphs from a necessity to a leisure activity for those well off enough to have the luxury of free time and the money to take new modes of transportation such as streetcars. Silas Chamberlin, an independent scholar on trail policy who once served on the Adirondack Mountain Club trail crew, traces not only America's passion for recreational walking, but trail development, the advent of clubs and the social culture they created, hiking equipment, the backpacking craze of the late 20th century, and the impact of the National Trails System Act.

Although Connecticut trails and the Connecticut Forest & Park Association are not mentioned (the author is a Pennsylvanian and goes into some detail about the Keystone State), this book establishes a useful historical context in which to view development of the Blue-Blazed Hiking Trails. Connecticut readers will come away realizing that both our extensive trail system and the volunteer spirit of construction and maintenance are precious assets that should not be taken for granted.

The book's main argument—that the typical hiker has transformed from a "net producer" of maps, well-maintained trails, advocacy, and outings, to a "net consumer" of equipment, information, and federally subsidized trails—expands the author's reach from the realm of history into contemporary debate. Perhaps this change from production to consumption reflects evolving motivations for hiking that have long included a love of scenery, spiritual renewal, health, escape from urban commotion and routine, and patriotism. In the early years, scientific inquiry and religion were often part of the equation. But development of lightweight materials such as nylon tents and freeze-dried food that facilitated the backpacking revolution of the 1960s popularized the notion of individual escape into nature and eroded some of the communal culture of hiking. In Mr. Chamberlin's view, this is a large part of what led to a consumptive attitude.

Beginning with founding of the Appalachian Mountain Club in 1876, Mr. Chamberlin takes readers on a quick tour of the vibrant social community of hiking that involves excursions, trail work, and conservation advocacy. Among others, he gives attention to the Sierra Club, Oregon's Mazamas, and the Green Mountain Club whose Long Trail was the first long-distance footpath and a laboratory for trail construction. College outing clubs were crucial to building and sustaining the culture of hiking, and the Dartmouth Outing Club, established in 1909, gets particular attention as the most influential, though not the first. The Boy Scouts and Girl Scouts also get a nod for inspiring young people.

Mr. Chamberlin succinctly covers development of the Appalachian Trail from Benton MacKaye's vision in a 1921 article to its completion with construction of a Maine stretch in 1937. The common goal of completing the trail strengthened a tightly knit community of trail builders, but also gave rise to the concept of thru-hiking long-distance trails resulting "in a new type of hiker who foreshadowed the dissolution of that community" by loner individualism.

Thru-hiking began on Vermont's Long Trail in the 1920s, but as early as 1928, the Green Mountain Club passed a resolution that speed records undermined the intention of the trail. Appalachian Trail Conference leaders never expected AT hikers to travel the trail's entire length. Many of them thought the goal-oriented long-distance hike subverted the value of hiking itself. Mr. Chamberlin covers the journey of Earl Shaffer, the first to thru-hike the AT in 1948, and the hike of Emma Rowena "Grandma" Gatewood, at age 67 the first woman to complete the trail solo in 1955.

The backpacking rush that began in the 1960s is seen as a mixed blessing because new hikers often did not join clubs and their sheer number degraded many backcountry places they sought to enjoy and protect. Mr. Chamberlin also sees a downside to enactment of the 1968 National Scenic Trails System Act, which, he contends, took a toll on volunteerism because the public began perceiving trails as something provided by the government. These subjects are probably deserving of a more nuanced analysis that includes changes in backcountry ethics and the current state of partnerships on federally designated trails.

To his credit, Mr. Chamberlin mentions the lack of diversity in hiking clubs and their programs to involve minority youths, especially in urban areas. He also covers the role of women, who were welcome in most clubs from the beginning.

The book would have been stronger with some attention paid to expansion of the National Trails System, including the New England Trail. Analysis of the impact of multi-use rail trails on clubs and users would also have been useful. Mr. Chamberlin's insights into the current state of trail volunteerism and community activity are incisive, but, unfortunately, he covers very little about what is being done to deal with the issues he so well presents.

On the Trail is valuable for understanding how the nation's system of footpaths has evolved. One hopes it will energize and inspire a new generation of trail users, builders, and maintainers. If the book's biggest fault is to leave readers hungering for more, that is not such a bad thing.

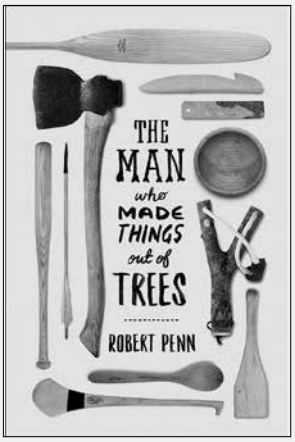
THE MAN WHO MADE THINGS OUT OF TREES

By Robert Penn. New York: W.W. Norton & Company, 2016. 245 Pages.

BY DAVID K. LEFF

This might well be titled, "The Man Who Revered Ash Trees." British author and journalist Robert Penn, who has written about bicycles and created a television series about his country's woodlands, does mention other tree species, a little. But he is effusive about European or common ash (*Fraxinus excelsior*), and its close relative, America's native white ash (*Fraxinus Americana*).

He delights in ash's beauty and versatility in everything from tool handles to ladders, wagon wheels to toboggans. Ash, Penn writes, "is one of the greatest gifts with which nature has endowed man in the temperate regions of the planet over the course of human history."



Mr. Penn determines to find a mature ash and have it cut and milled to get as many different uses as possible, not wasting any part of the tree. His goal is twofold: to make the case for ash as a sustainable resource, and to highlight "the pleasure we take from things made from natural materials as an extension of the pleasure we take from nature itself." He ultimately manages to produce 44 different products from his tree including a canoe paddle, spoons, desk, firewood, tent pegs, charcoal, tool handles, benches, tables, dominoes, bicycle wheel rims, and paneling.

The bulk of the book is given over to Mr. Penn's visits to the various craftspeople engaged to make things from his tree. Doing so enables him to take readers on a historical tour of humankind's relationship to ash through history and to celebrate traditional craftsmanship and the lessons it teaches for contemporary society.

I must admit to a bit of disappointment that in visiting the United States to investigate baseball bats, Mr. Penn did not explore the venerable world of Native American ash splint baskets despite his interest in ancient craft, including 2,000-year-old ash bowl fragments found in a layer of British peat. Furthermore, he gives short shrift to potentially devastating contemporary threats to ash, especially emerald ash borer in North America and ash dieback in Europe. Given his deep understanding of the tree's historical importance, I would have liked to hear his views on the impact of these disasters to both nature and culture, and what is being done to combat the threat.

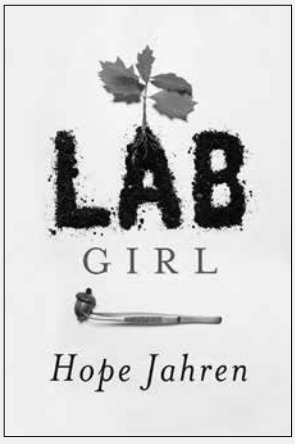
LAB GIRL

By Hope Jahren. New York: Alfred A. Knopf, 2016. 304 pages

BY KATHLEEN GROLL CONNOLLY

Do trees live in families? Do they defend one another? Do trees feel a loss when one of their community disappears? What if a tree somehow remembers the climatic conditions of its seedling days, but experiences a changed climate as it reaches the century mark?

If you're ready to entertain the possibilities (and implications) of a journey to the inner lives of plants, as well as a journey to the inner life of a plant scientist, welcome to *Lab Girl*.



Hope Jahren has spent a career devoted to understanding plants' "deep otherness." She has earned the right to say, "Plants are not like us." Dr. Jahren is an award-winning geobiologist who has traveled the globe for more than 20 years to study the interactions of the earth, atmosphere, and vegetation. She tunnels through permafrost to understand the remains of 50-million-year old forests that grew when the Arctic was not arctic. She travels to Norway to begin experiments that she knows will still be producing data long after she is gone. She runs a lab where they use measurements of stable isotopes of carbon, nitrogen, hydrogen, and oxygen to elucidate information about metabolism and environment, both today and in geologic time.

This book covers much more than the inner lives of plants because Dr. Jahren weaves the threads of science in the larger story of her life. That story is about a little girl who finds it natural to help her dad, a physics teacher, but unnatural to be like other kids, especially girls. It's about her evolution as a woman scientist in a male-dominated profession, in which she seizes the freedom to achieve but not without experiencing both subtle and direct discouragement. It's about the rigors of following one's inner compass.

A big part of the story is about her one-of-a-kind lab mate, Bill Hagopian. They meet during graduate school, forming a quirky friendship and intellectual partnership. They go dumpster diving for parts to build Dr. Jahren's first lab, drive all night to attend conferences 3,000 miles from home, and save Mr. Hagopian from homelessness with hideaway living quarters in a university closet near their bare-bones lab. After they both endure an existence that is at times held together by baling wire, they finally land at the University of Hawaii, where Dr. Jahren is now a tenured professor and Mr. Hagopian is now senior research laboratory manager at the Jahren Lab. Along the way, Dr. Jahren finds romance and marriage, becomes a mother, and learns to manage mental illness.

With so many threads, the narrative is sometimes episodic. A few times, I felt the story lost direction, but curiosity compelled me to keep reading. Does she ever find a permanent home for her lab? Does her research bring us closer to understanding the growing conditions of the past—and what do her discoveries imply for the future? Does she overcome her self-consciousness and grow more comfortable with her unusual path? Does she find a satisfying personal life?

I was also compelled to continue because Hope Jahren is a fine writer. The narrative is introspective but never self-absorbed. The writing is often lyrical and at other times, she plays for irony. She is never self-aggrandizing, nor judgmental. *Lab Girl* achieved best-seller status in several nonfiction categories. It is a New York Times 2016 Notable Book and has received hundreds of positive reviews on Good Reads and Amazon. When you're finished with the book, offer it to any young woman or man who aspires to a career in the life sciences. The Junior Library Guild rates it "NH," appropriate for ninth graders and older. I highly recommend this book for anyone interested in the life of a notable woman scientist and an interest in cutting-edge plant research.

Kathy Connolly is a landscape designer, speaker, and writer from Old Saybrook. Read more of her work and find out when she's giving a talk at speakingoflandscapes.com.

GROUNDBREAKING ENVIRONMENTAL JOURNALIST RETIRES

Bob Wyss's students at UConn wrote many articles for Connecticut Woodlands

BY TERESE KARMEL

Robert L. Wyss, a noted journalist and professor at the University of Connecticut, will retire from his faculty appointment this spring after 15 years with the journalism department. Mr. Wyss developed and edited many of his students' stories for publication in Connecticut Woodlands magazine.

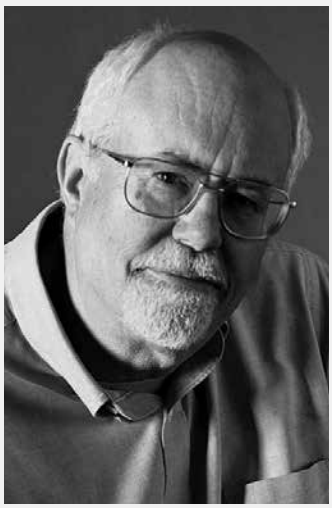
With the support of a National Science Foundation grant, Mr. Wyss worked with UConn administrators, science faculty, and staff members to create environmental science courses in the journalism department. The courses taught science students to communicate in clear language and journalism students to interpret science for the public.

For several years, Mr. Wyss has taken students on spring break field trips to the Florida Everglades, New Orleans, and southern Louisiana, where they have reported stories on disappearing species, the vanishing jungle, the effects of Hurricane Katrina, the BP oil spill, and more. Samples of their work appear at digitaljournalism.uconn.edu/everglades14/.

"Universities are often silos of learning where people in different disciplines never get together," Mr. Wyss said. "One of the exciting things we're trying to do is break down boundaries and barriers so that people can communicate with each other in different areas."

Through a three-year $500,000 NSF grant, awarded during the summer of 2015, and an additional $150,000 from UConn sources, Mr. Wyss created advanced classes, co-taught by ecology and evolutionary biology professor Margaret Rubega and Robert Capers, collection manager of UConn's greenhouses. The funds also support guest lecturers and graduate research.

The classes were formed in part through Mr. Wyss's conversations with other science journalists. "We had concerns about what happens with issues like climate change (since) there had been such massive miscommunication between the scientific community and reporting this," he said.



Bob Wyss

Mr. Wyss pointed out that it's been almost 30 years since Columbia University environmental science professor James Hansen's prescient testimony to Congress warning that the earth was warmer in 1988 than ever recorded and that the greenhouse effect had advanced to the point where extreme weather like heat waves could be predicted.

Mr. Wyss believes climate change remains the biggest concern of the environmental science community. "It's an overwhelming concern—it covers everything." Although the United States may be more prepared to adapt to it, the developing world will suffer most, he said. "I can't think of a more important subject to teach environmental journalists. You have to be able to understand the complexity of the science. We teach basic beat reporting—how to get out and get information on this specialized facet."

Although newspapers, going through massive structural changes, don't cover the environment as much as they used to, "you see a lot of information from freelancers and people in the scientific world on the Web," Mr. Wyss said. He believes that these stories are responsible for expanded public acceptance of climate change and its causes.

Mr. Wyss's colleagues praised him for his commitment to his field, to his students, and for his considerable skills. "Getting the chance to work with Bob has been one of the greatest pieces of luck in my own career," Dr. Rubega said. "He knows how to tell a story; he knows how to write a sentence, and he's up for new things, perennially."

Writer and former UConn professor Timothy Kenny called Mr. Wyss the "hardest working guy I know," a generous person, and excellent teacher. "I've never heard him say an unkind thing about anyone," Mr. Kenny said.

Mr. Wyss, who is 68 years old, plans to write a book about vintage baseball, revisions to his groundbreaking textbook, *Covering the Environment: How Journalists Work the Green Beat* (Routledge Press, 2008), and another book on coal pollution and a clean-air campaign in St. Louis in 1941. He started his career as a reporter with the Providence Journal in 1974, and has written countless stories for media outlets and professional journals. He is author of *The Man Who Built the Sierra Club: A Life of David Brower* (Columbia University Press, 2016), a penetrating look at the revolutionary conservationist, which, one reviewer said, "makes clear the multiple layers of Brower's personality," both professional and personal. Mr. Wyss also writes a blog, coalblacksky.com.

He will work with the university in the search for his replacement and said that he is grateful that the university and the department are committed to replacing him with an environmental journalist.

Terese Karmel is a pre-journalism advisor and lecturer in the journalism department at the University of Connecticut.

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