



CONNECTICUT

# Woodlands

MAGAZINE



## ECHOES OF THE PAST

THE GHOSTS OF GREEN FALL POND. THOREAU'S LAST LECTURE. A REDCEDAR PREDATES THE INCANS.

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*Some Canada geese do migrate. See page 24.*

## 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.

## Connecticut Woodlands

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Top, Waterbury as it looked when Thoreau spoke there.

Above, an old trail map from a CFPA Walk Book showing the Quinnipiac Trail in the Rocky Top area.



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JAMIE TOMMINS

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## *Bicycling's satisfactions and difficulties*



BY ERIC LUKINGBEAL

"Changing the Car Lifestyle," the lead article in our last issue, got me thinking on a topic I've wondered about for years. Just how hard would it be to make bicycle commuting practical

for the ring of suburbs around our major cities?

Drivers' negative or even hostile attitudes toward cyclists is, in my book, a large factor. For 40 years, I worked in downtown Hartford, about 20 miles from my home in Granby. Cycling was—and still is—my chosen form of daily exercise. I probably averaged 5,000 miles per year on country roads, but I tried commuting by bike only a few times. Each time, I ended up saying to myself that it was too dangerous.

Part of the problem was timing. I found it impractical to leave before rush hour started or to head home after rush hour ended. Drivers going to and from work are in a hurry. In my experience, courtesy and patience are rare. Driver distraction has become common, so much so that one struggles to distinguish discourteous driving behavior from poor driving.

To some extent, we all become different people when behind the wheel; walkers and

cyclists are just annoying impediments to progress. On two occasions, drivers threw bottles at me. Neither one was an innocent attempt to litter. Both missed. One driver forced me off a rural state road in Massachusetts, as I was descending on a curve at about 30 miles per hour. Why he did this, I don't know. But his intention was unmistakable. I rode off the road, onto a lawn, and into a backyard.

I acknowledge these are just three incidents in nearly seven decades of bike riding. The potential danger was palpable, for me. A few of my cyclist friends were hit by cars. One of them died only a few miles from his home, in broad daylight.

I have observed that many drivers are ignorant of bicycle laws. Twice, apparently successful persons driving expensive cars have told me that it is illegal to ride on the road when a bike path is nearby. Some drivers believe that cyclists are required by law to ride to the right of the white lines painted on the side of the road. According to others, riding two abreast is always illegal. Others believe that it is illegal for cars to cross the center line to get around a cyclist safely.

All wrong, under Connecticut laws, which require drivers to give cyclists three feet of room when passing. I am not sure this law is wise. It gives some drivers the idea that three feet is plenty, and it's not. Experienced cyclists can ride in a straight line on good pavement. Children and inexperienced

adults usually cannot. Careful, patient drivers—they do exist—give cyclists a wide berth. We're grateful, and we wave our thanks.

In Europe, where bicycle commuting is more common, both accident and fatality rates are much lower than here in the United States. Apparently this is so because drivers are accustomed to seeing bicyclists. In Italy, drivers are said to be very patient, even with large groups of cyclists on narrow roads. Perhaps part of the solution to our problem is to encourage more cycling.

Let me balance my comments by offering a criticism of some cyclists. They should not wear black. I looked hard to find fluorescent yellow shoes, which catch more drivers' eyes. Bikers in packs should form a line so cars can pass; not to do that is rude and dangerous. Riding on the wrong side of the road against traffic—once the norm in some places—is illegal and hazardous.

I maintain that more accidents are caused by car drivers. And in a collision, the cyclist pays the price almost every time. I guess we can hope that a technological solution is on the horizon, as cars may someday have systems to avoid cyclists. When that happens, I hope that all bicyclists will commute.

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

## EDITOR'S NOTE

### *Thank you for 16 years and 64 issues*

BY CHRISTINE WOODSIDE

In 2000, I first heard of the Metacomet Trail and hiked it over eight separate days between July and November. I was stunned at its beauty and solitude, even in the places like Farmington where I glimpsed glittering windowpanes of nearby houses. I wrote a piece for *Appalachia* journal about the mythical black dog of the Hanging Hills

and the fact that the black dog was struggling to find wild spots in which to scare us. I don't want to say that I fell in love with the Blue Trails, but—I did. And then I found the Connecticut Forest & Park Association's magazine, and began editing it—on a temporary basis at first—in fall 2001.

Over the past 16 years, I've tried to bring the best reporting and writing I could to the members of CFPA and to those citizens

who might pick up Woodlands in the public libraries. I did not think I'd be the editor this long, but CFPA kept drawing me back; every time I thought it was time to move on, a flood of new ideas ran through my head.

And I've poured myself into building this magazine. The CFPA staff, writers, and I together have achieved so much. We've covered forestry, climate change, trails and the threats to trails, historic landscapes, farm

## CFPA's community begins with you

### EDITOR'S NOTE *continued*

land, “imperiled ecosystems,” and important personalities like artist Eric Sloane, Helen Binney Kitchel, Edwin Way Teale, and many others.

It's good for an organization to rotate leadership, to bring in new voices and try different approaches. CFPA is evolving, and so am I. I finished a book last year and plan to write another one. I'm starting a master's degree in history. I will remain a volunteer trail manager and member of the CFPA Trails Committee. I look forward to years on the trail with Clare Cain and all of the trail team.

I can't list all of the wonderful writers I've worked with—foresters, hikers, scientists, journalists, and more. Thank you all. I hope that in the coming years some of their unique work can be gathered together into a volume.

This magazine's quality is due in great measure to the work of my wonderful copyeditor, Robin Gold; the creative and efficient designer Karen Ward; and our proofreader, Diane Friend Edwards.

I thank the following people whose strong vocation, encouragement, and love of the land have had strong effects on my editorship: Lori Paradis Brant, Eric Hammerling, Jean Crum Jones, David K. Leff, James Little, Eric Lukingbeal, Adam R. Moore, Patty Pendergast, Terri Peters, David Platt, Starr Sayres, and the late Richard Whitehouse.

And thanks to you, the reader of Connecticut Woodlands. Keep caring about this incredible world. Do work that matters. Wear your ethics on your sleeves.



BY ERIC HAMMERLING

You may have noticed that CFPA has started a series of “insider updates” in each county for members and volunteers like you.

There are many reasons for these fun gatherings: to thank you for your support; show you some of the work being done in the forests, parks, and trails of your community; introduce you to other CFPA supporters in your area; and provide you with an opportunity to make suggestions, ask questions, and find ways to get further connected. Most important, we want to spend more time with you where you live, work, and play proactively, rather than waiting in Middlefield for you to email, call, or visit us.

So far, we have held insider updates in Windham and Hartford Counties, and I have greatly enjoyed meeting members of the CFPA community to build relationships that go far beyond the limitations of email, letters, and social media. If I could generalize from the amazing people I have met, I would say that supporters of CFPA are united by (1) a passion for forests, parks, and trails, and (2) a deep appreciation for how important nature is to their lives and the future of Connecticut. We hope that you will be inspired by some of the work happening in your community thanks to your support, just as we are inspired on an ongoing basis by getting to know you better.

We in the CFPA community will need to be strong and cohesive because many challenges lie ahead. As you know, our public

lands need to be better protected against being given away without adequate public input. State budget cuts are siphoning away the resources necessary for well-maintained state parks, forests, and wildlife management areas. At the same time, federal and state support for national scenic trails (like the New England Trail) and other recreational trails and greenways is in jeopardy.

Fortunately, there are achievable solutions to these challenges: a constitutional amendment to better protect state-owned public lands, the proposed “Passport to the Parks” to establish a more sustainable funding source to keep state parks and campgrounds open and maintained, restoration of funds for recreational trail projects, and many others. As you know, these solutions don't just happen. Indeed, each solution can feel as difficult to achieve as the eternal frustration of the mythological Sisyphus pushing his boulder uphill. However, your support and involvement in the CFPA community makes an enormous difference to whether we are successful together, and we look forward to continuing to work with you to build our conservation community together.

As a quick but important last note, I want to express CFPA's gratitude and salute Christine Woodside, who has been the outstanding editor of Connecticut Woodlands magazine for the past 16 years. Though Chris is starting graduate school and new professional challenges this fall, we are so glad that she will stay involved in the CFPA community as a trail maintainer, Trails Committee member, and perhaps even as a future contributor of articles to Connecticut Woodlands.

*Eric Hammerling 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, the private, non-profit organization dedicated to conserving the land, trails, and natural resources of Connecticut.

Members of CFPA receive the magazine in the mail in January, April, July, and October. CFPA also publishes a newsletter several times a year.

For more information about CFPA, to join or donate online, visit our website, [www.ctwoodlands.org](http://www.ctwoodlands.org), or call 860-346-TREE.

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BY DAVID K. LEFF

Henry David Thoreau, apostle of nature and iconoclastic social critic, is not a name readily associated with an industrial city like Waterbury. Nevertheless, of the 75 lectures the sage of Walden gave in his career, his only Connecticut appearance was in the Brass City on December 11, 1860, just as the area was beginning its meteoric rise as a center of metals manufacture. Entitled “Autumnal Tints,” the speech was a paean to fall’s brilliant colors. Eerily apropos of some of the funereal imagery Mr. Thoreau used as metaphor, he was sick with his final illness, and this was the last lecture of his relatively short life of 44 years.

Today Mr. Thoreau is revered as the father of modern nature writing, a social critic of increasing relevance in an ever more complicated society. He was an inspiration to the nonviolent political philosophies of Mahatma Gandhi and Martin Luther King. Mr. Thoreau’s popularity as both a writer and cultural figure seems only to grow over time. Despite the many great literary figures our nation has produced, the Thoreau Society is both the oldest and largest organization devoted to an American author—one small but significant measure of his passionate following.

When Mr. Thoreau came to Waterbury, he was certainly a lesser light in the literary firmament, having published only two books and a smattering of essays. Many looked on him as a mere acolyte of his mentor Ralph Waldo Emerson and considered Mr. Thoreau somewhat eccentric, if not downright odd in his habits and philosophy. One sympathetic observer who met him only once wondered how to behave “in the presence of one whose thoughts and conduct differed so widely from those of ordinary men, and whose attitude towards society and its conventionalities I knew to be so critical, not to say disdainful.” Mr. Thoreau’s first book, *A Week on the Concord and Merrimack Rivers*, published in 1849, flopped commercially and had at best a mixed critical reception. *Walden* was published in 1856 and met with more success, giving Mr. Thoreau some modest renown. Most of his works



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*Thoreau as he looked a few months after his lecture in Connecticut, and not long before his death.*

## THOREAU'S LAST LECTURE

*Sick with his final illness,  
the then-unknown nature writer  
spoke in Waterbury*

we know today, such as *Cape Cod* and *The Maine Woods*, as well as his voluminous journals, were published posthumously.

But Mr. Thoreau was very much alive that evening in Waterbury, and his thoughts soared about the intensity of red maple color. “If such a phenomenon occurred but once,” he remarked, “it would be handed down by tradition to posterity, and get into the mythology at last. . . . One wonders that the tithing men and fathers of the town are not out to see what the trees mean by their high colors and exuberance of spirits, fearing that some mischief is brewing.”

### Why Waterbury?

Nineteenth-century towns with cultural aspirations held lecture series, known as lyceums, featuring writers, clergymen, professors, journalists, and politicians. Waterbury’s Young Men’s Institute, organized in 1852 for the education and edification of its members, sponsored a series of several lectures

each year. Many prominent citizens joined the institute, which concluded its work in 1868 by donating 3,000 volumes to form the nucleus of the newly established Bronson Library, the public institution still serving the city.

Mr. Thoreau was invited to Connecticut by the institute’s corresponding secretary, Augustus Sabin Chase, who responded to Mr. Thoreau’s September offer of his services as a lecturer. The deal was sealed in a letter Mr. Chase sent Mr. Thoreau on October 5, 1860, assigning him a date and requesting that he name his “subject in advance of the time if convenient as we would like to be able to state it.” The enterprising and energetic Mr. Chase had come to Waterbury in 1850 to work at the Waterbury Bank, becoming president in 1864. He was also simultaneously president of Waterbury Watch, Benedict and Burnham, Waterbury Buckle, and Waterbury Manufacturing, later to become the legendary Chase Brass and Copper.

Mr. Thoreau spoke in Waterbury at an edgy and tumultuous time for America. Only a year before, John Brown had swung from the gallows for attempting to incite a slave rebellion with his attack on the federal arsenal at Harpers Ferry, Virginia. Little more than a month earlier Abraham Lincoln had been elected president, and in less than 10 days, South Carolina would secede from the Union.

Though Mr. Thoreau had given political speeches in opposition to slavery and in defense of John Brown, on this evening he spoke of pokeweed. “It appears a rare triumph of Nature to have produced and perfected such a plant,” he said, “as if this were enough for a summer. What a perfect maturity it arrives at! It is the emblem of a successful life, concluded by a death not premature, which is an ornament to nature. What if we were to mature as perfectly, root and branch, glowing in the midst of our decay, like poke!”

### An Evening in Worcester With a Friend

Mr. Thoreau traveled the 290 miles to Waterbury by train, having first stayed the afternoon and night of December 10 at the Worcester, Massachusetts, home of his

friend H. G. O. Blake. Mr. Thoreau arrived at Mr. Blake's on a raw day when a nor'easter blew rain and snow into the city. But things must have been warm and lively in the parlor, where several guests spent the evening in conversation with the visitor from Concord. Joining Mr. Blake and his wife were a couple clergymen, a pair of nearby neighbors, and E. Harlow Russell, who met Mr. Thoreau for the only time that evening. He would gain custody of the Thoreau manuscripts at Mr. Blake's death in 1898.

The trip might have been tedious in foul weather, but perhaps Mr. Thoreau went over his speech notes. "All the sunny wealth of the season," he had written, "the Indian summer, seems to be absorbed in their leaves. . . . Wealth in-doors may be the inheritance of few, but it is equally distributed on the Common. All children alike can revel in this golden harvest. . . . Nature herself holds her annual Fair in October, not only in the streets, but in every hollow and on every hillside."

Mr. Russell found Mr. Thoreau as "rather less than medium height, compact, well-proportioned, and noticeably straight and erect. His shoulders were not square, but sloping, like those of Mr. Emerson. His head was not large, nor did it strike me as handsome; it was covered with a full growth of rather dark hair. . . . Large, perceptive, blue I think, eyes, large and prominent nose; his mouth concealed by a full, dark beard, worn natural but not untrimmed. . . ." Mr. Russell found Mr. Thoreau's plain dark clothes unstylish and his black cravat "tied without skill."

Despite the unprepossessing physical presence, Mr. Russell observed Mr. Thoreau "with the look we recognize as that of vitality and distinction." His voice was deep and musical and "emphatic words seemed to hang fire or to be held back for an instant as if to gather force and weight." Nevertheless, "he talked rather like one who was more accustomed to be listened to than to listen . . . but did not come to very close quarters with you or help you out with your thought after the manner of skilled and practiced conversers." Overall, Mr. Russell opined, "he was always interesting, often entertaining, but never what you would call charming."

Later Mr. Russell "remembered with sadness, the hoarseness and cough from which Thoreau was suffering that evening." Although it's been generally accepted that he caught cold a week earlier while counting

tree rings on stumps atop Fairhaven Hill, some scholars have suggested that he became sick while visiting an already ill Bronson Alcott to chat about John Brown's execution. Regardless, Thoreau biographer Walter Harding notes, "His cold had rapidly developed into bronchitis. His friends and the family doctor all urged him to cancel the lecture, but he . . . journeyed to Waterbury . . . despite their advice." Scholars Bradley P. Dean and Ronald Wesley Hoag conclude, "Thoreau might not have survived even had he not gone to Waterbury, of course, but given his and his family's susceptibility to lung problems, and the apparent severity of the cold, it was nothing short of folly for him to have left home."

Regardless of his cold and weakness, Mr. Thoreau vividly described the scarlet oaks of home as great roses, finding in their late October color "partly borrowed fire, gathering strength from the sun on its way to your eye. It has only some comparatively dull red leaves for a rallying-point, or kindling-stuff, to start it, and it becomes an intense scarlet or red mist, or fire, which finds fuel for itself in the very atmosphere. So vivacious is redness. The very rails reflect a rosy light at this hour and season. You see a redder tree than exists."

### Arrival in Waterbury

In 1860, Waterbury was a boomtown with a population that had almost doubled in the previous decade to just over 10,000. New immigrants poured in to work in busy, growing factories made possible with waterpower from the swift-running Naugatuck River and its tributary, the Mad River. Industry had rapidly produced great wealth and with it an interest in culture.

Among the outward signs of that wealth and concern with culture was the Hotchkiss Block, a long, three-story brick building with tall windows that sat at the corner of North and East Main Streets across from the green. The building was a beehive of activity with offices like Hall and Smith Insurance Agency and retailers such as Slate's, a clothier who advertised cloaks and shawls among other goods. Named for Waterbury's first mayor, the second floor housed Hotchkiss Hall, where the institute held its lectures. It was torn down in the 1980s to make way for senior citizen apartments.

On the morning of December 11, 1860, Mr. Thoreau caught the 9:20 Western

Railroad train to Springfield, from where he made connections south into Connecticut. Rain, wind, and snow continued throughout the day. The train got him to Waterbury in plenty of time to be there when the doors to Hotchkiss Hall opened at 7 p.m. for a lecture that would start an hour later.

Perhaps he was early enough to browse among the books, stationery, and newspapers at Patton's store on the first floor of the Hotchkiss Block. Maybe he looked in the windows at J.D. Doty, which was in the process of liquidating \$6,000 worth of dry goods.

Mr. Thoreau's was the second lecture in the series, which had begun to favorable reviews the previous week when the Rev. Henry W. Bellows of New York spoke on "Direction, or the Face We Turn to the World." Tickets for the series were \$2 for men and \$1.50 for ladies and included use of the institute's library. A single lecture carried a charge of 25 cents.

### Painting Autumn Color With Words

"Autumnal Tints" was first delivered in Mr. Blake's parlor on a February evening in 1859, and afterward proved one of Mr. Thoreau's more frequent offerings. It was originally conceived as part of a larger work Mr. Thoreau called "The Fall of the Leaf," a project he didn't live to complete. As early as 1853, he had considered creating a volume of precisely colored reproductions of ripe leaves. Several months after his death on May 6, 1862, the Atlantic Monthly published the lecture. The next year, it appeared with other natural history oriented lectures in a volume entitled *Excursions*.

Mr. Thoreau's message was not all about the aesthetics of pretty colored trees. Typically ahead of his time, he had some words on the value of fallen leaves in the cycle of life. At a time when few people thought about such things, Mr. Thoreau instructed his audience in terms that his business-oriented listeners might understand. "The trees" he said, "are now repaying the earth with interest—what they have taken from it. They are discounting. They are about to add a leaf's thickness to the depth of the soil. This is the beautiful way in which Nature gets her muck, while I chaffer with this man and that, who talks to me about sulphur and the cost of carting. We are all richer for their decay."

"Autumnal Tints" is vintage Thoreau, filled with a rich mixture of poetic imagery, science lore and Latin names, and a good

scolding of society for failing to see what is truly important. Despite more formal language than appears in lectures and magazine articles today, his talk was remarkably fresh for the unusual perspective it took on the subject of fall color. Today, the turning of the leaves is a major event in the cycle of the New England year. The flaming maples, lemony birches, and other brightly hued trees have become regional icons of the first order, a cardinal source of our identity. Millions of tourism dollars turn on this natural event, and ordinarily sane people who would not otherwise care about such crystal ball predictions hang on every word of sylvan color prognosticators.

You might think that Mr. Thoreau would rail against such overly commercial use of the landscape, as if leaves were dollars and had no other beauty than their conversion into cash by the profligate spending of leaf peepers. But Mr. Thoreau dwells on none of this because the craving for color that we anticipate each September was unheard of. Our mania over fall foliage came years later with the development of leisure time and the rise of automobile tourism.

What makes Mr. Thoreau's lecture so refreshing is that he proselytizes for people to notice. "The autumnal change of our woods has not made a deep impression on our own literature yet," he says near the beginning. "October has hardly tinged our poetry." But his concern is not merely literary. Amazingly from a 21st-century perspective, he chides his fellow New Englanders for failing to see both the forest and the trees, saying, "Not only many in our towns have never witnessed it, but it is scarcely remembered by the majority from year to year."

The lecture is structured around the hues of several particular species: purple grasses (including pokeweed), red maple, elm, sugar maple, and scarlet oak. In the middle, there is a discourse on fallen leaves. "We love the redness in the vegetation of the temperate zone," he remarks of the purple grasses. "It is the color of colors . . ." and "speaks to our blood." Of the red maple, he wonders, "What more remarkable object can there be in the landscape? Visible for miles, too fair to be believed." Elms are "great brownish-yellow masses, warm from their September oven, hanging over the highway." In sugar maples he finds that "all the sunny warmth of the season, the Indian summer, seems to be absorbed in their leaves." As for the scarlet

oak, it asks only "a clear sky and the brightness of late October days." With regard to fallen leaves, he notes, "Down they have come on all sides, at the first earnest touch of autumn's wand, making a sound like rain."

Always looking at the world from odd angles, in describing falling and fallen leaves, rather than colorful trees, Mr. Thoreau is at his most rhapsodic. But the funereal imagery is uncomfortably poignant in retrospect, knowing that his cough and hoarseness that evening were harbingers of his demise.

How beautifully they go to their graves! how gently lay themselves down and turn to mould!—painted of a thousand hues, and fit to make the beds of us living. They put on no weeds, but merrily they go scampering over the earth, selecting the spot, choosing the lot, ordering no iron fence, whispering all through the woods about it,—some choosing the spot where the bodies of men are mouldering beneath, and meeting them half-way. How many flutterings before they rest quietly in their graves! They that soared so loftily, how contentedly they return to dust again, and are laid low, resigned to lie and decay at the foot of the tree, and afford nourishment to new generations of their kind, as well to flutter on high! They teach us how to die. One wonders if the time will ever come when men, with their boasted faith in immortality, will lie down as gracefully and as ripe,—with such an Indian-summer serenity will shed their bodies as they do their hair and nails.

### Newspaper Labels Lecture "Dull"

It's unlikely Mr. Thoreau received more than polite, tepid applause when he finished. The December 14, 1860, Waterbury American panned the lecture as "dull, commonplace, and unsatisfactory. There was nothing," the reviewer continued, "of the practical and very little of the poetical discoverable in it. It is possible, however, that the monotonous style in which it was delivered prevented the audience from duly appreciating whatever the real merit it contained as a composition. On the whole, probably no lecture[r] before the Institute has so thoroughly disappointed his auditory." Among the audience was George Townsend. "Very poor lecture," he confided to his diary.

No doubt Mr. Thoreau's poor physical condition and the long, tiring train ride contributed significantly to his substandard

performance. Written comments on "Autumnal Tints" the four other times he delivered it were generally positive, except for one reviewer in Lynn, Massachusetts, who also faulted the speaking style.

"The strain of the journey," Mr. Harding has written, "worsened Thoreau's condition and he returned to Concord a seriously ill man. For the first time in years he left large gaps in his daily journal, sometimes going as much as two weeks without a single entry." He spent what little energy he had in his last months revising lectures like "Autumnal Tints" and other works for publication. About a year and a half after visiting Waterbury, Mr. Thoreau was dead of consumption, as tuberculosis was then called.

But like the falling leaves he extolled for nourishing a new generation, his words have provided the nourishment that has fed today's environmental consciousness far beyond any influence he had during life through either his published works or by lectures like the one he gave on that cold wintery night in Waterbury so many generations ago. The take-home message that evening, if anyone got it, was not about trees, leaves, or colors. It was about the power of observation to transform us. It was about being actively mindful of the world around us, that looking requires positive effort and concentration to be of value.

As always, Mr. Thoreau said it best no matter how dully the delivery may have resonated in Hotchkiss Hall.

Objects are concealed from our view, not so much because they are out of the course of our visual ray as because we do not bring our minds and eyes to bear on them; for there is no power to see in the eye itself, any more than in any other jelly. We do not realize how far and widely, or how near and narrowly, we are to look. The greater part of the phenomena of Nature are for this reason concealed from us all our lives. . . . We cannot see anything until we are possessed with the idea of it, take it into our heads—and then we can hardly see anything else. . . . There is as much beauty visible to us in the landscape as we are prepared to appreciate—not a grain more.

*David K. Leff is a writer, poet, and the New England Trail poet-in-residence. He lives in Collinsville. Visit him at davidkleff.com.*





## HONORING ROCKY TOP

*Development creeps closer to the site of Blue Trail founder  
Edgar Heermance's cabin*

BY CHRISTINE WOODSIDE

**R**ocky Top doesn't show on most maps of Hamden but stands as perhaps the most important landmark in the history of the Blue-Blazed Hiking Trails. It's the site of a cabin on the wooded traprock ridge where retired minister Edgar Laing Heermance brought his family in the late 1920s. Mr. Heermance marked a path through the woods there, the Quinnipiac Trail, the first of the Blue-Blazed Hiking Trails managed by the Connecticut Forest & Park Association through a cadre of volunteers.

Now a neighbor of the Heermance site has filed an application with the United States Geological Survey seeking official designation of Mr. Heermance's cabin site as York Hill, with a variant name Rocky Top, the name the man known as father of the Blue-Blazed Hiking Trails gave his summer property.

Roberta Mack, a retired math and science teacher, said she's motivated to request placing Rocky Top on the map because a development company submitted, withdrew, and many believe will submit again a proposal to quarry 100 feet of the ridgeline. After the quarrying would finish, the next phase

would be building 280 apartments, 30 percent of which would be affordable housing and the rest luxury units, according to a public statement by investor Gary Richetelli, a partner of Paul Kaplan of Mountain View Estates LLC.

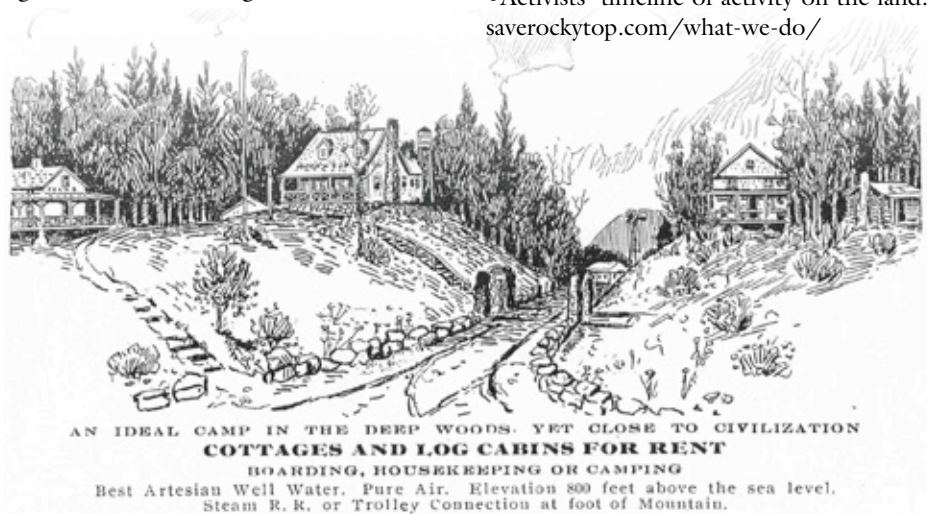
The neighbors of the development site have joined to oppose development there, calling their group Save Rocky Top. Ms. Mack, in testimony this spring to town officials, called the application "a traprock quarry operation disguised as 8-30g affordable housing," referring to the state statute governing affordable housing. Under that law, in municipalities where less than 10 percent of the housing stock is affordable by federal definitions, development proposals with even a small percentage of affordable housing can override local regulations.

The area proposed for quarrying and development is about a mile from Rocky Top and would probably interrupt the current route of the Quinnipiac Trail. Also near the trail is the decade-old York Hill campus of Quinnipiac University, where construction is continuing to expand residence halls. It includes a sports center, wind turbines, and a ski-lodge-style student center. Quinnipiac owns some of the trail corridor. Across Route 10 from this Rocky Top area is Sleeping Giant State Park, into which the Quinnipiac Trail continues. The name is not unique to Mr. Heermance's cabin. Developer William H. Johnson, who died in 2015, sold a retreat he called Rocky Top to Quinnipiac University for the York Hill campus.

For now, the apartment proposal has been withdrawn. Mr. Heermance himself believed his cabin site Rocky Top was the most meaningful spot in his life. "A voyager comes back to little Connecticut to carry out his great dream—a life of study and writing," he wrote in his 1942 memoir, *The Time Stream* (Free Press Association). "To anyone who, like Ulysses, has roamed with a hungry heart, no subject is alien—the price of pig iron is as significant as the death of kings. And one's surroundings, too, are important, perhaps more important than anything else."

For further reading:

- Christine Woodside, "The Color Blue," Connecticut Woodlands, volume 78 no. 2, summer 2013.
- Woodside, "The Trail Pioneers," Connecticut Woodlands, spring 2004. Available at [chriswoodside.com/trail-pioneers](http://chriswoodside.com/trail-pioneers).
- Centerbrook Architects page about the York Hill campus: [centerbrook.com/project/quinnipiac\\_university\\_york\\_hill\\_campus](http://centerbrook.com/project/quinnipiac_university_york_hill_campus)
- Activists' timeline of activity on the land: [saverockytop.com/what-we-do/](http://saverockytop.com/what-we-do/)



*Top, Edgar Heermance and his beloved Rocky Top summer house.*

*Right, Before Mr. Heermance owned Rocky Top, it was part of a camp.*

HAMDEN HISTORICAL SOCIETY

# THE GHOSTS OF GREEN FALL POND

*What happens when the state closes campgrounds? A journalist investigates.*

BY JAMIE TOMMINS

The sunset at Green Fall Pond in Voluntown held the kind of solitude that you can only find at the end of a bumpy road. Surrounded by thousands of acres of Pachaug State Forest, the landscape looked about as natural and undisturbed as a former granite quarry possibly could, with the notable exception of the beach ball. I'd been hiking along the blue-blazed Narragansett Trail on the edge of the lake when I spotted the ball floating several hundred feet from shore. Farther down, in the lake's roped-off swimming area, a father and his two sons stared hopelessly after it.

As I made my way to the beach for one last swim—sunset is closing time in Connecticut's state parks—I passed a gate that had been closed and locked across the entrance of a gravel road. A paper sign was nailed to the gate, and it read, "Dear Valued Visitor: Green Falls Campground will be CLOSED for the 2017 season."

I wondered how many other visitors to Connecticut's state parks and forests had seen similar signs posted elsewhere. A few days before this, Governor Dannel P. Malloy

had signed an executive order cutting government services in the wake of the legislature's failure to pass a biennial state budget. The order had forced the state's Department of Energy and Environmental Protection, or DEEP, to close four of its public campgrounds as part of a department-wide cut to summer staff and other services. The campground here at Green Fall Pond, along with two others at Devil's Hopyard, in East Haddam, and Salt Rock, in Baltic, had been shut down in early 2016 during a similarly fraught budget season, and the three have now been closed to the public—and more or less unmaintained—for over a year.

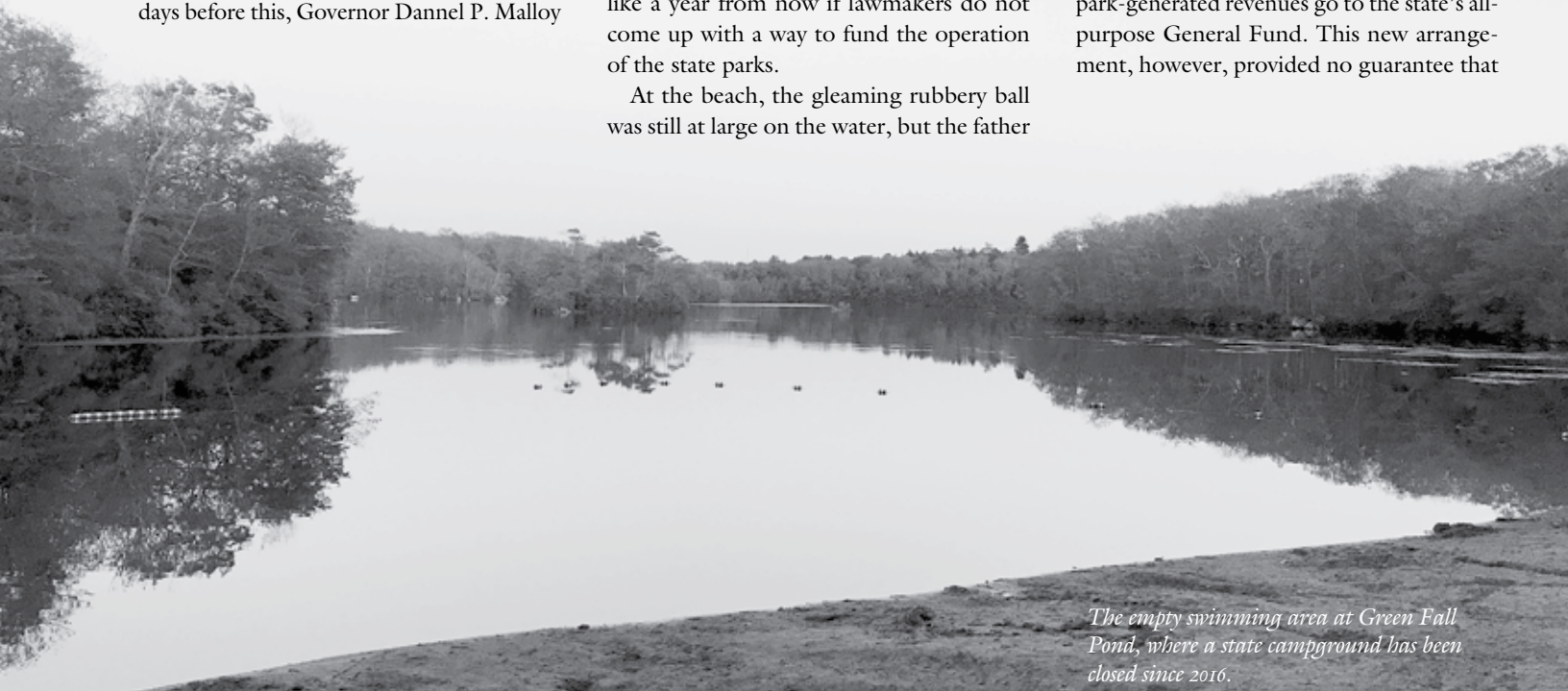
From behind the gate, several of the campsites at Green Falls Campground were visible in various stages of neglect. Enormous weeds, some as tall as my shoulders, had overtaken the flat clearings meant for tents and campfires. They gave the area an uncanny, almost sinister look, as if it were on the bottom of the sea. It was a glimpse of what the state's fourth closed campground, in Macedonia Brook State Park in Kent (shut down for 2017)—and perhaps the state park system as a whole—could look like a year from now if lawmakers do not come up with a way to fund the operation of the state parks.

At the beach, the gleaming rubbery ball was still at large on the water, but the father

and his sons had gone. Traces of dark blue had moved into the eastern sky. I was completely alone, and as I set my small portable camper's stove onto a picnic table, I wondered how much longer it would be until a park manager—or perhaps a cop—would arrive to escort me from the area. I even considered, briefly, what it might take to get away with spending a night in a large, unwatched state park, or a even closed one—or, come to think of it, what the difference was between them.

Since the 2008 recession, budget battles have become something of a permanent feature of America's state parks. In a 2013 study, the research group Resources for the Future found a nationwide decline in state park expenditures beginning in 2007. In Connecticut, the state park system was dealt a major blow in 2010 with the elimination of the Environmental Conservation Fund, a kind of savings account for park-generated revenues from sources such as parking fees, pavilion rentals, and campground reservations. At the time, the ECF had provided a quarter of the park system's entire budget.

Today, state law requires that those same park-generated revenues go to the state's all-purpose General Fund. This new arrangement, however, provided no guarantee that



*The empty swimming area at Green Fall Pond, where a state campground has been closed since 2016.*

JAMIE TOMMINS

the money generated by state parks would be spent on the parks themselves. As a result, the state parks must compete with the rest of Connecticut's discretionary government programs for a slice of the budgetary pie. In recent years, that pie has been rapidly shrinking.

Connecticut's slow economic recovery exacerbated a preexisting debt crisis that now threatens the long-term economic stability of the state as a whole. The state government currently owns over \$170 billion in unpaid liabilities accumulated by entitlement programs and other debt since 1939. By 2032, the government's combined annual payments on two of those accounts—for state employee and teacher pensions—are projected to exceed \$12 billion, a spike in expenses that Governor Malloy has said the state “cannot survive.”

The state's economic troubles have left the parks facing an existential crisis. How can the state operate its 140 parks, beaches, and forests when it can't afford to pay its bills? The budget negotiations in the first half of 2017 provided a choice between two possible solutions: either continue funding the parks through the General Fund, or find an alternative method of financing.

The first scenario could cause a dramatic change in the way the state parks are operated today. In the almost certain event of cuts in General Fund spending in the next few years, the state will likely not be able to afford the current budget of the state park system, which in fiscal year 2017 was about \$16 million. Instead, the parks would experience severe and unprecedented cuts in staff, maintenance, and services as part of a statewide shift toward a practice known as “passive management.” Under this new and mostly hands-off style of park administration, oversight of the park system would be reduced to the absolute bare minimum. The parks would theoretically remain open to the public, but access would be granted at the visitor's own risk.

To avoid this scenario, park advocates have proposed an alternative arrangement that would build on the idea behind that previously established by the Environmental Conservation Fund.

Given the virtual certainty of severe cuts to the General Fund, park advocates have proposed establishing an alternative funding source similar to the previously abolished

Environmental Conservation Fund. Their plan calls for adding a \$10 surcharge to residents' biennial vehicle registration fees, with the new revenues going into a fund—officially called a “dedicated non-lapsing account”—to be used exclusively for management of the parks. In return, residents who pay the fee would be given free admission and parking to the entire state park system. Advocates call the program the “Passport to the Parks.”

If enacted, the Passport to the Parks program is expected to generate roughly \$14 million a year—almost 90 percent of the parks' General Fund allocation in fiscal year 2017. The remainder, and perhaps a little more, could be raised from existing revenue sources not covered by the Passport, such as camping permits and pavilion rentals. The funds collected from the surcharge, meanwhile, would create identical savings in the General Fund, which would no longer need to fund the parks. The state park system, in effect, would become entirely self-sustaining.

“We think that's a concept worth looking at,” said DEEP spokesman Dennis Schain.

The Passport program has gained wide support from conservation and outdoor recreation groups during the last two years. “We certainly support the passport,” said Pamela Aey Adams, president of Friends of the Connecticut State Parks. “It just makes so much sense,” said Amy Paterson of the Connecticut Land Conservation Council. Others such as Eric Hammerling, executive director of the Connecticut Forest & Park Association, have been unambiguous in their stance against the use of passive management. “It would be devastating—absolutely devastating—with regard to the parks,” he said. Several of the eight different budget proposals discussed this year, from both Democrats and Republicans, have supported the Passport program as well.

Enactment of the Passport program is far from assured, however. Governor Malloy has cited skepticism of the revenue projections put forth by proponents of the Passport, and the program was not included in the two-year budget proposal released by his office in May. According to Mr. Schain, however, “Just because it wasn't in the governor's budget doesn't mean he doesn't support it.”

Meanwhile, the proposed budgets that included the program may not prove to

be reliable indications of political will. The spokesman for one state senator on the Environment Committee, for example, told me that the senator was in favor of the Passport program, but also not in favor of raising residents' auto registration fees. Mr. Hammerling says he is cautiously optimistic, but added, “It's been a weird year.”

As of July, the political stalemate could very well push the budget negotiations through the end of the summer, or even beyond. The parks, however, are under a more pressing deadline. The funding provided by the governor's executive order was set to expire after Labor Day, when park revenues are expected to drop from their peak in the busy summer months.

If a budget is not passed by the fall, the entire park system may be forced into passive management. In the meantime, the effects of passive management are already visible in the state parks this summer. “We're already getting pictures from folks of trash that's been dumped in different areas because there's no one around,” said Mr. Hammerling.

I could see these effects for myself as I ate my dinner at Green Fall Pond. In the picnic area, between the site's two restrooms, a garbage can stood with a precariously balanced pillar of trash rising several feet above its brim. I felt grateful, having noticed this pile of garbage, to not be spending the night in an area with such an egregious attraction for black bears or other animals. I was even more grateful, however, to find that the open restrooms made a very secure bear shelter—if one were needed.

### Value of the Parks

Talk of such large-scale cuts to Connecticut's state parks and recreation areas might suggest that these activities cost the state a lot of money. DEEP's approximately \$63 million allocation in the General Fund might sound like an objectively large sum, but it represented only 0.35 percent of the fund's total of \$19 billion. In this context, the \$16 million budget of the state parks is infinitesimally small. And as it turns out, cutting funds from either source could do considerably more harm than their small budgets might suggest.

The fact often goes unacknowledged that DEEP is one of the most cost-effective and ultimately valuable organizations in the entire state. Among government programs,

the agency has emerged as one of the state's foremost achievers in its efforts to improve bureaucratic efficiency. Under the LeanCT program, the government's internal efficiency initiative, DEEP has implemented 80 various "process improvements" since 2008. In recent years, DEEP officials have even been called to consult with government agencies on how to make progress under LeanCT.

One major driver of this efficiency is, of course, the severe budget cuts that have hit the agency in recent years. Between 2015 and 2017, DEEP's allocation of the General Fund—typically providing over 60 percent of the agency's budget—fell by nearly 14 percent. Federal funding, another quarter of its budget, has fallen by 9 percent since 2013.

These cuts have not always been equally distributed across DEEP's various divisions. Compared with other state agencies, a large proportion of DEEP's expenditures go toward nondiscretionary activities, largely for administering compliance with state and federal environmental regulations. Of the agency's discretionary spending, the vast majority—nearly two-thirds—is spent by the Environmental Conservation division, which oversees the parks. This is the primary reason that conservation and recreation programs are so often targeted in lean financial times.

In 2016, when the agency was asked to cut nearly \$10 million from its existing General Fund budget, a proportional cut to the state park system would have exceeded \$6 million—enough to necessitate a large-scale adoption of passive management policies. Ultimately, agency officials decided to keep most of the parks' budget intact, opting for the \$1.8 million cut which led to the first three campground closures and other service reductions last summer. Doing so, however, required keeping some 30 open department positions unstaffed at a time when the agency is reeling from the effects of deep staffing reductions. Since 2007, staffing at DEEP's three main branches of environmental protective services—the divisions of Environmental Conservation, Environmental Quality, and Centralized Services—has fallen by over 20 percent.

In recent years, agency officials have begun to use the term critical vacancies to describe the increasing number of core agency positions that have disappeared as a result of layoffs, hiring freezes, and retirement incentive programs by the state. DEEP Commissioner



JAMIE TOMMINS

*The sign no one wants to see greets people at Devil's Hopyard State Park's campground. Below it, a forgotten beer bottle in a fire ring.*

Rob Klee, speaking to the legislative Environment Committee last year, cited one example of critical vacancies in the agency's aquatic pesticides group, which lost three of its four members in 2015. "They"—now, a single employee—"will still get the same 500 applications," he said. Even when positions can be refilled, the loss of experienced staff to retirements has been particularly challenging, as former Deputy Commissioner Mike Sullivan explained in the same committee hearing. "Those people frequently have the strength of ten."

It will be virtually impossible for DEEP to absorb the next hit to its discretionary budget without severe cuts to the Environmental Conservation division. In fact, such cuts are already underway. This summer, the state parks' corps of seasonal workers suffered a 45 percent cut in hours under the governor's June executive order. Traditionally, this seasonal workforce has provided virtually all of the day-to-day maintenance and support required to operate the parks during the high season, and their absence is what has forced many parks to fall under passive management this year.

This seasonal workforce is also what

allows the parks to bring in its roughly 2 million dollars' worth of parking and entrance fees each summer, a fact that underscores a deep irony about the crisis facing the parks. As cuts to DEEP endanger the future of the "discretionary" park system, the parks themselves are one of DEEP's most economically valuable assets. According to the Connecticut Center for Economic Analysis, at the University of Connecticut, the "discretionary" outdoor programs of the agency's Bureau of Environmental Conservation generate over \$1 billion of economic activity in the state every year. The state parks alone were found to produce about \$38 in local economic activity for every \$1 spent by the state to operate them.

A person camping in one of the four closed state campgrounds might find particular irony in the study's finding that campgrounds brought Connecticut's economy \$18 million of out-of-state money—four-fifths of the out-of-state total for the parks. This economic point is far from abstract. In the governor's latest budget proposal, the four towns whose campgrounds were closed this summer could lose almost \$4 million in combined municipal aid from the state. Voluntown alone could lose over \$1.3 million. When DEEP announced the closure of Green Fall Pond last summer, Voluntown First Selectman Robert Sirpenski told reporters, "We're getting shortchanged."

### The Strange, Perfect Potholes

I try not to let statistics distract me from the true value of Connecticut's state parks. The week after my visit to Green Fall Pond, a friend and I went for a hike at Devil's Hopyard, in East Haddam. We arrived only a little later than planned—just after sunset. Up the road from the parking lot above Chapman Falls, a familiar wooden gate stood closed at the entrance to the park's campground.

It was a miserable, humid evening that I would hardly have chosen for hiking, but I had little choice. My friend, from Ohio, had been bragging about some of the swimming holes in his home state, and I had to put his claims to rest. We crossed the Eightmile River on the covered wooden bridge, then hiked up the trail to a rocky outcrop overlooking Chapman Falls. It had rained the entire week before. Spray whipped our faces as the swollen falls roiled the waters in the pool below our feet, thundering louder than even the growl of a pickup truck accelerating

up the nearby road. Somewhere below, perhaps, little rocks were digging the strange, perfect potholes the falls are famous for, which early settlers saw and believed was the work of the devil. But perhaps not.

“Whoa,” said my friend, barely audible.

Will the Passport to the Parks be the solution to the threats facing places like Devil’s Hopyard? Like Mr. Hammerling, I’m cautiously optimistic. Standing in front of Chapman Falls, I would have said that the parks are worth any amount of funding. They might even be priceless. But there is no denying the weight of the pressures they face, and just as the parks are worth far more than a few millions of dollars, Connecticut’s financial crisis is more than just a book to be balanced. It’s the livelihoods of teachers and public servants, the dreams of retirees, the health of the poor and the sick, and the hopes of immigrants, refugees, parents, and children. Those things are priceless, too.

Connecticut faces impossible choices over the next decade, and even the Passport program may not be able to shield the parks from the economic consequences. The recent threats to one other government program serve as a cautionary tale. Established in 2005, the Community Investment Act, or CIA, provides money for a dedicated funding source for local land projects financed with a surcharge on municipal real estate recording fees. Since its inception, the CIA has generated upward of \$4 billion in statewide economic activity, as well as tens of thousands of jobs. “It’s brilliant,” Ms. Paterson of the Connecticut Land Conservation Council, an outspoken advocate for the program, said. But the state’s last biennial budget cut funding for the CIA by 50 percent, and there are proposals in this year’s negotiations to sweep the remainder of its funds back into the General Fund.

“It was really meant to weather any fiscal crises,” says Ms. Paterson of the CIA’s dedicated funding source. Today, however, advocates for the CIA worry about a possible raid of the funds that have already been raised and promised to existing projects. “I think it’s just looked upon as a source of revenue,” Ms. Paterson said. So, too, might the \$14 million raised by the Passport to the Parks.

I thought of other questions as we stared at the roaring falls. What kind of places will a Passport give access to? In the parking lot, my friend and I had passed a sign warning of high bacteria levels in the river following

the storms. Will the Passport protect DEEP’s other divisions, including Environmental Quality, from dwindling state and federal funds? Park maintenance is one thing, but ensuring the health of Connecticut’s environment as a whole is quite another.

The sky had turned the color of wet stone when we hiked back into the darkening woods. We must have taken a wrong turn, however, because rather than finding our way back to the covered bridge, we emerged, inexplicably, across the road from the campground gate.

So much for caution. As for optimism, the best reason I could give, if pressed, would probably be the continued efforts of Connecticut’s outdoor community to rally behind the parks. During the week of rain, I’d asked Mrs. Adams, president of the Friends of Connecticut State Parks, how many individual friends made up her organization’s 26 different local chapters. “A little over 6,000,” she said. An all-volunteer organization more than six times the size of DEEP seems like a pretty good friend to have.

The most important thing, it seems to me, is for all Connecticut residents to do their part. That might mean paying the government an extra \$10 every two years. It might mean bringing a garbage bag on a hike to clean up garbage at a passively managed campground. Or, if you happen to be violating Sections 23-4-3(a) through 23-4-3(k) of the state’s regulations on the use of public lands—which, I should mention, you must not do, even if you’re willing to be punished with up to a year-long ban from the state park system—it might mean teaching a friend about Leave No Trace camping ethics.

My memory of the rest of my visit to Devil’s Hopyard is hazy. It’s possible we stood at the gate for a very long time, staring at the beautiful moonlit campground on the other side—empty, abandoned, overgrown, but beautiful. We might also have heard bullfrogs in the nearby pond, and the piercing cry of an owl. But I do remember the pile of beer cans in the fire pit, and the pair of flashlights that flickered deep in the woods. I saw them emerge from the trail, cross the road, and drive away through the open gate at the entrance to the parking lot.

*Jamie Tommins is a freelance writer in Hartford.*

## HORRIFIED BY TREE CUTTING

### To the Editor:

I am a passionate tree hugger. We joined the Connecticut Forest & Park Association after we visited Goodwin Forest a few years ago, and we have been members since. It was my understanding that the purpose of this organization was to protect living trees, and to promote the growth of new stands of trees. I do have some comments to make, however, about two articles (summer 2017). The last time (this spring) that I visited Goodwin Forest I was deeply saddened and horrified to see a large area of mixed trees that had been cleared. It was between the house and Route 6, along the driveway. The bodies of the big, beautiful trees still lay on the field, all hacked to pieces. I imagine that these were some of the original trees planted by Mr. Goodwin that you mention in your piece. What would he think of this? I understand that there is a need to clean some areas for pastures, for, say, the bobolinks, but there are already large areas cleared in the forest.

I don’t think I will return there ever again.

Another article in this magazine that I took exception to was [Jean] Crum Jones’s article about a small black walnut grove on her property. The entire article is devoted to rationalizing why these beautiful trees should be cut down: The nuts were too hard to crack (my father harvested and cracked his own black walnuts well into his 80s), they stain your hands (?), it interfered with her garden (easy, move the garden), or the fear of a walnut falling on the head of a passing guest (?). I found the article exasperating and inappropriate for a forest and parks magazine.

So I guess this is an opinion article. I will continue to look forward to receiving and reading your magazine.

—*Margarita Halpine Eastford*

**Editor’s note:** We understand how shocking the cutting of large trees can appear. CFPA’s mission to connect people with the land and to promote sound forestry sometimes extends to cutting trees so that new growth and new

*continued on page 19*

# THE MASTER NATURALIST PROGRAM INSPIRES A RETIRED TEACHER TO STUDY PAINTED TURTLES

BY BILL POWERS

The woods or waterfronts have always served as refuges for me. When I retired from my career as a public high school teacher, I joined the Goodwin State Forest's Master Naturalist program sponsored by Friends of Goodwin Forest, Connecticut Forest & Park Association, and the Connecticut Department of Energy and Environmental Protection. The program provides background knowledge and skills needed by future volunteers.

For my required research project, I chose observing the behavior of eastern painted turtles (*Chrysemys picta*), also called sun turtles. I wanted to study whether atmospheric conditions and water temperature affect the counting of a local population of painted turtles and predict when turtles were most likely to be seen and therefore counted. For three years in my kayak, I conducted more than 300 surveys. I went out in all seasons except winter. Simple methods to determine the population of painted turtles are needed to be able to monitor their health and vitality over time.

Biologists use some very sophisticated methods for obtaining turtle population data that turn out to be very time and labor intensive. They trap turtles, mark them, and later recapture them to determine the number of individuals. Researchers also frequently need to use added statistical methods to obtain the final estimate of the population. Some researchers point to the unreliability of trapping techniques for this purpose. My method

was simpler and may be a more valid and reliable way to collect such data in locations similar to where these observations occurred.

Painted turtles are abundant and distributed widely throughout North America. The eastern painted turtle lives throughout Connecticut wherever there is slow moving water, especially in lakes and ponds. They are cold-blooded reptiles and help regulate their temperatures by basking in the sun on logs, stumps, rocks, and the edge of cattails near the water. They hibernate during the cold of the winter months, often in mud at the water's bottom.

Surfacing from their long winter's inactivity, they appear very groggy and often somewhat indifferent to the presence of potential predators. Apparently, a turtle thinks that being taken by a predator is less risky than staying submerged for slightly longer periods. Being buried for months in winter, they possess truly remarkable adaptive features, which allow them to tolerate low or no oxygen availability, lower pH (acidity), the cold, and no food. Surfacing to bask in the sun as the air starts warming allows them to take in warmth and oxygen and to discontinue reducing their stores of calcium from their shells for buffering of the acidity in their tissues. Soon they will also be able to begin replenishing their stores of carbohydrates that were depleted.

## The Surveys

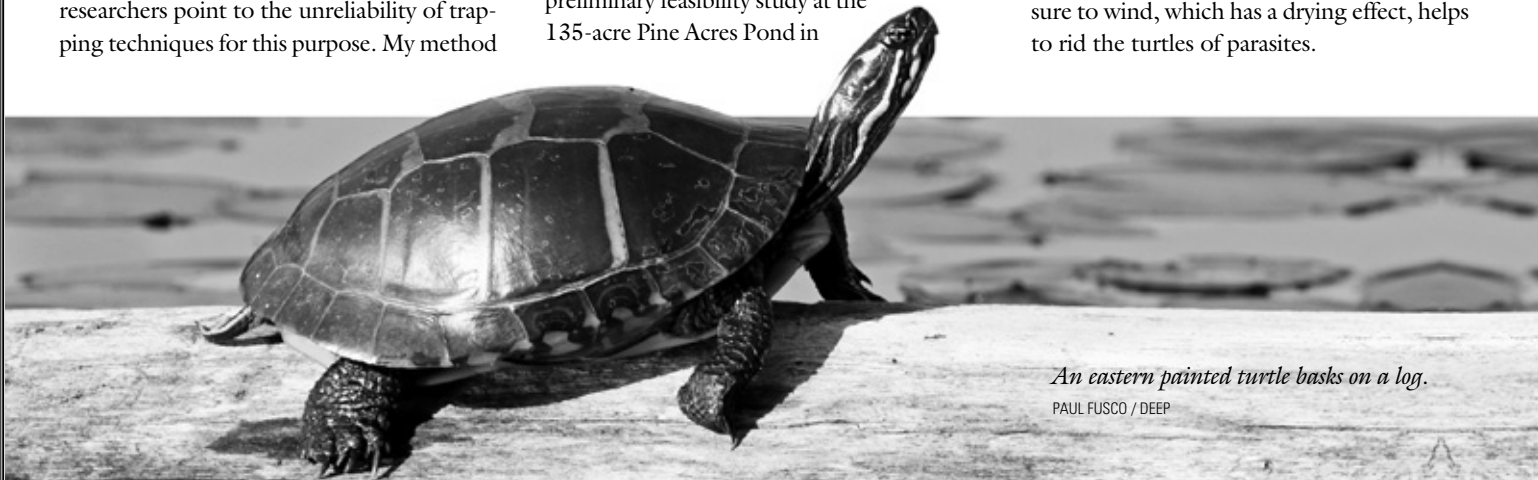
I first got my feet wet, so to speak, with a preliminary feasibility study at the 135-acre Pine Acres Pond in

James L. Goodwin State Forest in Hampton. For convenience, I moved the study to a private, 22-acre spring-fed pond in Windham. The depth of the pond ranges up to 20 feet. It is mostly surrounded to the edge of the water by forest, a small amount by grass, and cattail-dominated marsh accounting for about 15 percent of the edge. The southern end is narrow and shallow and has a deep layer of leaves that have accumulated on the bottom above a layer of mud.

I paddled counterclockwise at various times of the day, avoiding rainy days. I counted basking painted turtles and noted their locations. I noted those rare times I saw swimming turtles. I recorded the water and air temperatures, cloud cover, wind speed and direction, relative humidity, and barometric pressure. I observed birds and other animals. Each survey took about 40 minutes.

## The Results

The greatest numbers of painted turtles were seen basking within an optimal range of temperatures for both the air and water (except for the days after emerging from hibernation). Other measures taken did not correlate with the number of turtles observed, with one unexpected exception. As the wind speeds increased, so did the numbers of painted turtles observed. A possible explanation for this came in consultation with Dr. Travis Ryan, a biologist from Butler University who has studied reptilian parasitology. The theory is that increased exposure to wind, which has a drying effect, helps to rid the turtles of parasites.



*An eastern painted turtle basks on a log.*

PAUL FUSCO / DEEP

I found that the best time to estimate painted turtle populations is in the spring, when the temperature begins to increase as they emerge from the mud- and leaf-covered bottom. This year at my location, it was just two days after the ice had melted at the shallow southern end of the pond. During the next few days, I saw them there in record numbers (they appeared nowhere else on the pond).

With data available for the various locations where turtles were seen, it has been possible to track their movement during the year. After emerging in spring, they surfaced at the shallow end of the pond and in a matter of a few days began to distribute themselves to other locations on the pond. In the fall, they slowly moved back to the shallow end of the pond until that was again the only location where painted turtles were found. Seems that they were preparing to dig in for the upcoming winter months.

I usually found turtles in bales, or groups. Basking turtles were with others 93 percent of the time.

At the north end of the pond, painted turtles and nesting red-winged blackbirds (*Agelaius phoeniceus*) were jointly occupying a 70-foot-long strip of cattail-dominated marsh. When the turtles and blackbirds were together, both appeared to benefit by warning the other of approaching threats from possible predators. This early warning system included approaching muskrats, snapping turtles, osprey, red-tailed hawks, great blue herons, neighborhood cats, and my kayak. The movement of the turtles (usually two or more) entering the water aroused the blackbirds, which then aggressively defended their nesting area. When the blackbirds saw something threatening first, their noisiness alerted the turtles. As the nesting blackbirds left the area for the season, the turtles left, too. A possible explanation for this, aside from the loss of their early warning system from the blackbirds, is that another benefit exists to cohabitating in the nesting area. Dr. Susan Herrick, a herpetologist at the University of Connecticut, suggested to me that turtles basking near the nests benefit from “things falling out of the nest.” So the turtles take advantage not only of the early warning system but also a free lunch.

The author would like to acknowledge the indispensable inspiration and support of Juan Sanchez, his coordinator and instructor in the Master Naturalist Program at the Goodwin Conservation Center.

*Bill Powers is a retired public school teacher. He volunteers for CFPA and the James L. Goodwin Conservation Center in Hampton. He lives in Windham.*

## CFPA CONSERVATION PROGRAMS

### CONSERVATION ADVOCACY

Every year since 1897, CFPA has provided legislators with an Agenda for Connecticut's Land and People. CFPA's advocacy priorities have included securing adequate resources for the Connecticut Department of Energy and Environmental Protection to manage state parks and forests; support the preservation of working forests and agricultural lands; and lead efforts to secure National Scenic Trail designation and ongoing support for the New England Trail.

### BLUE-BLAZED HIKING TRAILS

The Blue-Blazed Hiking Trail System, established in 1929, is one of CFPA's most visible and lasting contributions to recreation. The Blue Trails total more than 825 miles in 96 towns. The infrastructure for managing this massive area consists of CFPA's trail stewardship director, the CFPA Trails Committee, and more than 100 volunteer trail managers who through work parties and ongoing maintenance activities donate more than 15,000 hours of volunteer time each year.

### ENVIRONMENTAL EDUCATION

Since its original statement of purposes to bring forestry and related topics into schools, CFPA has been a leader in environmental education.

To engage in a natural learning experience CFPA offers teachers, landowners, adults, natural resource professionals, youth, students, families, and seniors myriad programs that provide inspiration for science, art, history, math, literature, and conservation topics. Together, we demystify the wild, explore trails, and discover hidden gems of Connecticut's forests.

From its headquarters in Middlefield to its partnership program at the Goodwin Forest Conservation Education Center in Hampton, and the forests and trails across the state, CFPA connects people to the land to create and support lifelong learners as Connecticut's stewards of the woods.

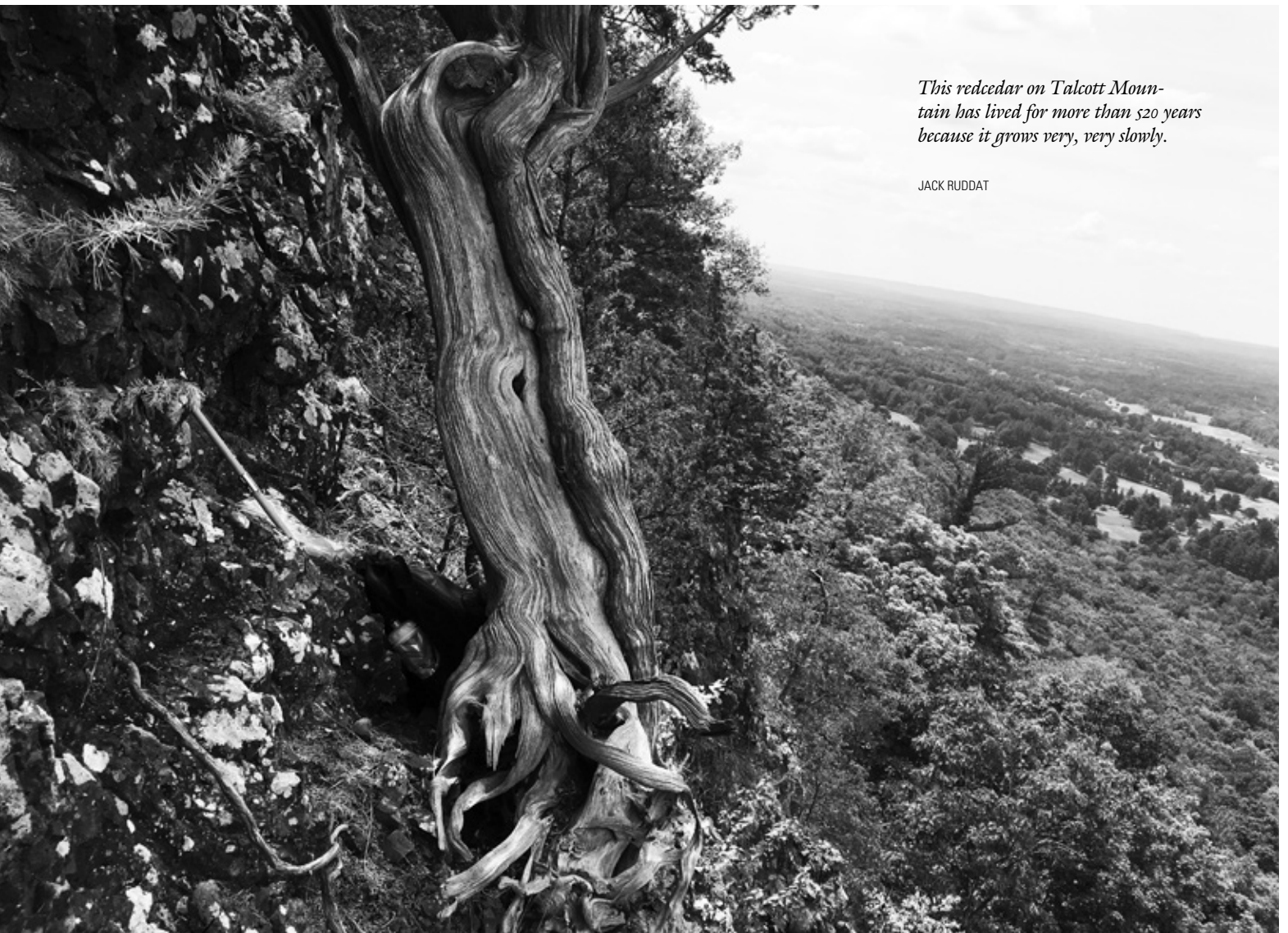
### LAND CONSERVATION

Over the past 100 years, CFPA has been instrumental in the acquisition of more than 100 state parks and forests for public use and enjoyment. CFPA owns properties or holds conservation restrictions on approximately 2,000 acres. The conservation priorities for the program are in lands associated with working forests and/or hiking trails.

**Visit [ctwoodlands.org](http://ctwoodlands.org) for more information on CFPA programs and activities.**

*This redcedar on Talcott Mountain has lived for more than 520 years because it grows very, very slowly.*

JACK RUDDAT



BY JACK RUDDAT

I set off for Talcott Mountain State Park in July 2016 searching for ancient eastern redcedars (*Juniperus virginiana*). The sun was still high, being only just past midday, and I was hoping to find the grandparents of the 225-year-old redcedar I had found earlier that year. As I carefully scaled the slope that led to the bonsai-like trees known as krummholz, the German word for crooked wood, I realized that some of them may approach 300 years in age. Not that they are all that impressive in height or girth; rather, they grow extremely slowly because of the harsh environments of the traprock ridges.

The exaggerated dry, hot, and stormy summers on top of these mountains and the

## CONNECTICUT'S OLDEST LIVING THING

*This redcedar sprouted  
before the Incan Empire*

lack of nutrient-rich soil, or much of any soil at all on the basalt, prevents the trees from growing more than a tenth of an inch in diameter on average every year, and in some cases, less than 1/37 of an inch. Instead of dying sooner, these trees survive by growing much more slowly than other trees. They employ an adaptation known as strip bark growth. When they become too large to be sustained by the nutrients available to them, part of the root system dies while the rest continues living. When part of the root system dies, the bark and foliage above it subsequently die.

As I explored the ridge using technical climbing gear, I saw many stunted, gnarled trees. I noticed a particularly large individual leaning up against the mountain, settled on a narrow ridge, whose diameter was near



14.5 inches and whose mostly dead, desiccated root system was largely exposed. On the side of the tree facing the Farmington Valley, an 8- to 10-inch-wide strip of bark was the only living part of the tree, sustaining only one or two of its main branches. From what I had observed and read about characteristics of old trees, I originally thought this one to be anywhere between 300 and 500 years old. After taking a few photos of the tree and choosing the best place to bore it, I took out my increment tree borer and extruded a small, pencil-sized core sample from which I could count the annual tree rings. These annual rings are created by the contrast between the lighter colored, larger wood cells created during the spring and summer and the darker colored, smaller wood cells created at the end of the summer and early fall. The result is a thin, dark, annual ring that almost always encircles the entire circumference of the tree except during extremely harsh growing seasons when there may be gaps along certain radii.

The age of the tree is most accurately determined by counting these annual rings. This method of dating trees, based on a small, axial, wood core sample, is the least invasive way to accurately age a tree. Since the only living part of the tree is the inner layer beneath the bark, known as the cambium layer, most of the wood removed from boring is not harmful to the tree. The greatest risk to trees after increment boring is the slightly increased chance of heart rot or the decaying of wood from the middle of the tree, as there is now an entry hole for moisture, fungus, and bacteria. The tree works around this by growing wood around the hole and sealing it up within one or two growing seasons, depending on the growth rate of the tree. These eastern redcedars live in very dry, harsh environments, so the risk of heart rot and insect attacks is very low. Also, coniferous trees tend to heal wounds much faster than hardwoods by exuding sap, filling up the hole within a week or even a couple of days or hours.

Now that I had the sample sealed in a Ziploc bag, the time came to take it back home where I could sand the surface with successively finer grits of sandpaper until it was possible to see individual wood cells under a microscope. Before I started counting, it was clear to me that the tree was more than 300 years old because each ring was very closely spaced to the next. After counting to

323 and 348 rings, it was evident that two fires had taken place on this tree around the years 1668 and 1693. I knew this by what dendrochronologists (those who study tree rings) call fire scars or tree rings that have a dark band of charcoal where the fire burnt the tree. After being scarred by a fire, the tree will grow around the scar and leave a cavity where the wood burned away, in this case two small cavities. Furthermore, some of the tree rings were locally absent, meaning that the tree did not grow wood all the way to the base of the trunk during those years. Trees start growing wood from the buds down, so a very harsh growing season may prevent the tree from adding wood cells all the way to the base of the trunk. Each place where growth stopped is where two or more rings become locally “wedged” into one ring. In these cases, two or more rings must be counted to most accurately reflect the true age of the tree.

A third anomaly I came across when counting were false rings or rings that are the result of “false” late wood growth, either before or after a true annual ring is made at the end or beginning of the growing season. This can happen from either a cold spell in early spring or from a sudden increase in warmth during the fall, in which case the ring should not be counted. Because of the question of whether some of the rings may be false rings, the actual currently visible ring count of this sample is likely to be 533 but could be anywhere between 520 and 539. After approaching the pith (middle) of the tree, wood appeared to be missing, probably from a long ago or perhaps recent fire that carved out a cavity from the side of the tree facing the mountain to the pith. I counted an approximate total of 533 rings in the 7.3125-inch-long sample, meaning that the tree core sample contains approximately 73 rings per inch. Perhaps as many as 60 to more than 80 rings are missing because of the wood missing from the two fire scars, the missing pith and surrounding wood, and any unseen locally absent rings.

Knowing all this, I estimate this tree to be certainly at least 550 years old but more likely around 600. That puts its germination date to around 1416, 35 years before the birth of Christopher Columbus and 22 years before the founding of the Incan Empire. To confirm my findings, I brought the sample to Associate Extension Professor Thomas Worthley, a professor of dendrology

(the study of wood) at the University of Connecticut. He counted the rings under a stereo microscope and arrived within single digits of the number claimed. The only other dated trees in Connecticut that come even remotely close to that age are the few 400-year-old eastern hemlocks in Sages Ravine, Mount Riga State Park, and Great Mountain Forest. There are probably other, even older eastern redcedar trees scattered among the traprock ridges of the Connecticut River Valley. *Trap* refers to steps and *rock* refers to the igneous basalt that commonly breaks off in sharp angles, forming the giant step-like formations of the mountain-side. Dr. David W. Stahle, the director of the Tree-Ring Laboratory of the University of Arkansas, has found eastern redcedars close to 800 years old. He associates very old redcedars primarily with dolomite formations and secondarily with limestone. The fact that this particular eastern redcedar was found growing on basalt is unusual, according to Robert T. Leverett, the executive director and a cofounder of the Native Tree Society. This may be a very rare occurrence found only in the traprock ridges of Connecticut’s River Valley. If other living or dead trees of this age are found, then the ability to cross-date or match the patterns of varying ring widths between trees of the same species to account for tree ring anomalies could allow a reconstruction of past weather conditions in the state of Connecticut such as fires, droughts, and floods. The larger the ring, the wetter the season, and the thinner the ring, the dryer the season. Extreme caution must be taken when searching for trees of this age because many of them live in very dangerous areas that require specialty climbing gear. The tree I found should never be approached without professional climbing gear because there is a significant chance of falling over 100 feet down the sheer, jagged cliff below. Furthermore, many of these trees live in delicate ecosystems where extensive rock climbing could easily loosen their fragile hold on the earth or remove rocks and soil needed for the establishment of new trees. Therefore, much care should be taken in protecting these rare and ancient trees from harm caused by human traffic.

*Jack Ruddat is a freshman at Worcester Polytechnic Institute and a 2017 graduate of Northwest Catholic High School.*



# PIGS: PRESERVING HERITAGE IN CONNECTICUT

BY JEAN CRUM JONES

**W**e have two Tamworth pigs, a heritage breed, on our farm. More than a dozen years ago, we began raising a couple of pigs each year because so many children coming to pick pumpkins also wanted to see farm animals. We began by borrowing a couple of turkeys from a neighbor and getting some piglets. Pigs are delightful social animals, and they will happily consume damaged pumpkins, wilted broccoli, and all other unused foods from our farm's small production kitchen. Pigs have sharp teeth and are curious animals, so we built a two-layered fence to prevent them nibbling the fingers of small children.

Pigs cavort around their pen “snouting” at a basketball, munching away at their varied diet with relish when hungry, and snuggling together to rest when tired or hot. We thought pigs were the perfect choice of animal for our Pumpkinseed Hill farm. Before we were the owners, the previous farm family raised pigs on the farm commercially, in addition to dairying. In the 1920s through the 1950s, the farmer collected leftover food waste from restaurant and food shop owners of nearby Ansonia, a thriving small manufacturing city. The farmer processed the discarded food into slop, fed pigs excess milk, and grew the biggest pigs around.

My father-in-law described how easily as a child he could see the gigantic pigs on the hillsides from his house about a mile away. There were many local butchers and Eastern Europeans in the lower Naugatuck Valley in those days, and raising hogs was a very profitable enterprise for this farm family. Subdivisions started creeping over the hillsides in the 1950s, and when this neighboring farmer passed away in the early 1960s, the swine and dairy farm disappeared. Fortunately, other neighboring stock farmers hayed the land until we had the opportunity to purchase the property in 1984.

Pork has been an important part of the New England diet since the earliest Pilgrims and

Puritans brought pigs from Europe in the early 1600s. Pigs were also imported from Spain, Portugal, the Netherlands, France, and other countries into the other North American colonies and quickly became established here. They became widespread because no other farm animal is more completely useful. Pigs are easy to raise, are quick to put on weight, and were essential for home supplies of pork and lard.

In early American times, pigs proliferated because of their remarkable scavenging ability, and they became a nuisance at times. They broke through split-rail fences and rampaged through gardens, grain fields, and cornfields. Colonial laws were enacted requiring hogs to have ear slits for identification (so errant-pig owners could pay for damages created by loose animals) and to have nose rings to prevent rooting. In New York City, a long solid wall to exclude marauding pigs was constructed on the northern edge of the colony; it created the name for the area now known as Wall Street.

By the end of the 1600s, the typical colonial farmer owned four or five pigs, supplying salt pork, ham, and bacon for the table; excess could be preserved in salted brine, kept in wooden barrels, and sold if necessary. Pigs were often finished on American Indian corn, and this became a standard way of fattening the animals before the late fall pork harvest.

In the United States, pigs were first commercially slaughtered in Cincinnati, and by the mid-1800s, Cincinnati led the nation in pig processing and was nicknamed “Porkopolis.” In 1887, Swift & Company introduced the refrigerated railroad car, chilled by an ice and salt solution (mechanical refrigeration didn't begin until 1947). This created a revolution in pig farming as slaughterhouses could be centralized near production centers because processed pork could be shipped instead of live hogs. Efficient swine farming became concentrated in the upper Midwest close to where the grain was grown and the large terminal markets

were located. Production of pigs, therefore, declined in New England.

Pig breeds were traditionally classified into two types, either lard or bacon. Lard breeds were used to produce lard, a cooking fat and mechanical lubricant. These pigs had short legs and were compact and thick. They fattened quickly on corn, and their meat had large amounts of fat in it. Bacon pigs were long, lean, and muscular. They were traditionally fed on legumes, small grains, turnips, and dairy byproducts—feeds high in protein and low in energy. The market for lard was very strong during World War II, when it was used in the manufacture of explosives. With most lard diverted for military purposes, people began using vegetable oils (shortening and margarine) for cooking. After the war, these oils were successfully promoted as being healthier, and lard never resumed its place in the American diet. At the same time, manufacturers developed synthetic materials to replace lard for industrial and military purposes.

Suddenly, there was no market for lard pigs. Breeders worked on developing pigs with leaner meat and less fat for hog farmers. In the 1980s, because of the development of very lean pig types, pork was promoted as a healthy alternative to chicken.

The economic structure of pig production has changed dramatically from the days when pigs were an integral part of subsistence and diversified commercial farming and every farmer kept a few pigs. Today's production is dominated by a few large corporations that are vertically integrated, controlling every step from selection of breeding stock to marketing pork in the supermarket. The environmental consequences are dramatic and well publicized. The number of independent pig farmers has dropped dramatically, and some farmers have been forced to become contract growers for the corporations. Fewer and fewer processing facilities are open to small-scale pig farmers. As well,

*continued on page 21*

habitats can come in. Even a bearing walnut tree can reach a point on a farm where it no longer belongs. I contacted four professionals who know and work with Goodwin Forest: CFPA's Goodwin Forest Center Program Director Beth Bernard, James Parda (the former Goodwin program director), Connecticut Department of Energy and Environmental Protection forester Ed McGuire, and former Goodwin Forest Program Director and University of Connecticut Forester Steve Broderick.

Mr. Parda points out that this harvest was done in consultation with seven state-certified foresters and four other natural resource professionals who concurred that the overall benefit of the harvest outweighed the option of letting the trees decay naturally and eventually fall. Ms. Bernard hopes that you will visit Goodwin Forest again and points out that Mr. Goodwin bought the property originally to practice sound forestry.

Mr. Broderick writes the following, which we hope will help explain why harvesting trees can be an appropriate act:

In the mid 1950s, James L. Goodwin wrote a book entitled *A History of Pine Acres Farm*. Let me begin by offering a couple of quotes from that book: "A forester should, if he has the means and the time, own and manage a tract of woodland according to forestry principles and in this way learn what it means to cut timber conservatively and make it pay."

"After graduating from Yale Forestry School, it was my ambition to own, develop and operate my own timber tracts according to the best forestry principles."

Goodwin went on to say that he chose the site in Hampton because the railroad "was situated only a short distance away, with a siding at Clark's Corner, making a short haul for lumber, ties, cordwood, or other wood products to be shipped away by freight."

Yes, Mr. Goodwin did indeed plant those trees. He planted them as a crop, with the full intention that they would one day be harvested and sold as wood products. This was recently done, according to his wishes, and following the best forestry principles.

The Goodwin State Forest is unique in that it has been managed continuously by professional foresters for over 100 years. The Connecticut Department of Energy and Environmental Protection's forestry division can rightfully be proud of this heritage. The recent harvest in the area in question at Goodwin was the fourth there over the past 60 years. Each was undertaken to remove slower growing, less healthy trees and make more room for the strongest trees to grow rapidly and remain healthy. The most recent timber harvest that Ms. Halpine references was undertaken for several reasons:

1. To harvest timber trees that were financially mature and in some cases (due to rot in the stems) posing a public safety hazard to trail users, power lines, and Route 6.

2. To diversify and enhance wildlife habitat, particularly for American woodcock, a species of special concern (a woodcock management demonstration area lies adjacent to the harvest area).

3. To create optimal conditions for the regeneration of a new forest of oak, white pine, and associated deciduous tree species.

The tree tops and branches of the harvested trees that were left behind admittedly look messy and even shocking to the passerby. But they also contain essential nutrients that will rot back into the soil, while at the same time discouraging white-tailed deer from browsing back the new trees that develop there. To remove that wood through chipping or other means would be both unviable economically and damaging

ecologically. Within a very few years, the saplings and shrubs that grow up there will be literally full of migratory songbirds, reptiles, rabbits, and a host of other wildlife that were not there prior to the harvest. Mr. Goodwin would be proud.

In closing, it is worth pointing out that in New England we consume on the order of six times the amount of wood products annually that we harvest here. This makes us a significant net importer of wood. Much of the wood we import comes from places where the soils are steeper and more fragile, where environmental regulations are few, and where tree harvesting does a great deal more damage to the environment than it ever does here in Connecticut. Every board foot we grow and harvest here, according to the best forestry principles, is a board foot that does not need to be harvested elsewhere under far less optimal conditions.

## ARE NEONICOTINOIDS HARMFUL TO BEES?

I am concerned that false information ("Why honeybees are suffering and what beekeepers are doing about it," Summer 2017) may disrupt our access to and use of [the family of pesticides known as neonicotinoids,] an exceptionally effective substance that has low toxicity to mammals, great value as a systemic application, and in fact, no unique impact upon bees. I enclose an article from the Huffington Post, which is about the best comprehensive takedown of the strange case against neonicotinoids.

—John H. Grasso, *Glastonbury*

**Editor's note:** The article should have referenced recent studies that suggest neonicotinoids in the greater environment may not be as harmful to bees as previously thought. Dr. Richard S. Cowles and Dr. Brian D. Eitzer of the Connecticut Agricultural Experiment Station noted in the *Journal of Environmental Horticulture* (volume 35 no. 1, March 2017) that these chemicals can be harmful to insects that pollinate the plants on which the substances are used, but that in many cases, they are also pollinating other plants not treated. "Nurseries and ornamental greenhouse growers do need to recognize the potential for harm to pollinators" from using neonicotinoids and should choose a product like acetamiprid, which is 1,000 times less toxic to bees than others. We recommend reading the article.

I contacted several of my colleagues in the Society of Environmental Journalists. One who covers this story in Maryland said she recently talked to a U.S. Department of Agriculture bee expert in Beltsville who said that many believe the hazards to bees come from several sources that include (besides pesticides) the varroa mite and the stress of commercial pollination.

Mr. Grasso referred us to a 2014 Huffington Post article by Jon Entine, executive director of the nonprofit Genetic Literacy Project. He writes that neonicotinoids do not hurt bees. We recommend a more recent article by Mr. Entine, in *Slate*, "Do Neonics Hurt Bees? Researchers and the Media Say Yes. The Data Do Not." Mr. Entine's stance is that the media exaggerate the hazards of these systemic pesticides. (For those who really want to dig into this, search for posts by Gary Ruskin of the nonprofit U.S. Right to Know; he criticizes Mr. Entine's past public-relations work for chemical corporations.)



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:*  
**GINNY LOWE  
 CONNORS**

**Ginny Lowe Connors** is the author of three poetry collections: *The Unparalleled Beauty of a Crooked Line*, *Barbarians in the Kitchen*, and most recently, *Toward the Hanging Tree: Poems of Salem Village*. Her chapbook, *Under the Porch*, won the Sunken Garden Poetry Prize. Ms. Connors has also edited several poetry anthologies, including the recently published *Forgotten Women: A Tribute in Poetry* and *Laureates of Connecticut: An Anthology of Contemporary Poetry* (co-edited with Charles Margolis). She is the coeditor, with Pat Mottola, of *Connecticut River Review*, a national journal sponsored by the Connecticut Poetry Society. Connors also runs a small poetry press, Grayson Books.

## PORCUPINE

Powder puff with quills.  
 Hobo of the woods.  
 Queen of the rock piles.  
 Berry picker, leaf chewer, gnawer  
 of bark—canoe paddles if she's hungry enough.  
 Spined pig.  
 Shadow sharpening its darkness.  
 Prickle bear.  
 She doesn't know the dog has meandered out  
 to check on the leaf pile before retiring.  
 Her program tonight's just a shuffle  
 through the underbrush.  
 Suddenly a growl.  
 A howl.  
 A frenzied crying as the dog skitters home  
 with its prickly new beard.  
 She climbs a tree, sharp claws raking the bark.  
 She is the uncombed old woman of the woods.  
 Leave her alone.

## LUNAR ECLIPSE

Can you hear the sky, how it streams  
 the notes of an aria lost long ago? The moon  
 is dreaming again. Or we ourselves are lost  
 in some dream, beneath a gauzy trail of cloud  
 as the moon edges into earth's shadow, begins  
 to glow like a pomegranate. You told me once  
 my heart was cold as a marble. You couldn't see  
 how it ached like this moon pulsing red, beyond  
 the touch of anyone, out there in its universe  
 of silence. The lens of a camera, pupil of an eye  
 open wider and wider, never knowing why  
 certain bodies, moving into their inevitable  
 positions, bawl out their brief transformation.  
 O dress me in a golden sari, kimono of red silk  
 patterned with birds that wing across  
 a bronze-colored sea—do that if you would know  
 a different sort of me. That cold planet  
 spinning into and through the penumbra  
 is pitted with ancient accidents. You touch  
 your shoulder to mine. Streaks of cloud  
 begin to loosen, move away. Out there  
 The Sea of Tranquility croons to its dust. We lean into  
 the night's strangeness. The round syllables  
 of an owl's call fall toward us and we swallow them.

the economic centralization has led to a genetic narrowing of swine stock. Today, the pork industry relies on a three-way cross between a few highly selected strains of Duroc, Hampshire, and Yorkshire breeds that have been selected for performance under intensive husbandry.

### Two-Hour Drive to a Butcher

After our first pumpkin season with pigs, we needed to harvest ours in the late autumn. It was a problem to locate a slaughterhouse, and when we finally found one that would accommodate a couple pigs, we had to haul them over two hours to get butchered. But, it was worth it—I had never known how delicious pork could be. I have not bought supermarket pork since.

Around the time I discovered local pork, disturbing reports of large-scale confinement systems caught the public's attention. Such pigs were fed only grains and legumes along with antibiotics to hasten weight gain. The market for sustainably produced pork is still very small, but it is increasing. There is a trend toward a return to the older, fatter, tastier heritage breeds such as the Berkshire, Red Wattle, Tamworth, Large Black, Mule Foot, and Old Spot. These breeds have superior taste and texture because of the fat marbling that retains the moisture of the meat.

This interest in heritage pork is coinciding with an interest among some young persons eager to begin farming in Connecticut. The perfect trifecta for new farmers with a small acreage is vegetables, chickens, and pigs. These emerging enterprises have meant a greater availability of local, farm-fresh products in our state. Check with the Connecticut Department of Agriculture to find a local pork producer near you. Making the effort to find local, highly flavorful meat and to pay a fair price to the farmer is good for the farmer and for our environment as well as for the preservation of foods with flavor. I enjoy visiting with my friendly Tamworth pigs every day in their pen, and I look forward to winter when I will appreciate their gift of wholesome and delicious nourishment.

*Jean Crum Jones is a registered dietician who farms with her family in Shelton.*

## NOTES FROM THE FIELD

### *Meet CFPA's summer trail crew*

BY MARISSA JAYAWICKREMA

This summer, the Connecticut Forest & Park Association hired us, a team of five interns, to work on trail maintenance and construction projects throughout Connecticut. We're all in college. Four of us hail from Connecticut, and one is from South Carolina. Some of us are studying natural resources and the environment; others aspire to do good work outdoors. The thing we all have in common is that we are all immensely dedicated to maintaining and preserving trails across Connecticut.

A typical day for us begins at the CFPA office in Middletown, where we assemble the tools needed for each specific project. Then, we go to the work site where we spend the day clearing brush, repairing structures, or blazing new trails. We work in any weather, be it scorching sun or pouring rain, although the mild Connecticut climate often provides us with blue skies and pleasant temperatures.

Some weeks, our crew camps out in state parks and works from there. This reduces travel time and allows us to become more familiar with the area. One such week was spent in Goodwin State Forest, and another was at the White Memorial Conservation Center in Litchfield. When camping, we share a communal living environment where everyone works together and helps with cooking, cleaning, and preparing for the workday. From the moment we wake up and emerge from our tents to the end of the day when we share stories around the campfire, we are happy to be working in Connecticut forests, surrounded by natural beauty. The challenges and achievements of these shared experiences increase the camaraderie between us.

We prepare for the day by having breakfast together and going over the details for that day's work site. Our most recent project involved elevating a bridge over Furnace Brook on the Mohawk Trail in Cornwall. When we arrived at the site, the first thing we noticed was the beautiful Coltsfoot Valley that encompassed the trail, complete with misty mountains and quaint farmlands. The bridge itself had become nearly submerged by the brook, due to beavers building dams further downstream and raising the water level. There, we spent four long days taking apart the existing structure, raising the preexisting support beams, and replacing the wooden planks that make the walkway. Each day had its trials and tribulations, but at the end, the new bridge shone brightly and was a testament to our hard work and dedication.

By the end of each workday, we are tired and hungry, stiff, and worn down from the physically demanding tasks we have completed. However, we are quick to recover and return to our jovial temperaments as we share dinner under the cover of pine boughs.

All the projects we are a part of teach us many valuable skills, from carpentry and chainsaw usage to sustainability and environmental ethics. During the weeks spent with CFPA, we have had the opportunity to learn from volunteers and professionals, who helped us gain insight about park management and practical hands-on expertise. Every task we complete contributes to the quality and experience of the Blue-Blazed Trail System for current and future trail-goers.

**Note from CFPA Trail Stewardship Director Clare Cain:** CFPA hired its very first summer trail crew this year thanks to support from the DEEP Recreational Trails Program. This 10-week crew has tackled important improvement projects on the Paugussett, Field Forest, Hatchery Brook, Mat-tabesett, Narragansett, Punch Brook, Chatfield, Metacommet, Mohawk, Nipmuck, Pachaug, East-West, Goodwin Forest, Valley Falls, Nayantaquit, and Mattatuck Trails. Special thanks to Eastern Mountain Sports, REI, and James Little for camping gear donations.

*Marissa Jayawickrema of Andover is a history major at the University of Hartford.*



CFPA

*Clockwise from left, Al Sedor, Devin Hunt, Ben Coyman, Wesley Skidmore, Marissa Jayawickrema.*

# COPPICING COMES (BACK) OF AGE:

*An ancient forestry practice can help wildlife and tree growth*

BY HALLIE METZGER AND LLOYD IRLAND

**Q**uestion: Should you include coppicing in your woodland management plan?  
Answer: “Why not?”

This ancient forestry practice has proved its worth all over the globe and through the millennia. Used correctly, it provides wildlife habitat, fuel, and wood for a whole range of uses such as fencing, furniture making, and basketry. In southern New England, generations of charcoal makers coppiced stands to fuel iron foundries.

In England, beech stands have been coppiced for centuries for fuel, wooden stiles, chair legs, fencing, knobs, and other “small-wood” products. Then plastics and other materials replaced wood as factory-made products replaced local handcrafts. Coppicing fell out of favor and, as in New England, those coppices have now become mature beech forests with full-size sawlogs. In England, that shift has meant the loss of a distinctive traditional landscape. Now a British nonprofit, Small Woods, maintains demonstration plots and teaches coppicing as a way to perpetuate an “artisanal” landscape while promoting well-managed forests and local crafts. The change in attitude has even led some local tanneries to coppice trees for bark rather than using chemicals to tan leather. Closer to home, Maine and Vermont are considering coppice cuts for a steady supply of woody biomass.

The word *coppice* refers to sprout growth. You probably don’t think of a coppice when you prune flowering shrubs, but it’s the same technique. When you cut a large tree, sprouts emerge from dormant or adventitious buds on the stump or roots. Done correctly, coppicing a tree provides stems you can easily use for fuel and the whippy growth ideal for baskets or other small items. Coppicing promotes a brushy, hedge-like stand where wildlife will forage while the new sprouts grow. In the Middle Ages, stands of this kind were called copses, meaning “a small area of trees or bushes growing together” and were often managed by gamekeepers for small game.



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*A stand of coppiced trees sends up a dense thicket of young shoots out of older trunks.*

But a coppice does not attract all species. “Coppice works for very particular wildlife species,” said Mark A. Ashton, Morris K. Jesup professor of silviculture and forest ecology and director of school forests at the Yale School of Forestry and Environmental Studies. “Once the canopy closes in again, bird diversity in a coppice is unique but relatively low,” he said. “You’ll get woodcock and ruffed grouse, for example. The forest structure is ideal for upland game birds. The chicks of these birds are precocious and can walk around foraging. The shrubby growth gives a lot of protection from aerial predators such as owls and hawks because of the thick canopy. That’s different from shrub-breeding birds such as the eastern towhee. Those birds like greater vertical and spatial diversity.”

For greater diversity, you might prefer a “coppice with standards” plan: leaving selected trees, that is, “standards,” to grow to maturity amid the coppiced specimens. This system creates what you might call a two-story forest. Thomas Worthley, associate extension professor at the University of Connecticut, suggests this forest practice instead of large clear-cuts as a way to create the young forest habitat preferred by the endangered New England cottontail and other young-forest species. “It has the potential to provide suitable habitat conditions for lots of birds as well as the rabbits,” he said. “A coppice also provides better opportunities for growing desirable species and keeping invasive shrubs under control.

“One scenario might go like this,” Dr. Worthley explained. “Conduct a harvest where 10 to 15 mature hardwood trees per

acre are retained. Everything else is cut and allowed to sprout. When the new sprout growth is 20 to 30 feet tall, select another 15 to 20 of the best new trees. Remove the rest to start the process over again and promote a new crop of sprouts. Then repeat. You can eventually harvest the original mature trees you retained but you can maintain young-forest conditions for a longer period. You also get greater vertical diversity. The main disadvantage is that a coppice system is a long-term project requiring a fair amount of skill and understanding.”

Dr. Worthley added, “Wildlife biologists are encouraging landowners to create young forest patches by means of 10- to 20-acre clear-cuts. A coppice-with-standards system might be an alternative for landowners if they don’t want to clear-cut.” The stakes are high for Connecticut wildlife. As forests grow on former farms and fields, we lose those critical shrubby patches. And large properties are increasingly subdivided and cleared for development.

In her 2015 study of private forest ownership, Mary Tyrrell, executive director of the Global Institute of Sustainable Forestry at Yale’s forestry school, found that 66 percent is in parcels greater than 10 acres with an average size of 34 acres. Coppicing might not be feasible for landowners with small properties. But it would have a significant impact if done by 1,000 landowners in the survey who own parcels of 100 or more acres. That would represent only 10 percent of Connecticut’s total forest area, but that’s still 167,000 acres, parts of which could be made more attractive to upland game birds and other wildlife.

## How to Grow a Coppice

To start a coppice section of your land, consider the tree species your property already supports. Some are very adaptable to this method, others not so much. Beech trees, for example, are prolific sprouters, sometimes to the annoyance of a landowner who is trying to grow other species such as white pine. “Virtually all hardwood species are capable of producing sprout regeneration,” Dr. Worthley said. “Sometimes these sprouts can be quite numerous and develop into dense clumps of small stems. The most successful stump sprouts emerge from stumps cut close to the ground.” He and Dr. Ashton caution that coppicing the same plot over and over depletes soil nutrients and reduces future growth and quality. In particular, calcium is the most limiting nutrient in Connecticut except in the Litchfield area.

Next, start small. “I’m a believer in ‘small is beautiful,’” Dr. Ashton said, “If you’re going to coppice, start with forest growing on poorer soils, but try it on the better of the poorer soils. The slower recovery of trees on poor soils would give you open, slow-growing stands with greater wildlife potential. If I had a 12-acre woodlot, I would coppice one acre every two years in rotation, coming back to the first acre in about 25 years. That could meet my fuel needs and maybe even supply very local needs as well.”

One advantage of managing a coppiced stand is its very simplicity. It’s more like pruning a shrub than felling a tree. And a similar principle applies: Release the dormant buds that are always ready to sprout if the tree is damaged. In a shrub, pruning typically encourages flower- or fruit-bearing growth. With coppicing, you are activating the tree’s survival reserves. In other words, you are simulating a natural disaster such as a hurricane that forces the tree to come back with new growth. In his 1905 *A Primer of Forestry*, Gifford Pinchot, the first chief of what became the U.S. Forest Service, drew this parallel to a natural event: “When a farmer does with the ax what is often done by a fire he is using the system of Simple Coppice.” Done correctly,

Mr. Pinchot observed, it is a “very useful silvicultural system, and the easiest of all to apply.” Advice from a certified forester will be of great value when planning a coppice system.

Properly done, coppicing releases dormant buds invisible around the tree’s root collar. These buds grow outward with the tree’s cambium layer but always remain connected through it to the tree’s root system. Coppicing is so successful because the dormant bud, once released, can draw on the tree’s stored nutrients. But to get the best effect, you need to coppice when the tree is dormant because the nutrient reserves in the roots are then at their height. Once a tree begins to leaf out, it will draw down that reserve. You also want to coppice all the adjacent trees of your chosen species because their root systems are interconnected. If you leave some, they’ll tap the reserves and draw nourishment away from your coppiced trees. You should also avoid coppicing mature trees; the bark thickens over the years and can prevent dormant buds from sprouting.

The right tools and technique are key. You will need a good sharp ax. “Do not use a saw! You can’t hack at the tree,” warned Dr. Ashton. That’s why you need to make a clean cut with an axe. The back-and-forth action of a saw can damage the tree and loosen the bark, even pulling it away in strips that expose the tree to insects and disease.

There are drawbacks to coppicing. Do it too often and you degrade the quality of your stand. Do it the wrong way and you encourage disease, deformed branches, or weak branches that will break easily. Cutting the same patch too often can produce unattractive stool sprouts. Coppicing can also create openings for invasives.

“Think of coppice as a hedge fund,” Dr. Ashton advised. “You always want to preserve your forest’s diversity. We don’t know what’s around the corner that will affect it. There are all sorts of stresses we can’t anticipate. If you go too far with any management system, it’s like chipping away at your stock portfolio. You want to ‘invest’ in a range of stocks. So you want different kinds of forest stands for

different purposes. A diverse and healthy forest will also guarantee better returns on your effort so don’t worry about what wood is ‘in’.” He quoted the late David M. Smith, his predecessor at Yale: “Social values change more quickly than the trees grow.” Above all, Dr. Ashton warned, “Don’t try to time the market!”

In his *First Book of Forestry* published in 1902, Filibert Roth described a New Jersey woods at a time when a coppice was still integral to any forest management plan: “The woods, mostly chestnut and oak, appear rather scrubby.” In the book, he invents a dialogue with a local who explains, “We cut usually in winter, the best time being about February or just before spring opens, because then the stumps make the best sprouts, and sprout immediately, so that a good growth takes place that very season.” The supposed local says he counts on a cord of wood per acre each year and gets \$3 per cord of firewood.

Although coppicing has been a scorned forest practice for almost a century, foresters and landowners are now recognizing its benefits. It produces high yields of wood with minimal processing, such as splitting firewood close to where people use it. It can also be carried out with easily available tools. Not surprisingly, coppicing with standards has gained renewed academic credibility. Dr. Heinrich Spiecker of the Institute of Forest Science, University of Freiburg, advocates it for stands not likely to yield sawlogs for decades. You get to grow your own fuel and possibly sell some. That savings or income offsets the lack of revenue for the years it takes until the sawlogs are merchantable.

Today, the chestnut is gone and our elms and ash trees are under siege. But if coppicing really does come back, the landscape will change to something that Gifford Pinchot or Filibert Roth or even that unnamed local would recognize. Parts of your forest will be less majestic than the towering forests you see now, but your whole property will be more diverse and welcoming to wildlife. It might even put a few more dollars in your pockets.

*Hallie Metzger, a Yale School of Forestry and Environmental Studies graduate, manages a family forest in Connecticut and edits the newsletter of the Timber Producers Association of Connecticut.*

*Dr. Lloyd Irland, a Maine-based forestry consultant, is the author of many books and articles on forestry, including The Northeast’s Changing Forest (Harvard University Press, 1999).*



*A coppiced stump based on Adelaide Tyrol’s Northern Woodlands magazine drawing; and a coppiced woodland.*

DEBORAH ROACH

# ADMIRABLE TRAFFIC: WATCHING THE GREAT BIRD HIGHWAY

BY KATHERINE HAUSWIRTH

**A**utumn hits later than it used to, and climate change scientists are studying how this will affect the flora and fauna. But despite the shifts in temperature and timing, autumn remains an inevitable fact in our year. While we are starting to look for our sweatshirts and sweaters before we head out for the evening, many of our avian friends are turning their attention southward. It's not so much the chill but rather the diminishing resources—especially food—that drive birds to migrate.

Their annual exodus is a familiar one, immortalized by Henry Wadsworth Longfellow in “Birds of Passage”:

This is the cry  
Of souls, that high  
On toiling, beating pinions, fly,  
Seeking a warmer clime,  
From their distant flight  
Through realms of light  
It falls into our world of night,  
With the murmuring sound of rhyme.

I think first of geese. I remember hearing the honking of the Canada geese as a child. I craned my neck to watch their inky v-formation fade to grey and get smaller as they headed for warmer regions. The increasingly remote sound of the flock always made me feel wistful, even sad at being left behind. But there was comfort in knowing that these handsome, long-necked creatures would return. Much later, I learned that their iconic migration formation helps conserve energy by combatting wind resistance. The flock can also keep better track of its members this way.

According to the Connecticut Department of Energy and Environmental Protection, Canada geese fall into two main camps: the migrants and the residents. The residents stay in the United States year round, and the migrants nest in Northern Canada and Alaska and winter mostly in the States. We will see them arrive here in Connecticut in October, and most will head farther south by January. If the winter is mild, some might hang around here all year. And, of course,

other birds stay put all year or come down to Connecticut from the north around this time. Soon our beloved, white-bellied “snow birds,” more formally known as dark-eyed juncos, will come down from Canada, the high Appalachians, or the west for the winter. They will leave us in the spring, at about the time that tree swallows and yellow warblers are rolling in, travel weary.

Connecticut is part of the Atlantic flyway, a critical path for bird migration, breeding, and wintering. It is the most densely populated of the four flyways (the others are Central, Mississippi, and Pacific). So the sky over us is a remarkably busy place, especially in the spring and fall.

In the spring, the incessant drive for reproduction demands a stringent travel schedule for returning migrators. But autumn allows for a more generous departure timeline. The Connecticut Ornithological Association explains that following the passage of cold fronts, which traditionally roll through beginning in August, the cool, clear weather is conducive to long-distance flight. Many species migrate at night, and in many cases, parents migrate ahead of their young. Naturalist and writer Edwin Way Teale, who lived and wrote at what is now the Connecticut Audubon Society's Trail Wood in Hampton, wrote about his unique adventure of hearing and feeling the rush of nighttime bird migration from the observation deck on the Empire State Building. During both fall and spring migration seasons, the tower lights on the Empire State Building and other tall structures are now dimmed to avoid confusing the birds. But unlike Teale relishing his nature adventure atop a skyscraper, most of us sleep through this miracle of a journey.

To make their long sky treks, birds accumulate large stores of fat, although they might also supplement their stamina with meals along the way. Hummingbirds, whose wings can flap up to 80 times per second and whose hearts beat well over a thousand times per minute, can gain as much as 40% of their body weight pre-migration, to support this high energy expenditure. Birds also take advantage of weather patterns that

can help carry them along. For example, they may wait for tail winds before starting their journeys.

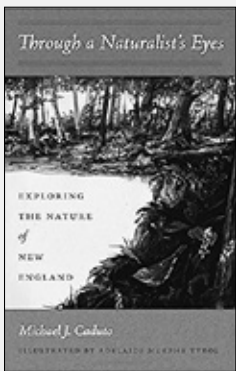
Canada geese proceed in orderly, and fairly predictable, fashion, albeit with some loud, off-key bugling. But our local tree swallows announce their impending exit dramatically, with some whiz-bang air shows. Before migrating, they gather in enormous numbers, and this only happens to such a massive extent in select areas, including Old Lyme, Connecticut, and southeastern Louisiana. It's estimated that about 300,000 tree swallows converge around Goose Island in Old Lyme. But the birds don't simply gather, as if on convention—they dazzle; they stun. Folks lucky enough to witness the display seem unable to suppress a series of “oohs” and “ahs.” Collectively, the swallows paint shifting shapes that darken the sky overhead, shortly before sunset. Very gradually, the birds descend from the awe-inspiring “cloud” they've created to their roost in a grove of trees, or a marsh. They even show up as “roost rings” on weather radar maps. This massing behavior is thought to be a way of ensuring “safety in numbers.” The dark formations sometimes described as “tornadoes” likely keep predators away.

In late September and into October, Connecticut is also witness to many raptors passing overhead, on their way farther south. Places like Lighthouse Point Park in New Haven and Quaker Ridge at the Audubon Center in Greenwich are well-known prime watching spots where volunteers and staff tally hawks and other raptors. In the fall of 2015, volunteers counted more than 10,000 birds of prey flying over Lighthouse Point Park.

There is so much to see in the sky this autumn. You might be prone to some serious neck cramping. But it could very well be worth it, and you'll have plenty of time to recover before the spring migration begins.

*Katherine Hauswirth's book on connecting with Connecticut nature, The Book of Noticing: Collections and Connections on the Trail (Homebound Publications) launched in May. She lives in Deep River.*





## THROUGH A NATURALIST'S EYES: EXPLORING THE NATURE OF NEW ENGLAND

By Michael J. Caduto.  
Hanover, New Hampshire: University Press of New England. 224 pages

BY DAVID K. LEFF

Starting with the premise, “New England is a land that dwells in the heart of its people,” Michael J. Caduto’s succinct and well-written essays on natural phenomena, wildlife, and flora will delight both the region’s casual observers and more serious naturalists interested in the world close to home. Sections of the book describe various animals from chipmunks to woodcock, and plants from skunk cabbage to pussy willow. But sections entitled “Interrelationships,” “Patterns and Perceptions,” “Harvests and Hunts,” “Out of Balance,” and “Stewardship” take an ecological approach to the natural world that gives the book a distinctive flavor by exploring how the various parts of nature fit together and what happens when systems are disrupted.

Mr. Caduto is the author of 20 books, a master storyteller, ecologist, educator, poet, and musician. This volume well illustrates his multiple talents in its carefully crafted mix of science and personal essay. He doesn’t lecture or expound, but invites readers to share his explorations. His language is poetic as when he calls rivers “those liquid skies through which fish move largely unseen.”

The book covers nearby nature such as the value of toads and snakes in the garden as well as creatures of wild areas such as the loon and catamount. It takes us to mysterious spots like bogs with their carnivorous plants and to familiar ponds alive with dragonflies and damselflies. Most intriguing are the discoveries of relationships. Readers learn that the holes made in trees by sapsuckers are “nature’s soda fountain for about three dozen different species of birds,” including hummingbirds, and nourish “a host of mammals,” such as squirrels and bats. In another chapter, we learn that cuckoos are one of the few birds that feast on caterpillars and “appear in great numbers” when there is an outbreak of the “bristle-coated buggers.”

Caduto explores the beauty and wonders of nature, but also threats to the natural order. He covers, for example, the effects of climate change on maple trees and migratory birds. He examines the impact of dams on anadromous fish like shad, deformities in frogs, and snake fungal disease.

Caduto also urges us to protect fragile creatures and habitats by supporting conservation organizations or taking personal action like stopping the use of lead fishing tackle or stopping lawn mowing to shorelines.

The book neither pretends to be comprehensive nor has an overarching theme, so each chapter is like an enchanting ramble in the woods where you never know what might be around the next twist in the trail. Perhaps its chief virtue is not in the information it conveys so much as the curiosity it stimulates.

*David K. Leff is the book review editor of Connecticut Woodlands, author of books about landscape and adventure, and the poet-in-residence of the New England Trail. He lives in Collinsville.*

## LAKE WARAMAUG OBSERVED: ITS BEAUTY IN THE FOUR SEASONS, ITS AMAZING HISTORY, AND ITS PROMISING FUTURE

By Charles Raskob Robinson.  
Washington, Connecticut: Brush Hill Studios, 2016. 129 pages

BY DAVID K. LEFF



At the heart of this book is a beautiful idea worthy of the keenest and most perceptive observers of nature. Fine art painter and author Charles Raskob Robinson has painted his beloved Lake Waramaug in all seasons from the same spot

so readers can truly envision the water body’s beauty throughout the year. The first part of the book is devoted to these 35 luminous paintings created between 2008 and 2010. All but two nocturnes were executed en plein air with a westerly view from the Washington Club’s Holt Beach. In foul or cold weather, he painted in his “Sketching Capsule,” a clear plastic tent in which he could stand at an easel. Each painting is accompanied by perceptive journal notes on the weather and Robinson’s thoughts at the time.

Robinson is a fellow and charter member of the American Society of Marine Artists and has been a contributing writer for Fine Art Connoisseur magazine. He has a studio in his Washington, Connecticut home.

Although the bulk of pages are given over to his paintings from Holt Beach, the book also features sections on the “amazing” history of the lake and its “promising” future. These and other portions of the book, lavishly illustrated with maps and more of Robinson’s alluring artwork, bring the total number of paintings to nearly 50. Among the paintings are four seasonal views of “The Lone Elm Overlooking Lake Waramaug.” The tree stands beside steep Tanner Hill Road and has long been my favorite spot for looking at the lake.

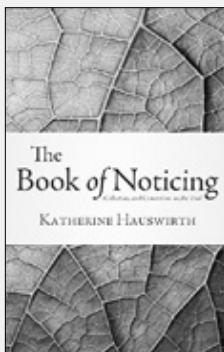
“The great difference between seeing something and observing it is time,” Robinson so correctly observes at the outset of the history portion of the book. He starts with continental collisions and plate tectonics, moves on to glaciation, the establishment of life, and the coming of humans. It’s a great overview of what happened in western Connecticut. Unfortunately, this is all done with a very broad brush and not well tied to the landscape around the lake. I found myself wanting to know where I could find particular examples of this deep history around Waramaug. When it comes to the colonial, industrial, and subsequent history of the lake area, there is more grounding information.

The promising future portion of the book concentrates on restoration and healing of the natural landscape. Well-deserved accolades are given to those organizations that spearheaded the work including the Housatonic Valley Association, the Lake Waramaug Task Force, and Connecticut Forest & Park Association. However, while the administrative apparatus for protecting the lake is well described, the issues facing it and what is being done about them is not as well covered. There is some discussion of the hypolimnetic withdrawal system to

aerate the lake, but nonpoint source runoff, invasive species, and public access are among critical issues deserving further discussion.

Regardless of any limitations, this book should enhance the experience of anyone with an opportunity to enjoy Lake Waramaug. Indeed, Robinson's technique of keen observation from a fixed point over time provides valuable inspiration to lake lovers everywhere.

## THE BOOK OF NOTICING: COLLECTIONS AND CONNECTIONS ON THE TRAIL



By Katherine Hauswirth. Pawcatuck, Connecticut: Homebound Publications, 2017. 128 pages

BY DAVID K. LEFF

If you've ever wondered whether real experiences in nature are possible in a settled community or even on a short walk with the dog, this book provides the proper dose of encouragement. Katherine Hauswirth succeeds in her fervent hope she will "find ways to see, with alert and apprecia-

tive eyes, the places that might otherwise go unnoticed." Join her in these pages on adventures near home and find yourself welcomed into a world of heightened awareness that will enrich even the shortest and most casual jaunt outside.

A native New Yorker, for two decades Ms. Hauswirth has made her home in Deep River, where she has found inspiration in nearby phenomena of nature. Published in Connecticut Woodlands, The Christian Science Monitor, The Wayfarer, and elsewhere, she has been awarded residencies at writer naturalist Edwin Way Teale's Trail Wood home in Hampton, Connecticut, and at Acadia National Park in Maine.

Without being a scientist or flora and fauna expert, Ms. Hauswirth proves that a sense of wonder is the best asset to exploring nature. She's unafraid to admit she doesn't know something and possesses the curiosity and tenacity to get the answers she needs to enhance her explorations. She had "an inaccurate habit of calling basically every needled tree a pine." But once she studied the distinctions among pines, spruces, firs, and other conifers, she opened herself to new worlds, from taxonomy to the value of various cones for birds and squirrels.

No phenomena seems beneath her notice, and she develops deep empathies. She even engages in a sort of communion with slugs, wishing she too "were so permeable as to take the earth into me." As the subtitle suggests, her mind is often wonderfully busy making connections. A discussion of ants, for example, jumps to veganism, factory agriculture, and primatologist Jane Goodall. Ms. Hauswirth often enhances her observations with cultural references. In a chapter on ferns she notes, "The plants linger under the eaves" of poets and she mentions Dylan Thomas, Ted Hughes, Thomas Hardy, and others.

Buried tree roots, oak galls, frogs, hornets, vernal pools, mushrooms, and so many other things attract Ms. Hauswirth's attention.

They provide both attachment to the natural world and grounding for her life in general. It's little wonder that she invokes conservation biologist E. O. Wilson's term *biophilia*—"love of living things"—as part of her creed.

The restless habit of noticing has enlarged Ms. Hauswirth's sense of wonder and turned a seemingly ordinary place into an extraordinary one. She describes the work of Edwin Way Teale as conveying "a deep sense of unabashed joy and enthusiasm for observation and learning." It is also true of her work and serves as a model for all of us.

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## CLASSIC ENVIRONMENTAL BOOKS

*Second of a continuing series*

BY ERIC LEHMAN

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## THE TWELVE SEASONS

By Joseph Wood Krutch.  
New York, New York: William Sloane Associates, 1949

Originally from Tennessee, Joseph Wood Krutch first came to rural Connecticut while teaching in New York, writing for The Nation, and composing biographies of such men as Henry David Thoreau. Mr. Krutch started out as a deeply pessimistic thinker, but found "great joy" in the natural world and began to change his mind. Most of his nature books focus on the Southwest, where he retired after decades exploring Connecticut. However, his 1949 book *The Twelve Seasons*, titled by his friend, critic and fellow Nutmegger Mark Van Doren, brims with observations and investigations of our familiar landscape.

It is a "country man's calendar," with reflective chapters that zoom in to the level of bacteria and out to the moon. Mr. Krutch ruminates on the mysteries of hibernation and the day the "peepers" wake up. And yet, he never allows himself to become sentimental or mystical, keeping a wry humor with lines such as, "The most serious charge which can be brought against New England is not Puritanism, but February." Connecticut conservationist Edwin Way Teale called it "infinitely more" than rigorous natural history, a thoughtful consideration of humans' place in the universe. Read this classic collection of essays, and you will find yourself thinking out loud, too.

—Eric D. Lehman, author of *Afoot in Connecticut*



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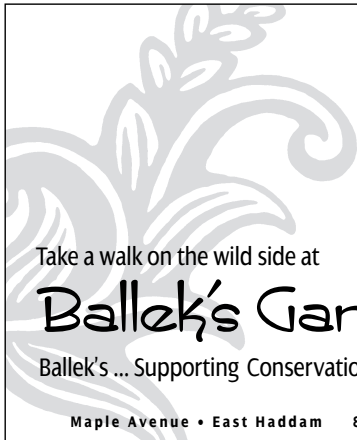
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