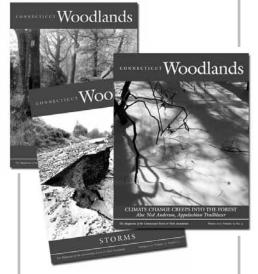
CONNECTICUT Woodlands



40 YEARS OF ENVIRONMENTAL FUNDING ALSO: WHAT SHALL INHERIT THE BACKYARD?

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, or call 860-346-TREE.

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\$ 2500

A hiker approaches an all-terrain vehicle. Middletown's Common Council voted in May to ban quads and dirt bikes from city and private land, setting an example in local ordinances that land trusts hope will ripple out to other towns.

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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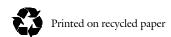
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CONNECTICUT Woodlands

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CONTENTS

FEATURES

CALL IN THE REINFORCEMENTS. **BUT FROM WHERE?**

Forty years of environmental funding. By Christine Woodside.

10 WHAT SHALL INHERIT THE BACKYARD?

Native Connecticut plants grow on nursery shelves but struggle in the wild. By Kathleen Groll Connolly.

13 MAPLE SYRUPING BASICS.

Get ready for the next maple syrup season now. By Steve Broderick.



CONNECTICU ASSOCIATION



On the Cover: The cascades at Kent Falls State Park. Gary Jordan

DEPARTMENTS

4 PRESIDENT'S MESSAGE.

Generosity. By Eric Lukingbeal.

5 EXECUTIVE DIRECTOR'S MESSAGE.

Task force seeks balance between trees and power outages. By Eric Hammerling.

5 EDITOR'S NOTE.

Out on York Mountain, looking down on New Haven. By Christine Woodside.

14 FROM THE LAND.

The value of hay. By Jean Crum Jones.

16 ESSENTIAL FACTS OF LIFE.

It is easy being (a) green (school): CFPA's early work on green school curricula will help schools apply for federal recognition. By Lori Paradis Brant.

18 TRY THIS HIKE.

Along the shore of Lake Lillinonah. By Diane Friend Edwards.

20 WALKCT.

Just say thanks. By Leslie Lewis.

22 OBITUARY

22 ENVIRONMENTAL UPDATE

State agencies set traps for invasive insect. Burlington man charged in shooting of bear.

23 ON THE TRAILS

Correction:

An old mislabeled photograph led the editor to misidentify the man on the left in the cover photograph of our winter 2012 issue. He was not John Camp, but an unknown foreman for Mitchell Company of South Windsor. Our apologies for the mistake.

PRESIDENT'S MESSAGE

GENEROSITY

BY ERIC LUKINGBEAL



Eric Lukingbeal

ost mornings, and some evenings, I walk our Australian Shepherd around the corn and alfalfa fields behind our house in Granby. The fields are owned by the eighth generation of farmers whose ancestors settled in Granby more than two centuries ago. It's hard to say if the path around the fields (less than a mile, but a good 20-minute walk) is open to the public. Now and then, I run into another walker. There are snowshoers and skiers on occasion. Rarely, a snowmobile or all-terrain vehicle will make the circuit. In hunting season, a few hunters will scatter their decoys and take some Canada geese.

When we moved here almost 30 years ago, we asked the farmer if it would be okay to walk around the fields. He said yes, without asking us any questions. He could easily have said no. All he's ever gotten in return from us is a phone call when we saw some horses loose in the corn.

The idea of private property is said to be fundamental to democracy in this country. One of the "sticks" in the bundle of rights composing the idea of private property is the right to exclude others. Here at the Connecticut Forest & Park Association, we depend on the generosity of landowners to waive their right to exclude others. The 825 miles of the Blue-Blazed Hiking Trails could not exist otherwise. Some of our trails are kept open on a handshake basis; there is often no written agreement. Some landowners do not want anything in writing. When property passes to the next generation, sometimes the new owners are unaware of our handshake deal, and they are reluctant to continue the arrangement. Some decide to close the trails over their lands, and we try to find alternative routes. Sometimes, an arrangement that has worked for decades is ended by the thoughtless acts of a few litterers or noisemakers. Even though Connecticut has a landowner liability law, there is always the fear of lawsuits.

Although much can go wrong, the general trend among forest landowners favors generosity. That is why the trails have lasted so long and continue to be added to over time. Our executive directors—John Hibbard, Adam Moore, and now Eric Hammerling—are quite persuasive in negotiating these handshake deals and keeping them in place when threatened.

Americans' notions of private property are deeply rooted, and we resist the idea that the public has a right to walk on private lands. But in some European countries, and especially in Scandinavia, generosity is reflected in law. In Sweden, the right of common access (allemansratten, "every man's rights") allows anyone to hike or camp for a night or two, on private land, provided no damage is done. The right is even guaranteed in the Swedish constitution. In other Nordic countries, it is statutory. The precise details of the law vary from one country to another, but the principle—often referred to as the right to roam—is of ancient origin and not controversial. In those countries where it exists, an organization like CFPA would not even need to ask for permission.

As we use the trails, we should reflect on the generosity of those landowners who have chosen not to exercise their clear right, as Americans, to keep us off their land. And if we happen to meet them while hiking, let's tell them how thankful we are.

Eric Lukingbeal is a lawyer.

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EDITOR'S NOTE

Out on York Mountain, looking down on New Haven

few Saturdays ago, my daughter, Elizabeth, who is 23 now and has a job, apartment, and life of her own, invited me to go hiking with her and her work friend, Kasia, who is about the same age. Elizabeth dances; Kasia plays soccer, but they assured me they craved getting out of the city and into the woods. Elizabeth knew I would show up with maps and a plan, that I would quote mileages and elevations as we trudged.

We picked up the Quinnipiac Trail as it begins its ascent of York Mountain. Kasia is from Minnesota and had never lived much around forests, let alone traprock ridges. I found myself telling her about traprock ridges. I said that all of them are steep cliffs on one side and gradual inclines on the other. A procession of traprock ridges sticks up through the middle of Connecticut, all the way into Massachusetts, I said. I leaned down and kicked a square, smooth, gray block. "I'm no geologist, but this is probably traprock. It breaks along straight lines, and you find it piled in the woods."

We worked our way up the ridge, and soon we could see the green bump of the ridge that heads into Sleeping Giant State Park. To our left, the compact skyline of New Haven framed the gray-blue of Long Island Sound. "That's beautiful," Kasia said.

We ducked through a tunnel of mountain laurels. I told Kasia that these are the state flower and that she ought to go back in June to see them in bloom.

I'd said these things to Elizabeth as she grew up. Connecticut rock and mountain laurels blend with her life's backdrop. But for Kasia, all of it was new. She said she didn't know that these unusual, twisty bushes were the state flower. And that she hadn't known Connecticut could be like this. "I've learned so much today," she said at the end. She was smiling.

I really disagree with people who think Connecticut's landscape is static or not as exciting as New Hampshire or Maine. No, its landscape and how we respond to it—can be intense. Its crags can make an ordinary Saturday into an extraordinary moment. I saw this again through the eyes of a young woman from Minnesota.

— Christine Woodside, Editor

EXECUTIVE DIRECTOR'S MESSAGE

Task force seeks balance between trees and power outages

BY ERIC HAMMERLING



Eric Hammerling

n late April, I began serving on a new state task force with a broad charge: "Develop standards for roadside tree care in Connecticut, vegetation management practices and schedules for utility rights of way, right tree/right place standards, licensing standards for tree wardens, municipal tree inventories and pruning schedules." This charge was taken directly from the 23rd of the "Two Storm Panel's" 82 recommendations to the governor following last year's Tropical Storm Irene and the October 30 nor'easter.

As the chair of the new State Vegetation Management Task Force, my job is to keep an outstanding group of state, municipal/tree warden, utility, and nonprofit environmental organization representatives focused on improving the management of roadside forests. The SVMTF seeks the most appropriate

balance between trees and people's general intolerance of long electricity outages.

Trees provide numerous benefits in our communities. So does electricity. In Connecticut, we love our trees, but we have not managed them effectively so far. There are many reasons for this, but funding is likely at the top of the list.

Most towns have not invested in managing their forest assets. Collectively, municipalities dedicated only \$10 million last year to roadside tree management with annual tree budgets ranging from a low of \$217 to a high of \$900,000. At the same time, the two utilities that deliver electricity, Northeast Utilities and United Illuminating, together spent more than \$28 million managing roadside forests. NU and UI have essentially become the de facto tree managers in many communities, and their tree trimming budgets are expected to increase to more than \$53.5 million in the coming months. Will municipalities and landowners assume the responsibilities of doing more, or will NU and UI continue to hire contractors to do this work?

There is a reason why NU and UI are planning to do more work on trees. According to the statistics the task force has been presented so far, approximately 25 to 30 percent of power outages that occur during a typical year are caused by power line-tree conflicts. During the two storms of 2011, 90 percent of the outages were attributed to trees.

As our roadside forests age, some power line-tree conflicts will be inevitable. However, as we prune or remove trees in some areas, we must also consider which trees to plant or replant now to create our roadside forest of the future. Using forestry lingo, we must plan for the "desired future condition" of our roadside forests in Connecticut.

The Connecticut Agricultural Experiment Station, Connecticut Department of Energy and Environmental Protection's forestry bureau, and other partners are developing "right tree/right place standards." These will be critical. Based on a diverse set of site characteristics, these guidelines will provide suggestions and rationales for which trees should be planted on private, municipal, utility, and state lands.

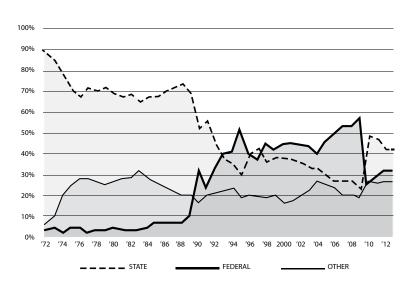
If you are interested in attending a meeting of the SVMTF, providing input, or just checking on our progress periodically, search for the task force at ct.gov/dep. Feel free to call me at the Connecticut Forest & Park Association: 860-346-TREE or e-mail me at ehammerling@ctwoodlands.org. Let me know what is important to you.

Eric lives in West Hartford and has been CFPA's Executive Director since 2008.

The state's environmental department receives proportionately less and less of its money from the General Assembly and more and more of it from special federal grants. Parks and outdoor recreation tend to suffer under this scenario, because most federal grants don't cover them

HE REINFORCEME

Y YEARS OF ENVIRONMEN



COMPARISON OF FEDERAL, STATE AND OTHER FUNDING OF DEEP BUDGET, OVER 30 YEARS

Connecticut's General Fund's proportion of the Connecticut Department of Energy and Environmental Protection budget has dwindled. The department relies more on other sources, mostly federal grants earmarked for specific purposes.

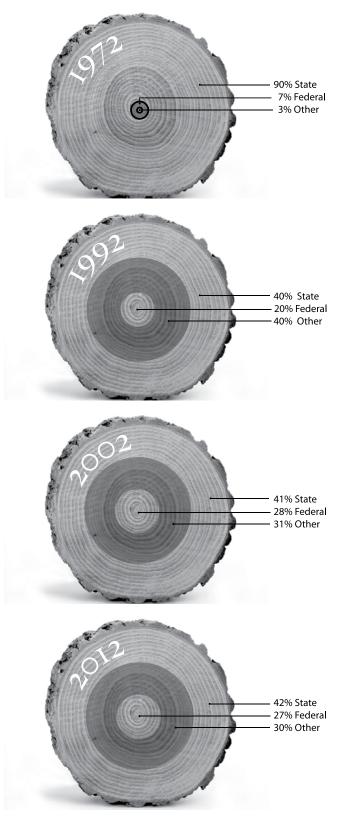
CONNECTICUT WOODLANDS CHART

BY CHRISTINE WOODSIDE

or more than 20 years, environment watchers, elected officials, and key staffers of the Connecticut Department of Environmental Protection—renamed as the Department of Energy and Environmental Protection in 2011—have said that its funding has, at best, remained flat, and at worst, that the department can't cover all of its obligations. Connecticut Woodlands has undertaken this review to shed more light on the complicated picture that is the DEEP budget.

The department has grown from \$8.1 million and 580 staff when it was formed in 1972 to \$182 million and more than 1,000 staff today in the agency now known as DEEP. At first glance, this rise in DEEP's budget and staff over the past 40 years might look like a normal, even impressive trajectory of growth.

But, scratch a bit at the numbers, consider the full scope of what they cover, and the department's financial health looks wobbly. DEEP's responsibilities have evolved and grown dramatically. Today, DEEP enforces an array of federal and state environmental laws. DEEP must protect water, air, parks, forests, and other public lands; manage wildlife, hunting, and fishing; teach boating safety; and, since last year, set energy policies, too. Although its budget has grown, if you look at the budget on a per-capita basis and adjust it for inflation, the amount of money the state of Connecticut spends on environmental



DATA FROM CONNECTICUT DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION

Since 1972, federal funding for the state of Connecticut's environmental department has fluctuated from 7 percent of the total to nearly 30 percent of the state's environmental operating budget.

CONNECTICUT WOODLANDS CHART

protection (not including capital expenditures) has remained flat.

Duty has piled on duty at this agency, as Connecticut has had to enforce both new laws and rules the federal government delegates to the states, and new laws passed by the state General Assembly. The sources of funding, from the federal government and programs, and from the state's General Fund, have fluctuated as crazily as rainfall totals in New England. The overall trend of those fluctuations has been upward, but rarely have resources increased as quickly as the workloads.

The upswings in both dollar totals and job numbers would be greater if the department could function ideally. This is the conclusion of Karl Wagener, who directs the state watchdog agency Council on Environmental Quality. Mr. Wagener said that counting the jobs is a better way of evaluating how DEEP's responsibilities have grown versus simply looking at dollar amounts. He noted that jobs today aren't equal to the jobs in 1972. "You could hire a state employee for a lot less back in the '70s," he said. "The total number of positions has about doubled since then—and have the responsibilities more than doubled? Yes, they have." He said that this is true even when considering the staff-saving benefits of computers and the streamlined general permit system.

DEEP Budget 101

The operating budget of DEEP draws on three pots of money:

- ► The state's General Fund
- ▶ **Federal grants** that help fund specific programs the federal government requires states to administer, such as the Clean Water and Clean Air acts
- ▶ Other funds, usually federal, temporary grants that come from special sources such as the federal stimulus program.

As federal grants and other federal funds have increased, the state's portion of Connecticut's environmental pot has dipped lower and lower.

In the beginning, 40 years ago, 90 percent of the DEP's budget came from the Connecticut General Fund. The federal government contributed about 7 percent, and about 3 percent came from other sources, such as special grant funds. That first year, 80 percent of the staff drew pay from the state's General Fund.

Now—in fiscal 2011-2012—42 percent comes from the state, 27 percent from the federal government, and 30 percent from other sources (much of which are also federal grants). The state funds only 65 percent of today's 1,111 "full-time equivalent" jobs. The rest of the staffers draw pay from federal funds sent to the state attached to specific environmental initiatives.

Programs Wobble Without Outside Funding

As state funding wanes, the largest deficiencies in the budget, Mr. Wagener said, tend to be in bureaus and programs the state started on its own-rather than those it runs at the behest of the U.S. Environmental Protection Agency. Not all federal environmental mandates receive federal funds. But the Connecticut-only programs can't receive federal funds. They rely on the state General Fund which is appropriated to various state agency programs by the General Assembly.

Such Connecticut-run programs include

▶ State parks, where 107 parks are currently run by only 17 park supervisors and 58 maintainers (supplemented in the summer months by roughly 550 seasonal employees)

▶ DEEP's Environmental Conservation Police, or EnCon. with only 52 officers responsible for patrolling 250,000 acres of state lands and enforcing fish, wildlife, clean water act, and other environmental laws statewide

▶ The Transfer Act, which requires any real estate changing hands between agencies or from the state to municipalities or the private sector to be checked for contaminants and other potential problems

► Aquifer and groundwater protection

▶ The Diversion Act, which requires anyone diverting water from a stream or river to obtain a permit

"Back in the 1970s, remediation was not a significant part of DEP," Mr. Wagener said. "And now it is a very significant part of what the department does." This movement from land management to permit review has changed the balance of resources within the department.

Recent History Has Not Been Kind

In 2009, the General Assembly abolished the Conservation Fund, which had been established to allow DEP to spend the revenues it collected from permits, licensing, and admissions fees. Today, these revenues with small exceptions, such as the Long Island Sound license plate fees, go directly to the General Fund. (For more about this, see the later section, "State Sources Appear to Decrease, But Are They?")

Further hurting the department in 2010 was a rash of early retirements done presumably to cut the budget. The primary legacies of these retirements, however, seem to be a brain drain of experienced professionals from the DEP ranks, a loss of positions that were often not refilled but captured by attrition. Any savings from these cuts (note that the state is still responsible for paying enhanced retirement benefits) were not offset by boosts to conservation programs.

The year before that, during an illustrated talk, former DEP Commissioner Amey Marrella told the Connecticut Bar Association that the losses of the Conservation Fund, early retirements, and other policy changes had gouged the department and its budget. The department's operating budget, she said, had failed to rise at the same rate that federal Performance Partnership Grants, or PPGs, were dropping. The PPGs had fallen by 1.5 percent over the previous nine years.

Federal grants are enormously important to DEEP. The lion's share of PPGs, begun in 1996, assist the states in administering federal rules for water, air, waste, pesticides, and toxic substances. The largest pot, the eleven PPG grants, amount to about \$10 million per year. That money funds fewer jobs as the years go by because of collective bargaining and huge increases in fringe benefits' costs. For example, in 2004, \$10.2 million from the PPG grants paid for 119 staffers. In 2011, \$9.7 million paid for 83.

Besides the PPGs, many more federal grants help fund the DEEP. "We have 11 federal agencies that we solicit grants from, for 126 active grants," said Dennis Thibodeau, chief of fiscal administrative services for DEEP. "They all have their own rules." Of the other federal grants, only a small number go to DEEP's Bureau of Outdoor Recreation. Several federal grants help support fish hatcheries and wildlife programs. But federal funds known as environmental quality grants, covering toxic waste spill cleanups, have disappeared.

DEEP has relied more and more on "special funds" from the federal government. These are dedicated funds for particular projects. In fact, funding from the federal stimulus programs accounted for more than half of the DEP budget in 2008. Because these were emergency funds, the federal government said recipients had to spend the money, or lose it, the year they received it. There wasn't enough time: Connecticut was granted \$48 million for clean water projects but spent only \$34.8 million of it; \$2.5 million for habitat conservation but spent only \$32,000 of it; \$2 million for leaking underground storage tank correction but spent only \$1.2 million of it; \$1.7 million for clean diesel grants but spent only \$215,000 of it; and \$485,000 for water quality management but spent only \$265,000 of it. These federal stimulus funds are now gone.

Parks and Conservation Programs Look in Vain for Funds

State parks, consistently understaffed during the summer and fall when visitor numbers are highest, don't qualify for many federal grants, Mr. Thibodeau said. Parks have been a challenge to fund, and outside fundraising is difficult. Mr. Wagener's CEQ recommended in 2008 that the department separate its Parks and EnCon Police operations from the rest of its bureaus when making the yearly budgets. It proposed that those two programs be funded at recommended levels and not be subject to the same cuts as other areas.

The Bureau of Outdoor Recreation, which includes parks, EnCon Police and boating programs, is now operating with about \$31.8 million, less money than it had two years ago. The Bureau of Natural Resources, which hosts forestry, fisheries, and wildlife programs, is in the same pickle with its \$22.4 million budget. The loss of the fees



Christine Woodside

Park volunteers demonstrated for better funding March 21 in Hartford. Above, Karen Carlson of the Friends of Windsor Lock State Canal Trail Park.

from fishing and boating licenses and other fees removed nearly \$8 million from this budget into the General Fund during the past two years, and the General Fund put only about \$4.5 million back into Natural Resources.

Leslie Lewis, Connecticut Forest & Park Association's WalkCT director, has a unique perspective of all this. She retired in 2007 from the DEP after working more than three decades in its solid waste, education, hazardous waste, and recreational trails programs. She said that the pinch is felt acutely in the parks.

Mrs. Lewis said she came to believe during her career in the DEP that the increase in federal funds over the years worked only to decrease funding from the state and that the result was, in effect, an agency with a flat budget for three decades.

"As federal money started to flow into the state, particularly on regulatory sides of the agency, the General Assembly would say, 'Oh, we don't have to use the General Fund," she said. Conservation funding relies on two federal funds, one for fisheries and the other for wildlife, and, until 2009, the state's Conservation Fund (the license, permit, and admissions fees). Other grants for parks and conservation programs were hard to come by, especially because many of the federal grants require the states to match their amounts.

For state parks, Mrs. Lewis said, "There is not a ready source of federal funding or private funding. . . . When I started with the DEP, there were supervisors in every major park." Today supervisors often cover more than one park. She said, "There were usually three or four maintenance people at every park plus plumbers, electricians, and carpenters in each district who could do work that required those skills . There still are, but in smaller numbers." As park supervisors retire, they aren't replaced. Two or more parks will be run by one person.

"It's been very hard to convince the General Assembly that the state parks do contribute value," Mrs. Lewis said. "The general public has no idea how much scrambling goes on behind the scenes to keep the parks mowed and the bathrooms clean."

On March 21, CFPA and several volunteer state park friends' organizations staged a display and protest in the hallway leading from the Legislative Office Building to the Capitol. These groups have donated regular volunteer workers and raised capital funds. They said they wanted to send a message to DEEP and the General Assembly that the state parks' budgets can't be cut any more.

"The reason we're here today is to raise awareness of the decline in employees—the field workers of the state park system— the people who maintain the parks, clean the parks, empty them of trash, and paint," said Chris Callahan, who has been involved since 1992 with the Friends of Harkness State Park. Like other Friends groups, the Harkness group gathers and supervises volunteer workers, holds events, and raises money for capital projects like the ongoing greenhouse restoration. Some Friends groups have said that they are getting dispirited when they pour their hearts and souls into promoting their local state parks, and they don't see the state making the same level of investment.

State Sources Appear to Decrease, But Are They?

We have mentioned the Conservation Fund. Starting in the 2009–2010 fiscal year, the DEP lost control of this special fund that held its revenues: permitting and license fees (from hunting, fishing, boating, camping, and oil and gas leases), as well as admissions fees from state parks. Instead of going to the DEEP, these funds the department collects now go to the state General Fund. The General Assembly could allocate the funds to any state function.

This change, negotiated in 2008 between then-Governor M. Jodi Rell and former DEP Commissioner Gina McCarthy, was a move designed to save more jobs in the DEP. It would have this effect because the DEP does not pay fringe benefits for its General Fundsupported employees—the state comptroller's office pays those. However, DEEP does pay the fringe benefits of those 83 staffers whose jobs are paid for by federal grants, and these fringe benefits are significantly more expensive than those paid to General Fundsupported employees. These expensive federal grant-funded benefits has created an incentive to move some staffers from those positions to those supported by the General Fund.

That move has good and bad sides. On the good side, General Fund positions are less expensive to the DEEP budget. On the bad side, General Fund positions are much more vulnerable to cuts during tight budget years.

At the same time, the General Assembly has not given nearly the same amounts it takes from DEEP's revenues back to DEEP for programs. For example, in 2008–2009, the General Assembly's contribution to the DEEP budget was just under \$39 million, whereas "other" funds (including the license and permit fee earnings) amounted to almost \$95 million. The next year, the first year of turning back the revenues to the General Fund, things flipped: the General Fund contributed \$30 million more to DEEP's operating budget than it had the previous year, but it also took away \$60 million from those revenues DEEP collected. Conservation groups, including the Connecticut Forest & Park Association (publisher of this magazine), say that the loss of this fund has hurt environmental programs which otherwise could be more self-sustaining.

Because the General Assembly took over the Conservation Fund, comparing long-term trends in General Fund contributions to the DEEP budget can be confusing and misleading, Mr. Schain said. "People talk about the level of general funding over the years," he said. "It's hard to compare apples to apples because we were keeping a lot of our revenue from fees."

Connecticut—Dead Last in Environmental Spending?

It's been many years since the Environmental Council of the States—a group that represents state environmental departments in Washington, D.C.—evaluated how well states are doing with their environmental spending. The last time it did that, Connecticut's spending looked paltry. R. Steven Brown, executive director of ECOS, said that when one looks at per capita in 1988, "Connecticut was dead last in the amount of spending per capita on environment." The study considered all sources of money, federal and state, in the calculations, he said. "That was an eyebrow raiser. They ranked below Mississippi. They ranked below West Virginia." This looked at spending per capita.

More recently-between 2005 and 2008-ECOS tracked total budgets of state environmental agencies. The totals rose year to year, but only because the states relied on "non-traditional fund sources." The report went on:

General funds have increased slightly, while federal funds have declined. "Other" funds—such as permit fees, bonds, and state trust funds-have doubled during this period. The federal government is decoupling issuance of environmental rules from the cost of their implementation, by gradually transferring the cost of federal environmental rules to the states.

This predicts the obvious: Connecticut must find some new sources of funding or curtail its environmental programs. In a tough economy, one truth emerges. This is not a problem for the weakhearted. The DEEP budget stands on unsteady stilts, and further analysis is sobering. As the DEEP takes on its new role of setting and administering energy policies, can its budget keep up? The story is evolving.

Christine Woodside is a freelance writer and the editor of Connecticut Woodlands.

Sea oats (Chasmanthium latifolium) and cinnamon fern (Osmunda cinnamomea) grace the dry shade beneath sugar maples (Acer saccharum) in Kathy Connolly's garden. All three are native.

Kathleen Groll Connolly

Native plants abound at Pachaug State Forest. Wood fern (Dryopteris intermedia), Virginia creeper (Parthenocissus quinquefolia), and meadow-rue (Thalictrum spp.) cozy up on the forest floor.

Kathleen Groll Connolly

This stand of joe-pye weed (Eutrochium purpureum) thrives in a wetland near the Connecticut River.

Kathleen Groll Connolly

The first time Kathy Connolly saw a prickly pear on a shady rock outcropping in Old Lyme, she was shocked. But Opuntia humifusa is a New England native.

Kathleen Groll Connolly









What Shall Inherit the Backyard?

NATIVE CONNECTICUT PLANTS GROW ON NURSERY SHELVES BUT STRUGGLE IN THE WILD

BY KATHLEEN GROLL CONNOLLY

his season, I held trysts with my sweethearts in the aisles of garden centers. My beloveds were plants, shrubs, and trees that are actually native to Connecticut. It's a lot easier these days to arrange a meeting with many of these indigenous plants in pots than in the woods and fields.

"We've got to stop meeting like this!" I said, aloud. Native plants should be in native places. As I filled my cart, I contemplated our disturbed landscape, where forest understories are covered with Japanese barberry and edges are consumed by Oriental bittersweet. "Okay," I said, "you need to be in my garden." There, I can at least defend the plants while they do their work in the local

But is my backyard a sufficient proxy for nature? Native plants evolve and thrive because of forces of ecology, not because of an act of horticulture. This distinction first entered my consciousness through Sara Stein's book, Noah's Garden (Houghton Mifflin Harcourt, 1995) and more recently by University of Delaware professor Douglas Tallamy's popular Bringing Nature Home (Timber Press, 2009). Mr. Tallamy writes, "What is and is not native is best described by nature herself." He argues that a plant can only function as a native while interacting with its coevolutionary partners—plants and other life forms that have known each other for a very, very long time.

If we accept Mr. Tallamy's observation, native plants personify something that many lament as lost in the modern world—a sense of place. The native plant is an expression of a specific collaboration between soil, temperature, light, pollination, seed dispersal, and evolution that came together without assistance—or interference—from humans. Its characteristics came about the old-fashioned way—through the passage of a great deal of time.

My backyard is not an ecological miracle, but it is a habitat I control. And that leads to a big question for all

WHERE TO BUY NATIVE PLANTS

Most garden centers sell natives. Plant labels often carry a capital "N." Retailers provide shelf labels, too. Holly Johnson, vice president of the Madison-based Summer Hill Nursery, says independent centers cater most to the natives-seeking public. She says, "After the state's invasive plants working groups started to raise public awareness about the problems of nonnative plants, many independent garden centers began to feature natives and help their customers find substitutes." She recommends the free download, "Alternatives for Invasive Ornamental Plant Species," from the Connecticut Agricultural Experiment Station as a great resource for gardeners. See http://www. ct.gov/caes/lib/caes/documents/special features/nativealternatives.pdf.

Though this list is far from exhaustive, some nurseries that feature native shrubs and perennials include: Ballek's Garden Center, East Haddam; Earth Tones, Woodbury; Natureworks, Northford; Perennial Harmony, Waterford; Sprucedale Gardens, Woodstock; and Woodland Trails, Eastford.

Nasami Farm in Whately, Massachusetts, is operated by the New England Wildflower Society and is open for retail shoppers. It is only an hour north of Hartford.

Some suggestions:

New York ironweed (Vernonia noveboracensis) blooms in August.

Black cohosh, also known as black bugbane, black snakeroot, and fairy candle (Actaea racemosa) blooms in June.

Sweet Pepperbush, also known as Anne Bidwell or Summersweet (Clethra alnifolia) blooms in late July or early August and then in the early fall.

Winterberry (*llex verticillata*) produces brilliant red berries during the cold months.

Joe-pye weed (*Eutrochium purpureum*) blooms in July and August.

Deer-resistent native perennials: goldenrod, (Solidago spp., many varieties), yarrow, (Achillea millefolium), False Solomon's seal, (Maianthemum racemosum [formerly Smilacina]), **bleeding heart** (*Dicentra spp.*).

of us who wish to be better stewards of nature: How shall we use the space? Which plants will inherit our backyards?

Thanks to members of the nursery trade, some native plants and trees are now widely available for home and commercial landscapes. The trend was visible everywhere in February at the massive horticulture and landscaping trade show in Boston, New England Grows. I loved seeing how many wholesale nurseries sell native plants—not only those that take part in the high-profile "American Beauties" series (a program of Prides Corner Farms in Lebanon, for instance) that benefits the National Wildlife Foundation. Many Connecticut growers now invest in native plants.

Indeed, some natives-endangered, threatened, or of special concern—are so rare in the wild that you might say they're found only in nurseries and garden centers. Examples of such natives are balsam fir (Abies balsamea), eastern redbud (Cercis canadensis), inkberry (Ilex glabra), fragrant sumac (Rhus aromatica), and the wildflower blazing star (Liatris scariosa var. novaeangliae), according to the Connecticut Department of Energy and Environmental Protection's list of plants it deems endangered,

From top, winterberry, New York ironweed, black cohosh, and sweet pepperbush.

Kathleen Groll Connolly

IT'S A LOT EASIER THESE DAYS TO ARRANGE A MEET-ING WITH MANY OF THESE INDIGENOUS PLANTS IN POTS THAN IN THE WOODS AND FIELDS.









continued on page 12

INHERIT THE BACKYARD

continued from page 11

threatened, or of special concern.

As nice as all this is, still, nurseries and garden centers are businesses. Market forces push them toward the plants that attract customers not for their ecological credentials but for their colors, ease of growing, or resistance to pests or diseases. Many natives on sale are cultivars bred for longer bloom, better color, or some other characteristic. Think of joe-pye weed (Eutrochium purpureum) and its showy cultivars or the pastel hues acquired by common yarrow (Achillea millefolium) through breeding. The breeding can leave behind some of the original species' values, however.

Most native plants are—and always will be—excluded from mainstream commercial trade. The less showy, the outright homely, the hard to cultivate, and the undesirable will lose in the quest for space at the garden center. Therefore, protecting habitat is the only remedy that will ensure a place for many, many native plants.

In the meantime, which plants will inherit our yard space? It is the summer of 2012, and we have choices. What shall we put in the ground?

Kathleen Groll Connolly specializes in garden coaching and landscape design in Old Saybrook. She writes on a variety of landscape and environmental topics and has published many poems in this magazine.

NEW DATABASE OF NATIVES

The newly minted "Go Botany" database of the New England Wildflower Society gives us all a better chance to identify and understand our native plants. Elizabeth Farnsworth, the research ecologist who manages the site, says, "We aimed for one-stop shopping for regional plant identification, and we aimed to reach people of all ages."

The database was developed over the past four years through a joint venture of the New England Wildflower Society and several partners, with \$2.5 million from the National Science Foundation and other donors. It went public on April 1. It offers a "simple key" with a guide to 1,200 of the most common native and naturalized vascular plants of New England. It will expand to cover more than 3,500 species, subspecies, and varieties with an advanced key.

The site builds on the new Flora Novae Angliae by Arthur Haines (Yale University Press, 2011), a comprehensive catalog of native and naturalized vegetation through New England. Haines' definition of "native" includes plants that were on the New England landscape prior to colonial settlement. He relied on herbarium collections, plant distributions inside and outside of North America and New England, and the evidence of a plant in native habitats (i.e., not human-made) for his research.

Visit gobotany.newenglandwild.org or visit the tutorial at www.newenglandwild.org/learn/go-botany.

Other Valuable Native Plant Resources for Connecticut:

The Connecticut Botanical Society: www.ct-botanical-society.org/nn Plants Database: www.hort.uconn.edu/plants/ USDA Plants Database: plants.usda.gov/

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Get ready for the next maple syrup season now

BY STEVE BRODERICK

Editor's Note: Sections of this article were missing in our spring issue, so here it is in its entirety. Save this for next season's sugaring season. It's never too early to plan. See also the spring issue for Steve Broderick's reflections about his years of maple syruping.

aple syrup production requires some information and some time during the season. A couple good information sources are listed below, but the best source may be a sugar maker in your area. Most are friendly sorts who are happy to share information.

What to Tap

Either sugar maples or red maples. Sugar maples tend to have sweeter sap, but red maples can produce fine syrup as well. Check out the Connecticut Forest & Park Association's book Forest Trees of Southern New England (newly reissued) for good descriptions of each tree.

When to Tap

Sap begins to flow whenever daytime temperatures rise into the 40s, after nighttime lows that are in the 20s or colder. That starts happening consistently in Connecticut in early- to mid-February. Keep gathering sap until buds begin to swell in spring, when the sap turns milky and develops a sour "buddy" flavor.

How to Tap

Proper tapping will not injure a healthy tree. At the end of the season, you need only remove the taps and the tree will heal itself. Do not tap trees less than 12 inches in diameter. New taps should be at least 2 inches to the side of, and 6 inches above or below previous years' holes. Do not stick to the south side of the tree, but tap all the way around the entire circumference.

A 5/16-inch hole, drilled about 1½ inches deep, will fit the spiles available commercially. Slant the hole slightly upward to allow good drainage. Tap holes begin to "dry up" after six to eight weeks as the tree's natural defenses, coupled with the growth of bacteria and fungi, plug the pores of the wood.

How to Collect

Sap can be collected in almost any food-grade container that is large enough (on a good day one gallon or more will flow from each tap) and can be cleaned thoroughly. Your local equipment dealer is a good source of ideas here. On a good day, sap will be running faster than you can boil it down, so some sort of foodgrade storage vessel will be necessary as well.

If you don't start the season with very clean equipment, your sap will sour quickly. Even with clean equipment, storing unrefrigerated sap for longer than 24 hours will often result in bacteria growth and a lower syrup grade. Clean sap can be kept longer if refrigerated or kept in a covered container in the shade, packed in snow.

How to Make Syrup

Sap boiling is best done outdoors or in a building other than the house. To make one gallon of syrup you'll need about 40 gallons of sap, 39 of which will enter the air as steam. Damage to wallpaper, furnishings, or other belongings in the home can easily result.

Use a large flat pan, preferably with 3- to 4-inch-high sides, to boil down the sap. As the water boils away, keep adding sap, maintaining a couple inches of sap depth in the pan. When sap is boiling vigorously, it may suddenly foam up and over the sides of your pan. A drop of cream, milk, or butter will stop the foaming, as will vegetable-based defoamers you can buy from your local dealer.

Eventually, as water is removed and the sugar becomes more concentrated, the boiling temperature of the sap will rise. This temperature is very important, so you'll need a decent thermometer you can keep in the boiling sap. Standard density syrup boils at 7½ degrees above the boiling point of water, which varies daily with atmospheric pressure. Check the exact boiling point of water on the day you're making syrup, and when the temperature reaches 7½ degrees above that, you've got syrup. To be sure you've got it right, a syrup hydrometer, the best tool to use. It measures the density of the liquid at any temperature.

Storing the Syrup

The finished syrup may be cloudy because of harmless impurities called sugar sand. Much of the cloudiness may be removed by filtering the hot syrup. Synthetic and paper filters designed for sugar makers work best and are relatively inexpensive. Any clean jar or bottle with an airtight seal can be used to store properly prepared syrup. Always be sure that the syrup is at least $180^{\circ}\mathrm{F}$ when packaged, and lay the container on its side briefly to sterilize the closure.

Equipment

Much equipment can be improvised, but certain commercially available items will make an amateur's sugaring much more successful. The two full-service dealers of maple sugaring equipment in Connecticut are

Manuals

The North American Maple Syrup Producers Manual:

This is the world's best soup-to-nuts, how-to book on maple syrup production. The authors are researchers and experts. See estore.osu-extension.org/productdetails.cfm?sku=856.

Connecticut Maple Syrup Producers Manual: This is a nice summary of the North American manual with excellent appendices and a focus on quality control. See ctmaple.org.

Steve Broderick is the forester for the CFPA. He also is program director for the Hampton-based Goodwin Forest Conservation Education Center.



The Jones family doing the haying in the 1930s.

COURTESY OF JEAN CRUM JONES

BY JEAN CRUM JONES

s a naive young wife of a Connecticut farmer more than 40 years ago, I thought hay harvesting was mysterious. The farm men would become "possessed" in June when the hay was ready for the first cutting. It became an annual battle between man and the impending rain clouds. It was a highly pressured period of days from the time the silvery green grass, as high as my eyes, was cut, dried, raked, compacted into heavy rectangular bales, picked up, and then carefully put up in the large haymow barn.

Despite my new grandmother-in-law's advice that I shouldn't take on any "farm jobs," I learned to drive the very big dump truck, ever so slowly, while the gang of strapping young men would toss hundreds of hay bales into the back hold. The next June, I learned how to drive a small tractor with a rake attachment, so that I could "ted" the hay, a fluffing process so the grass would dry thoroughly on all sides before being baled.

By the time I married Terry, the farm had sold its livestock; three years earlier, the dairy cows had been sold. Yet we still had so many

THE VALUE OF HAY

hay-buying customers that there was such frenzy about getting in the hay. By March, the big haymow barn would be empty again. I was busy pursuing my career in food service management and nutrition. I gave little thought to this reverence for good hay. As our Christmas tree and fruit business grew, we converted some of our hay fields to other crops, but we still maintain 40 to 50 acres in hayfields to be harvested each year.

Simpler Now

Hay cutting is still an exciting time, but the process has been simplified since we got a large baler about 20 years ago that makes big round

bales. This has reduced the all-out farm effort to bring in the hay. We use our hay these days primarily for mulching our own crops. The best hay is reserved to make huge blankets that we spread over our strawberry fields in November. We still make hundreds of rectangular bales that we use for "seats" for October hayrides in our hay wagons. Later on, that hay becomes mulch or bedding for our pigs. Some of our hay we share with a farm neighbor who raises beef cattle.

Hay and forage are among the state's primary crops. I don't know how it is apportioned, but the big consumers of hay in Connecticut are our dairy cows and horses and increasingly, our grass-fed livestock (beef, sheep, goats) that many Connecticut eaters so desire now.

Hay's Connecticut History

In a famous painting by Frederic Church that hangs in the Wadsworth Athenaeum, "Hooker's Party Coming to Hartford," a group of cattle can be seen arriving with the new settlers as they near their destination. During the Great Puritan Migration to New England from 1630 to 1641, about 21,000 brave

souls left their English homeland for reasons of religious persecution and lack of economic opportunity. In the holds of the 200 ships that made the treacherous trip across the Atlantic Ocean were cows, horses, sheep, pigs, dogs, and cats. In a unique migration movement, the people that came to New England were organized as church communities headed by a minister, and they came as family units—fathers, mothers, and children.

For the most part, these new settlers came from parts of England, the east and the south, where the diet was based on dairy products, livestock meat, grains, and vegetables. The Puritan scouts who had come in 1629 to America had noted the open fields near woodlands in the New England coastal areas that seemed void of people. Though a colder climate than England, the landscape seemed familiar to them. The yeoman emigrants wanted to reestablish their traditional, pastoral way of life in this new land. So, boatload after boatload of Puritans and their animals arrived. All the first towns settled adjoined natural salt or fresh hay marsh, so essential for their livestock's diet.

The American Indians here enjoyed wild game and fowl as well as plentiful seafood in their diets, but they kept no domestic animals. They were not familiar with the European livestock initially.

In each Puritan settlement town, the land was divided according to rank for farmsteads and gardens. Land was set aside for common grazing areas and for wood gathering needs. Each family built fences to keep livestock out of gardens and crops and to mark their property lines. The men focused on the agriculture of the fields plowing, growing grains, cutting hay, and herding livestock. The women and children took care of the dairying operations, the vegetable gardens, and the preparation and storage of food. There were some problems—wolves attacked their livestock and had to be killed. The English grains did not grow so well, so they cultivated corn as the nearby natives showed them (except that they planted the seeds in rows, whereas the Indian custom was to scatter the seeds in the fields). In the beginning, the cows did not thrive as they did in the mother country, and blame was cast on the native grasses. The settlers began importing and planting English grass seeds-timothy and bluegrass-as well

as legumes—clover and alfalfa. Wherever the cattle did graze after eating shipboard fodder, the English grasses began to grow from seed matter enclosed in the dung, and then, the grasses were systemically cultivated by the farmers. Remarkably, after a short settling in period, the villages began to flourish. They developed a familiar self-sufficiency as in old England. Livestock and its products played an important economic role in early New England, along with fish and lumber. The population was healthy and did not suffer much illness.

Soon the number of animals so increased that the settlers complained of "want of accommodation for their cattle." This situation led to groups leaving the Massachusetts Bay Colony and founding the towns of Windsor, Hartford, and Wethersfield—all with good meadows for grazing. All the early towns of Connecticut before 1650 had natural grasslands, and they were settled by small groups of farmers from assorted English shires. Wherever the cattle went, so did the English grasses. By the early 1700s, white clover blanketed the pastures of Connecticut and Massachusetts so thickly that Thomas Hutchinson wrote in his report to King George III, "To grazing, sir, your majesty has not a finer colony for grass in all your dominions."

New England farmers depended on hay-it was their great staple crop. The hay and pasture grass constituted the main feed of cows and sheep, who supplied the butter, cheese, milk, and wool-the principal cash crops of many farmers. Hay was also fed to the oxen that powered the heavy plows and wagons and to the horses that supplied the settlers' personal transportation. Some side benefits to New England farmland were that the relatively high ratio of animals to land areas encouraged soil fertility maintenance. Hence, the old farm saying, "the more hay, the more manure, and the more manure, the more of everything." Livestock was such an essential part of the farm economy, so no really good farmland in New England suffered from soil erosion because farmers needed to leave much of their land in pasture and grass. Production of hay remained important through the 1800s, even increasing some at the end of the century because an increase in dairying, greater demand from the growing cities, and the availability of transportation by rail or ship.

Grass and Hay Today

During the 1900s, the use of petroleum fuel brought dramatic transformations to the art and practice of farming in Connecticut and throughout the country. The use of animals for power was replaced by the use of mechanical, gas-driven engines in ever-larger equipment. Farms became specialized, larger, and more efficient. Fewer farmers were necessary, and excess farmlands became targets for suburban and commercial development. After World War II, business consolidation changed animal agriculture and food processing. Today, only a few large food processors dictate the arrangements for how farmers are to care for their animals. For efficiency and bottom-line profits, most cattle are fed an ill-suited diet of corn and soy, rather than grass and hay that is best for their ruminant stomachs.

In 100 years' time, we have created an animal agricultural system nightmare. Based on corporation management methods, the system neglects the public's health, is damaging to the environment, is unjust to farm laborers, is not energy sustainable, and is inhumane to the animals. Fortunately, many consumers are becoming aware of the destructiveness of our current industrial agricultural model. Many livestock farmers and ranchers are also concerned and are developing alternative systems where they become ecosystem stewards of the land. They are trying to implement farm management models focused on keeping grasslands abundant and healthy. They holistically value all their land's plants and wildlife, and their cattle become tools for sustainably managing the land. This solar energy-dependent agriculture is a pathway for the future, so we can continue to enjoy meat in our diets.

Fortunately in Connecticut, we have been grass farming for nearly 400 years' and we still have some very productive grassland. With proper incentives, Connecticut farmers can ramp up grass-fed animal production. To taste the future, you can find Connecticut grass-fed livestock farms at eatwild.com.

Let's "make hay while the sun shines" and value the miracle of our Connecticut grass.

Jean Crum Jones is a registered dietician. She serves on the Connecticut Forest & Park Association Board of Directors. Her family runs the Jones Family Farms and the Jones Winery in Shelton.

ESSENTIAL FACTS OF LIFE



Students from Two Rivers Magnet School's Green Team show off their invasive beetle costumes.

Christie Hazen

IT is EASY BEING (a) GREEN (SCHOOL):

CFPA'S EARLY WORK ON GREEN SCHOOL PLANS WILL HELP SCHOOLS TO APPLY FOR NEWLY AVAILABLE FEDERAL GREEN RIBBON SCHOOL AWARDS

BY LORI PARADIS BRANT

or some years, the Connecticut Forest & Park Association has worked with schools to become more "green," as part of a national pilot program. Now the work has paid off and Connecticut's schools are ready to apply this 2012-13 school year, if they wish, for the federal Green Ribbon School designation.

Helping schools see that it is easy being green is nothing new to CFPA. Two years ago, Project Learning Tree approached CFPA to take part in a green schools pilot program in Connecticut. With our national and state PLT partners, we created a hands-on, investigation-based workshop for several local teachers and their students. These student-teacher groups formed the core of each school's Green Team. CFPA provided resources, activities, equipment, and leadership skills necessary to carry out investigations of their school's use of energy, waste production, recycling efforts, water usage, outdoor learning opportunities, and local environmental quality. After collecting data and studying their results, these green teams created action projects designed to remedy the challenges or issues their investigations found. After carrying out their action projects, green teams are

encouraged to celebrate and share their successes with their community.

As part of the national pilot program, CFPA was awarded grants from PLT to help the following three PLT CT GreenSchools carry out the following projects:

Thomas Edison Magnet Middle School, Meriden

Under the lead of teacher Cindy Seaver, the Green Team at Thomas Edison Magnet Middle School in Meriden meets six times a year as part of an extra-curricular program. This group created a student-led WikiSite to highlight their environmental findings and to post their action plans for each of the GreenSchools investigations. Give their site a visit by going to http://project-learning-tree-at-tems.wikispaces.com/. This school's curriculum focuses on science, math and technology, so there is a strong connection between lessons and saving energy. Even though the school building is only eleven years old and has energy saving lighting and heating specifications, students recognized through their investigations that they could do more. They instituted a school-wide juice box collection in order to recycle the materials and earn money for their school.

Two Rivers Environmental Magnet Middle School, East Hartford

The Green Rivers Team at Two Rivers Environmental Magnet Middle School in East Hartford created an action plan that invited other students and their community to get involved in their projects. The Green Rivers Team, with enrichment coordinator Christie Hazen,* created Green Days and even Green Month. During these days, the Green Rivers students teach other students, teachers, staff, parents and other community members. They collected broken electronics for recycling, built birdhouses, taught composting methods, demonstrated the available use of sunlight in large classrooms instead of electric lighting, added motion detectors to lights, already complied with

the new Connecticut mandate to use green cleaners, and purchased a small rooftop wind turbine, the WindSpire, to offset their \$20,000 monthly electric bill. The team produced a humorous video teaching people the dangers of two non-native insects, the Asian longhorned beetle and emerald ash borer. Check out the student-driven website, http://greenrivers.webstarts.com, which highlights many of their environmental learning and activities.

The Green Rivers Team presented their work at the National Science Teachers Association's annual conference held in Hartford in October 2011, and at the annual conference of the Connecticut Outdoor & Environmental Education Association in 2012.

*Christie Hazen was awarded the first PLT CT Educator of the Year award for the 2011-2012 school year. Please see the June issue of CFPA's News & Notes for the article.

"THIS WHOLE GREEN SCHOOLS PROJECT
HAS MADE US LOOK MORE CAREFULLY AT
OUR ENTIRE CAMPUS AND SEE WHERE WE
CAN CUT THE ENVIRONMENTAL IMPACT
AS WELL AS THE FINANCIAL IMPACT ON
OUR AGENCY FOR THE NEXT DECADE AT
LEAST. THANK YOU SO MUCH FOR THIS
OPPORTUNITY. IT HAS MADE A HUGE

----Adlebrook teachers and administrators

DIFFERENCE TO OUR AGENCY."

teach biology, earth science, and horticulture."

Mr. Schaefer said that the students will sell plants they grow to the senior citizens' community next door and the public. He said the science classroom would host weekly activities to review and plan more green activities.

The Future for Green Schools

The federal Green Ribbon Schools program started in late 2011. It recognizes kindergarten through twelfth-grade schools in the three "pillars": resource- and energy-saving activities, healthy school environments, and environmental and sustainable education. State education departments nominate schools. The federal Department

of Education envisions several benefits for each school. Schools will save both money and natural resources through increasing energy efficiency and water conservation while also reducing waste. Students will be better prepared for future opportunities with green technologies, enjoy a more holistic approach to education, get involved in more civic engagement, and achieve academic excellence.

How Connecticut schools can apply

Three steps make a school eligible for a Connecticut Green Ribbon award:

- ▶ **Schools "plant seeds"** in their school and commit to working toward environmental consciousness, improving student and staff health, and working toward environmental literacy.
- ▶ In step two, or "growing green," schools sign on to take seven action steps toward becoming a green school (e.g., implementing a waste reduction plan or providing outdoor learning opportunities for students).
- ► The final step is for recognized Green Ribbon Schools to become mentors for other schools going through the process.

Through CFPA's environmental education program and its partnership with Project Learning Tree in Connecticut, CFPA has already made great strides in working with the Green Ribbon Schools program and serves on the state's steering committee. The three pillars on the federal application should tie in quite well with the PLT GreenSchools investigations, and the three schools highlighted above would all make fantastic Green Ribbon School applicants this coming year. In September, the federal program will be announced and applications will be due in 2013.

This fall, CFPA will hold a Project Learning Tree Connecticut GreenSchools! workshop with our partner, the Connecticut Department of Energy and Environmental Protection. Interested teachers are invited to email me at lbrant@ctwoodlands.org for details.

CFPA is proud to be a member of the group working to make schools greener, but we are even more proud that our work with PLT GreenSchools is already making a difference for many students who are becoming critical thinkers and problem-solvers.

Lori Paradis Brant is the education director for Connecticut Forest & Park Association.

Adelbrook: The Children's Home, Cromwell

Adelbrook: The Children's Home in Cromwell is a special education school and residential treatment center for students ages 8-21. This specialized school has now created Green Day Fridays during which time the students, under the guidance of science teacher Doug Schaefer, learn about solar energy, soil and water conservation, seed germination, and many more ecological topics. With the students' action plan, and the grant CFPA awarded the school, Adelbrook revived its greenhouse as one of their best hands-on classrooms for environmental teaching for youth of all abilities. Mr. Schaefer reports, "The original team had performed a detailed analysis on where we thought there may be wastefulness or poor energy usage. Four areas where identified by the team: turning off lights when classrooms are not in session, collecting the "waste vegetable matter" from the cafeteria and turning it into compost, the investigation of the air conditioning units (confirmed by an independent audit agency), and the restoration and repair of the greenhouse facility so that we may use the greenhouse to

Further Reading

Read urban forester, Rachel Holmes' blog article describing her visit to two of the PLT CT GreenSchools schools late in 2011 http://www.forestfoundation.org/plt-greenschools-in-connecticut

Visit http://www.forestfoundation.org/greenschools-gives-connect cut-students-a-voice to read a teacher's perspective, from PLT CT Educator of the Year, Christie Hazen.

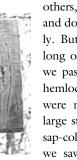
ALONG THE SHORE OF LAKE

BY DIANE FRIEND EDWARDS

hank you for picking a hike with soft footing," my friend said to me after we had hiked the Lillinonah Trail in Newtown. A very rocky trail in New York the previous weekend had left her with sore feet.

Along the blue-blazed Lillinonah Trail, located in the Paugussett State Forest, rocks are often in view but only occasionally underfoot. Much of the trail is a dirt path blanketed with hemlock needles and fallen leaves. That wasn't why I had chosen it, though. I like hikes that have a view as well as varied terrain and interesting things to look at along the way.

The Lillinonah Trail offered it all: There were views of water— Pond Brook, several streams, and Lake Lillinonah, a dammed up section of the Housatonic River. Sometimes heading toward the lake, at



others, turning inland, the trail led up and down over hills, occasionally steeply. But the steep sections were never long or precipitous. Early in the hike, we passed through woods with many hemlock trees; toward the end, there were mostly hardwoods, including a large stand of maples crisscrossed with sap-collection tubing. In many places, we saw wildflowers, fiddleheads, and mounds of moss. A treetop that had

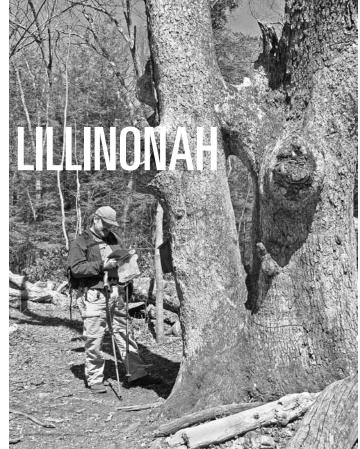
snapped off had landed upside down on its branches, looking as if it could walk away on spindly legs. At the trail's high point (elevation: 480 feet) grew a big, old oak tree with a keyhole-shaped slot between its two trunks.

The Hike

The Lillinonah Trail is a 5.9-mile loop, portions of which follow the western shore of Lake Lillinonah. Before the trees have fully leafed out, there are beautiful views of the lake. For that reason, the Connecticut Department of Energy and Environmental Protection has designated a section of the trail as a scenic trail of just over 3 miles. (This section is closed to the public from December 15 through March 15 each year to protect wintering bald eagles.)

The trail has two trailheads with parking areas (see directions later), so you can shorten the hike by leaving a car at each parking area. If you begin at the Hanover Road trailhead, don't be surprised to see a sign referring to Al's Trail. That trail, which is part of the Newtown greenway (see alstrail.org), and the Lillinonah Trail are the same until the high point, where they diverge.

The Lillinonah Trail leaves Hanover Road 0.1 mile south of the bridge over Pond Brook. The trail follows the brook eastward, then northward. As it nears the lake, the brook becomes a wide inlet. Upon reaching the lake, the trail stays close to the shore for a while before turning inland and climbing to the high point, 250 feet above the lake. There, you will find a hiker registry (log book) for Al's Trail



Ken Tardell consults a map near the "keyhole" oak at the trail's high point.

next to the "keyhole" oak.

After continuing inland for a bit, you will climb down to the lake, then back up again, several times as the Lillinonah Trail heads southward to the parking area off Echo Valley Road. Just before you reach the road, you will see the maple sap tubing zigzagging through the forest.

At the road, the trail turns right, passing a reddish-brown barn, then turns left into the parking lot. Between that lot and the Hanover Road lot, the final 2 miles of the trail take you past stone walls, up a rock scramble, across a small stream, past a rock outcrop, along forest roads, and through another hemlock stand.

Directions

There are two parking/access areas: one on Hanover Road and the other on Echo Valley Road.

To reach the Hanover Road trailhead: From I-84 exit 10, go southwest 0.6 mile on Route 6 and turn right on The Boulevard. Go north on The Boulevard, which becomes Hanover Road after passing beneath I-84, for 3.5 miles to the small parking area on the right just south of a small bridge. There is additional parking at the Pond Brook boat launch on the north side of the bridge. To reach the trailhead, walk south on the road a short distance; the trailhead will be on your left. Watch for a yellow sign that says "To Al's Trail."

To reach the Echo Valley Road trailhead: Follow directions for the Hanover Road trailhead, but turn off Hanover Road 0.6 miles after passing under I-84 and bear right onto Echo Valley Road. Proceed 0.7 mile, pass Alberts Hill Road on the right, and then continue another 0.2 mile on a narrow, dirt road to the parking lot and trailhead.

Diane Friend Edwards is a freelance writer, nature photographer, and lifelong lover of the outdoors. She lives in Thomaston with her husband, Paul.

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JUST SAY THANKS

BY LESLIE LEWIS

s you enjoy our state parks and forests, fish for an afternoon, or take a bird walk, do you ever think about the people behind the scenes who make these activities possible and enjoyable? You may see seasonal employees taking tickets or cleaning restrooms, but what about all the rest of the hard-working men and women of the Connecticut Department of Energy and Environmental Protection? Who, and where, are they?

Who they are, for the most part, are passionate believers in the conservation and protection of Connecticut's natural resources and recreational areas. They come in early, stay late, work extra hours without compensation, and have become absolute masters at doing way more with way less. Very few people appreciate what



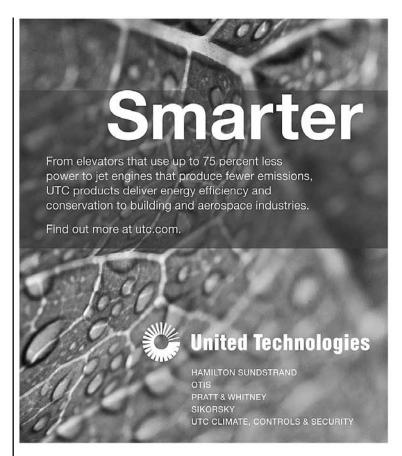
it takes to keep a "recreation unit" comprising several parks and forests going with only two or three full-time staffers. DEEP has done a great job at acquiring open space lands over the past several years, but

additional personnel have not been added to take care of them.

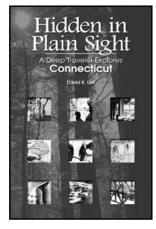
As you read elsewhere in this issue, several reports from independent sources have pointed out the serious underfunding of the Division of State Parks. And we know, following an economic study released in December, the huge amount that park and forest visitation contributes to our economy (\$38 for every \$1 spent). Like the famous man behind the curtain in Oz, state employees make everything seem to operate as if by magic. Therefore, it comes as no surprise when legislators and members of the public see no outward impact from lack of money for staff and infrastructure and see no need to increase agency budgets to ensure a high-quality experience.

If I sound like I am on a soapbox on this issue, perhaps I am. Before coming to Connecticut Forest & Park Association, I worked for the (then) Department of Environmental Protection for almost 30 years. The people who run our parks and forests are not looking to become rich, or to jump off into some high-paying job in the private sector after a few years. They are there because they love what they do, and they want you to love the places that they have been charged with overseeing. If they have done their jobs well and you do love those places, let them know it. Let your elected officials know it as well, and ask them to support this vital part of our past, present, and future. Take some time and thank the next park or forest employee you meet. Trust me. It will mean a lot to them.

Leslie Lewis retired from the state DEP (as it was called) in 2007 after almost three decades in various programs, most recently running the recreational trails program. She now directs the WalkCT program of CFPA.



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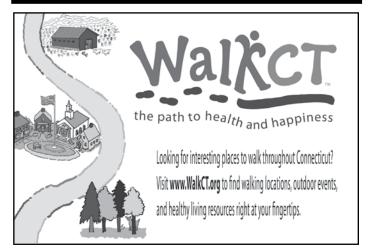
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OBITUARY

MARC TAYLOR, RIVERS ADVOCATE

Marc Taylor, a noted river conservation advocate from Southbury, died June 5 in New Haven. On retiring from private practice in 1997, Dr. Taylor remained active in medicine as Medical Director of River Glen Health Care Center and also pursued the great interest of his later years: clean water and river conservation. He was the founding chairman of the Pomperaug River Watershed Coalition, and he chaired the Housatonic Valley Association from 2005-2008. He was vice president of the Rivers Alliance of Connecticut and a long-time board member of the Southbury Land Trust, where his leadership led to preserving the Platt Farm property for generations to come. In 2003 he joined the board of River Network, and soon became chair of that nationwide organization. Among his many honors, he received the Cooperative Conservationist Award from the U.S. Secretary of the Interior, the "River Hero" award from River Network, the Duncan Graham Award for regional leadership, and the 2012 Aquarion Environmental Champion Award.

He was born in 1937 in Brooklyn, NY, went to Amherst College and Columbia University (where he received his MD degree). He was a Clinical Associate Professor of Medicine at Yale and attending doctor at Waterbury Hospital. In 1971, with Dr. Ira Mickenberg, he started Southbury Medical Associates and for three decades served residents of the surrounding area. He leaves his wife, Janet Taylor, and their daughters Ann Vileisis and Regina Krell and their families. Memorial donations may be sent to the Pomperaug River Watershed Coalition, 39 Sherman Hill Road, Suite C 103, Woodbury, CT, 06798, or to the Southbury Land Trust, P.O. Box 400, Southbury, CT, 06488. A memorial service was held on June 24 in Southbury.

-Source: the Litchfield County Times

ENVIRONMENTAL UPDATE NEWS FROM AROUND THE STATE

State agencies set traps for invasive insect

Large purple traps hanging high in ash trees this season are part of the state's major effort to keep the invasive emerald ash borer out of Connecticut. The insect, which can hitch rides into new areas hidden in firewood, has been documented in Dutchess County, New York, only 25 miles from the Connecticut border.

The traps number 590 and will be seen in all counties in Connecticut, on public and private land. Among the agencies involved in this project are the Connecticut Department of Energy and Environmental Protection, the Connecticut Agricultural Experiment Station, and the University of Connecticut Cooperative Extension System.

The DEEP said that the greatest geographic dispersal of emerald ash borer has

been documented through the movement of firewood. Just as out-of-state visitors should leave their firewood at home, Connecticut residents should not bring firewood back from out-of-

FACTS ABOUT THE PURPLE MONITORING TRAPS

- ► They hang in private and public campgrounds, highway rest stops, nurseries, and wood product businesses.
- ► They attract beetles with a chemical.
- ► The surfaces are sticky, trapping the beetles.
- ► Traps cannot bring emerald ash borers into an area not already infested.
- ► Birds and other wildlife will not become entangled in the traps.

state vacations.

DEEP Commissioner Daniel C. Esty said that the public must be vigilant because the emerald ash borer is slowly moving eastward: "Considering Connecticut has more than 22 million ash trees, its presence here could have a devastating effect on the beauty of our forests, state and local parks and neighborhoods, as well as the state's wood product industries."

CAES Director Louis A. Magnarelli noted, "The early Dutchess County finding by New York State foresters and the U.S. Forest Service sheds some hope that if EAB is found early, its spread can

indeed be slowed, allowing municipalities and landowners time to prepare by considering options for both roadside and interior forest management."

Burlington man charged in shooting of bear

A Burlington man shot and killed a 460-pound black bear early in the morning of May 15 on Cobblestone Road, the Department of Energy and Environmental Protection's Environmental Conservation Police said. Neighbors reported hearing two gunshots, after which a bear went into their yard and lay down. Cory J. Maitz, 42, of 6 Cobblestone Road, was arrested and charged with illegally killing a black bear and criminal possession of a pistol. Mr. Maitz was alleged to have shot the bear after he had seen it walk into his backyard.

-Press release

ONTHETRAILS









Upper left and center left: Volunteers worked on the new trail network in the Highlawn Forest in Middletown on April 21: Members of WesCFPA (of Wesleyan University) pause after a morning clearing thorny brush, and volunteers move bridge decking.

Photos by Christine Woodside

Upper, center, and lower right: Kids, volunteer cooks, and runners enjoyed the Soapstone Mountain trail races May 20 in Stafford Springs.

Photos by Scott Livingston.







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