

The Cutting Edge



NEWS FOR THE DEDICATED PROFESSIONALS WHO WORK CONNECTICUT'S WOODLANDS

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YOU ARE INVITED

TO ATTEND THE

TIMPRO CT ANNUAL MEETING

SATURDAY, APRIL 11

The Connecticut Farm Bureau, 775 Bloomfield Avenue, Windsor, CT 06095*
We will open with a workshop on Connecticut Best Management Practices and
Road Building from 8 AM to 3:30 PM. Lunch will be provided.



Among the topics to be covered are:

- ◆ Soil survey mapping
- ◆ Working with local Inland Wetlands Boards
- ◆ Slope protection
- ◆ Saving money on road costs

The Annual Meeting will held from 4:15 to 6:15. Dinner will be provided.

Bring your laptop or tablet for a hands-on presentation on soil mapping. Free WiFi
will be available.

*Directions: Exit #37 off of I-91. Travel west on Bloomfield Avenue for 8/10 of a mile.
Take a left at the traffic light onto Addison Road Extension.

The Connecticut Professional Timber Producers Association, Inc. (TIMPRO CT)
is recognized by the IRS as a 501(c)6 non-profit corporation. Our mission is to
enhance the image and understanding of the forest products industry throughout the state through
public outreach programs, education, and a commitment to professionalism among its members.

TIMPRO CT NEWS

BOARD UPDATE

Stephanie Gillotti will be stepping down as president of TIMPRO CT. We thank her for her leadership this year, especially her efforts for Log A Load.

Interested in joining the Board as an alternate? Email Secretary Jerry Bellows at info@timproct.org or 860-948-0432.

SCHOLARSHIP INCREASE

At its December 2014 meeting, the TIMPRO CT Board voted to increase the amount of the annual scholarship awards to \$500 each. Please pass the word along to any high school students interested in entering the field of natural resource management. The application form can be downloaded from the TIMPRO CT website.

WARNING: RARE TICK-BORNE VIRUS IN STATE

Dr. John F. Anderson of the Connecticut Agricultural Experiment Station warns that Powassan virus (POWV), a rare tick-borne encephalitis, has been detected in ticks from Bridgeport and North Branford. This tick is the black-legged tick, the same tick that carries the pathogen that causes Lyme disease. The mammal reservoir for the pathogen that causes Lyme disease is the white-footed mouse. This mouse may also carry POWV. And although there have been no recorded human cases in the state, the CDC (Center for Disease Control) reports that many people who are infected do not develop symptoms. Worse, according to the CDC there is no specific medicine to treat POW encephalitis. Furthermore, the disease can be transmitted within a few hours of being bitten, unlike the 36-48 hour period needed for the transmission of Lyme Disease. The CDC advises using tick repellents, wearing long sleeves and pants, avoiding bushy and wooded areas, and doing thorough tick checks after spending time outdoors. For more information, consult the CDC website (cdc.org/powassan).

"The bottom line," says Dr. Anderson, "be very vigilant and diligent about removing any attached ticks ASAP."



TIMPRO CT Vice President Henry Gundlach with assistant Gaelin Rhoades on New York City's Ashokan Reservoir.

Photo courtesy New York City Department of Environmental Protection.

Membership in the Connecticut Professional Timber Producers Association

Membership is open to sawmills, loggers, foresters, landowners, supporting businesses and anyone else interested in supporting the forest products industry in Connecticut. Benefits include educational programs, a voice in the Connecticut Legislature, a listing on the TIMPRO CT website, current information on issues affecting the forest products industry, discounts from area businesses, a free subscription to ***The Cutting Edge*** and more.

Dues are \$150/year. \$25.00 for student memberships.

Applications are available by calling TIMPRO CT at 860-948-0432 or visiting the website at www.timproct.org.

REMEMBERING "PEP" VOBORIL

April 23, 1935 – January 15, 2015



Joseph "Pep" Voboril, Jr., an unassuming man, was nonetheless a towering figure when it came to protecting and preserving Connecticut land.

A founding member of the TIMPRO CT board, he was active in many organizations devoted to the best use of Connecticut land. Among them are the Connecticut Forest & Park Association, the Connecticut Farm Bureau, the Society of American Foresters, and the Eastern Connecticut Forest Land Owners Association. He also served as First Selectman of the Town of Willington. Joe was an active member of the Tolland County Farm Bureau and was Treasurer of the CT Christmas Tree Growers Association.

A graduate of the University of Connecticut, he was an instructor in the U. S. Army and retired from the State of Connecticut as Director of Property Management.

"His institutional memory was amazing," recalls Joan Nichols, who first met him as a consulting forester in 1983. "We really got to know each other in the 1990's when the Forest Practices and

Regulations document was being written. When the

Farm Bureau took on a forest advisory function, I served with him and with Henry Gundlach and others. He was very sincere and very well thought of."

Joe was always one of the first to step up when there was an issue that could impact Connecticut forestry. He was especially passionate about making sure that neither the state nor municipalities negatively impacted forest practices through unnecessary and burdensome regulations. He brought institutional knowledge to the table and was able to speak fluently on the history of PA 490. He was active in forestry in the early 1960s when the Whyte Report was crafted which became the impetus for Connecticut's Land Use Value Assessment law for forest land, farmland, and open space. Joe did not hesitate to volunteer tirelessly on various committees related to forestry and brought common sense and practicality to the discussion. He loved trees, forestry, and everything about them and was especially interested in the more unique native trees of Connecticut. Connecticut forestry is alive and well thanks to individuals like Joe who truly cared about the resource and were willing to go the extra mile to protect it. He will be missed by all who had the good fortune to have worked with him.

Predeceased by his first wife, Joan Kent Voboril, he is survived by his second wife, Ruth and his daughters Pamela and Valerie and their families. The family has requested that trees be planted in his memory.

News You Can Use



SUGARING: TWO VIEWS

TIMPRO CT member Peter Hart and Tufts University scientist Dr. Elizabeth Crone have both grown up with maple syrup but came at it from completely different directions. Peter worked beside his father and brothers in the family sugar bush learning to tap trees and boil down the sap. Dr. Crone grew up in the Washington, DC area and loved eating waffles with maple syrup. Peter continues to tap trees and bottle the boiled sap for family, friends, and a few customers. Dr. Crone, going in a different direction, studies sugar maple seed cycles. She was the first to demonstrate a possible predictive link between years of low mast production and high sap yields.

You could say sugaring is in Peter Hart's blood. He and his brothers -- Paul, Jim, and Robert -- have been working since boyhood in the family sugarbush under the direction of their father, Irving Hart, who worked with the Metropolitan District Commission in Barkhamsted.

Peter Hart doesn't work with horses but otherwise his system hasn't changed much from what you see in the picture above.



He and his older brother Robert, who worked for the New Haven Water Company, use time-tested methods. As he explained, "We still use buckets and a flat pan. No evaporation, no tubing. I grew up with it. It was something to do in the winter with four boys."

Above: The buckets are thoroughly washed before being hung. Filled buckets will be emptied into the boiling pan in the shed.

Left: Peter Hart tapping the trees. It's the first step in a process that has changed little since the Native Americans taught settlers to make the syrup.

Since he had all the gear, he has continued the family tradition, making about 15-20 gallons a year. It's not easy work, as you can see from these pictures.



Left: Ben, a beloved dog, kept watch over the sugaring shed as the boiling started and the steam rose.

Below left: Peter takes a quick break as the steam rises from the boiling sap.

Below right: Paul's wife Kathy helps Peter filter the syrup for canning.

Hart distributes the finished syrup to family members and has some regular customers. Intrigued by the work being done by Dr. Elizabeth Crone, he confirmed that his yield can swing dramatically from year to year. "One year I made 50 gallons. One year I made 7," he recalled. But regardless of any predictive guidelines, such as mast yields, he sticks by one old rule: "Never tap before the first of February. You get into trouble if you start too early."



Photos courtesy of the Hart family.

A Conversation with Dr. Elizabeth Crone



Dr. Crone is an Associate Professor of Biology at the Tufts University School of Arts and Sciences. A graduate of The College of William and Mary, she received her PhD in Botany from Duke University and did postdoctoral research at the University of Washington.

Hallie Metzger (HM): Please tell our readers what got you interested in maple syrup.

Elizabeth Crone (EC): Growing up in the DC area, I learned to love maple syrup on my waffles. Then, when I lived in Montana for a decade, I became interested in the theoretical ecology of resource allocation in plants. In this particular project I was working on whitebark pine. I studied the pattern of episodic seed production. My research showed that a heavy seed year causes plants to deplete stored nonstructural carbohydrates.

HM: How does the tree's carbohydrate reserve affect sap production since that is mostly sugar.

EC: From a nutritional point of view, sugars are different from carbohydrates. But in plant ecology, we use the term differently. Structural carbohydrates are fixed in the wood fiber of the

tree. But non-structural carbohydrates are sugars and starches that the plant can move around. When the tree's supply of non-structural carbohydrates is low, that means there's little sugar for the sap.

HM: So a poor seed yield would indicate the tree had poor carbohydrate reserves for sap?

EC: That's the possible connection I'm studying. A big seed crop in one year means low sugar in the sap the following year. But then in the following year, when sugar is low, we expect a low seed crop.

HM: How did you come to study maple trees?

EC: When I moved to the northeast, I looked for a mast-seeding plant to study. Someone told me that sugar maples are a mast-seeding species. This interested me because most people think of oaks when they think of mast-producing trees. Most maple trees don't produce mast. But sugar maples do and I thought this was cool because stored carbohydrates are difficult to monitor in most trees. I thought I could test what's happening by looking at sugars in the sap. Also, after choosing what plant to study, I had hired Josh Rapp as a post-doctoral researcher. He grew up in New York state where he and his parents made maple syrup.

HM: Has anyone looked into this connection before?

EC: To test our ideas, we found correlations between seed and syrup reports by foresters working in different places, syrup in Quebec and seeds in New Hampshire, for example. Then Josh pulled together the data from Vermont that we published in *Forest Ecology and Management*. We are also monitoring seeds and syrup on individual sugar maple trees in the Harvard Forest. In two to three years we'll have enough data to know individual tree patterns here.

HM: How would you see TIMPRO CT members using your results.

EC: Often maple syrup producers are farmers or loggers who do this for a little extra money. At least if they know in advance it's going to be a bad year, they can plan for that dip. They wouldn't count on that extra income



Opposite Page: Dr. Crone with Keswick.

Left: Two Students working with Dr. Crone and Josh Rapp (r) in the field are Iris LeRonce and Emma Sass.

Photos courtesy of Dr. Elizabeth Crone



Bits and Chokers

IS FIREWOOD SCARCE?

Is firewood really scarce? TIMPRO CT President Stephanie Gillotti reports, "I get at least two people a day calling for firewood." TIMPRO CT Vice President Henry Gundlach finds that people were stockpiling a season's worth of firewood a year in advance just to be certain of their supply. A simple Google search brings up prices as high as \$400 a cord in Fairfield County.

This anecdotal evidence does seem to point to a shortage of firewood. But those phone calls Gillotti receives are just the tip of the iceberg. Beyond the supply problems, the calls indicate other factors in the supply chain that affect availability and price.

Bob Carrington, of Bob's Landclearing, Inc. in Thomaston and a TIMPRO CT Board member, sees an ongoing problem in the higher cost of oil these past years. As it went up, people turned to wood. But at the same time, the market price was undercut by the abundance of "free" wood available after several severe storms. "Now people realize they have to buy it but they're not prepared for the prices," Carrington said.

Paul Falco of Stillwood Farm in Easton also sees that mindset among people. "People think firewood can be gotten for nothing," he said. That means "there's no money in it" for the people who cut it. In his view the price of firewood is taking "an unending nap" for these reasons. In addition, cordwood producers and sellers share a limited market. "It boils down not to a shortage of wood but a shortage of profit." He adds, "I started doing firewood around the age of eleven, and I'm still waiting to meet someone who's gotten rich by doing firewood. When firewood becomes profitable, you'll see publicly traded companies in it and they will be teaching it in college."

But there won't be a lot of money in firewood as long as the field is open to anyone with a chainsaw and a pickup truck and as long as consumers are ill informed and just looking for something cheap. Stephanie Gillotti has heard from people who were cheated because they didn't know the difference between a cord and a face chord, because they bought from someone who just advertised on Craig's list with no references, or because they weren't present for the delivery and got firewood that wasn't dry. And then there are websites telling people how and where to scout for "free" wood. Although one site does warn scavengers to request permission before taking or cutting wood on private or public land, there are certainly people who have helped themselves.

Falco also describes an additional problem, a bias against burning softwoods. "There's this myth that you can only burn hardwood when the rest of the world burns softwood. Think of all the cold areas of the world that burn wood for fuel. There's no hardwood in cold areas. People there are burning softwood. As result, Falco says, "We waste so much wood." Tens of thousands of tons felled by storms or wind on water company land isn't used here but would have been used in Europe.

Consumer education is one way to remedy this situation. Another is to support the trained and certified people who already work in the field and to bring newcomers into the ranks. For that to happen, says Henry Gundlach, newcomers will need easier access to insurance and equipment, both of which are very expensive for young people just starting out.

By Hook Or By Crook: A Brief History of "Free" Wood

"By hook or by crook" goes back a long way. Today we use it to signify "by any means possible," legal or not. But its origins go back to the Medieval English custom of allowing peasants to gather wood in the royal forests. Foragers could take whatever dead-wood they could pull down with a shepherd's crook or cut with a reaper's bullhook. This custom was observed in England as late as the 1820's. Modern day foragers can watch a YouTube video by *Cash In The Trash* (legal sources) or the *About Home* website which advises foragers to scout private and public property for dead or dying trees and offer to cut them down (not so legal and certainly dangerous).



A BIAS AGAINST SOFTWOODS?

If there's a bias against burning softwood, we can blame Lady Celia Congreve. Her 1930 poem in *The (London) Times*, "Ash Wet, Ash Dry," (right) dismissed birch and fir as fuel. She praised ash as the very best to burn regardless of age or condition. Her choices reflected the composition of British forests so it's not surprising that those choices are part of our New England outlook.



ASH WET, ASH DRY

Beechwood fires are bright and clear

If the logs are kept a year,
Chestnut's only good they say,
If for logs 'tis laid away.

Make a fire of Elder tree,
Death within your house will be;
But ash new or ash old,
Is fit for a queen with crown of gold.

Birch and fir logs burn too fast
Blaze up bright and do not last,
it is by the Irish said
Hawthorn bakes the sweetest bread.
Elm wood burns like churchyard
mould,

E'en the very flames are cold
But Ash green or Ash brown
Is fit for a queen with golden crown.

Poplar gives a bitter smoke,
Fills your eyes and makes you choke,
Apple wood will scent your room
Pear wood smells like flowers in
bloom

Oaken logs, if dry and old
keep away the winter's cold
But Ash wet or Ash dry
a king shall warm his slippers by.

THE FUTURE OF BIOFUELS: THE WORLD RESOURCES INSTITUTE REPORT

Jeffrey Viola of J & J Log and Lumber Cooperative, Dover Plains, NY, runs a hardwood mill producing paper and pellets. "Hardwood chips are a by-product," he said. The chips are delivered 20 miles away to a gasification boiler that produces little smoke or carbon. It's a green solution to energy that makes a lot of sense in the area.

But biofuels have become a contentious topic. Lloyd C. Irland of the Irland Group in Maine says: "What's depressing about this debate is how you get extravagant unrealistic projections on bio-energy production, and then equally extravagant over-reactions from some advocates and then 'scientists' who write up horror scenarios to try and delegitimize the whole thing. Fear spawns fear."

The World Resources Institute, a Washington, DC think tank, recently released a global evaluation of the environmental cost of using biomass, including crops grown for fuel as well as wood. "Avoiding Bioenergy Competition for Food Crops and Land" notes that some biofuels, such as gasoline with ethanol made from corn, are inefficient uses of land. The report's chief concerns about woody biomass include net energy loss from burning wood, the effect on net global carbon emissions of growing and harvesting trees for fuel, and the potential impact on land use. Projecting demand for timber to grow by more than 80% by 2050 for all uses, the report warns that growing wood specifically for biofuels such as pellets and chips would compete with agriculture and preservation of natural ecosystems.

The net energy loss does depend on how woody biomass is used. Tim Searchinger, Senior Fellow at World Resources Institute and chief author of the report, explained, "Wood has lots of values. If you're facing a disease or infestation, you're going to cut wood down. The question is whether [cutting it for] energy is a net gain. That's part of the calculation. When you cut down trees, maybe 1/3 of the carbon remains in the woods, say, in roots and debris. The remaining 2/3 goes to the power plant. But you'll only get about 1/2 the energy value from that wood for electricity." Fossil fuels still rate higher in terms of efficiency for producing electricity while the best use of woody biomass fuels, in terms of net energy, is to produce heat.

Irland agrees with that point. As he sums it up it, "I've yet to be convinced that there's a future in taking green wood, drying it and gasifying it, then re-liquifying it to turn it into a 'drop-in' fuel. Perhaps in the very distant future. But so far, the principal feedstock for liquid biomass fuels has been trainloads of federal money...the output so far may be enough to run a few lawn mowers."

As for carbon dioxide, the problem to Searchinger is "double accounting." Quoting the report: "Large estimates of bioenergy potential double count biomass, leading to a double counting of carbon. Most of the world's land grows plants each year. Some of these plants are consumed for food, fiber, and timber while others are replenishing or increasing carbon in soils and vegetation. The latter keeps land productive and combats climate change. Like a monthly paycheck, plant growth will occur again once we use it. But because people use this annual growth - just as they use their monthly paycheck - people cannot divert plant growth to some other use except at the expense of

what they are already doing with it. To provide bioenergy except at the cost of food, timber, or carbon storage, people must generate additional biomass, which means biomass that is not already growing or being used."

"The report looks at woody biomass through a carbon lens," agrees Jason Hill, Assistant Professor, Department of Bioproducts and Biosystems Engineering, University of Minnesota.

"From that perspective, some things make sense and some don't. And then there's a grey area. To evaluate that, you really have to understand what *may* happen, what *could* happen, and what's the worst-case scenario. Ultimately it's a balancing act and we want to get to an optimal system."

This brings us back to Jeffrey Viola at J&J. "Industry-wide, we're trying to improve forest quality," he explains. "The wood we're using now is either dead or dying. There's always tons of undesirables." Much of it is oak, mostly red oak. He estimates he receives roughly 8 truckloads a day. At 25-28 tons per truck, that's over 200 tons a day --- a lot of potential bio-fuel. And that, in turn, bring us back to Searchinger: "If you're going to cut wood anyway for some purpose, that's free carbon."

CORRUPTION AND THE GLOBAL TIMBER TRADE



The New Viking Age... for North American Hardwoods

For a picture of the global logging trade, check out Lloyd Irland's report "The New Viking Age of North American Hardwoods" delivered at the 2014 Smallwood Conference in Rochester, Minn. Playing off the image of Vikings as ruthless invaders and raiders, he has analyzed the "new" Vikings who benefit from corruption to wreak environmental havoc through trading in timber from threatened and endangered species, sometimes even cutting on protected lands. He calls

for changes in the USA to strengthen our place in the timber trade while cutting into the hold of these "New Vikings." You can view the entire slide sequence at The Forest Business Network website.* More reading: "State Failure, Corruption, and Warfare: Challenges for Forest Policy," *Journal of Sustainable Forestry*, 27:3, pp 189-223.

*www.forestbusinessnetwork.com/wp-content/uploads/Lloyd-Irland_The-New-Viking-Age-for-North-American-Hardwoods.pdf

Modern Viking Raiders

- Illegal loggers
- Corrupt governments
- Enablers through the supply chain
- Timber Mafias of Asia, Russia Far East, elsewhere
- May not wither away as First Viking Age did...
- Oversupply affects Our business



PO Box 508
Oneco, CT 06373

CALENDAR OF EVENTS 2014-2015

CT Professional Timber Producers Association

Look for mailings or check the
website for further details and
any changes to the Calendar of
Events.

Ideas for classes you would
like offered?

Contact TIMPRO CT:

PO Box 508

Oneco, CT 06373

860-948-0432

info@timproct.org

Articles, ideas, pictures
you'd like to see?
hallie.metzger@rcn.com

Check calendar on Timpro website for any changes.

**SAT. APRIL 11 TIMPRO CT WORKSHOP AND ANNUAL MEETING:
THE CONNECTICUT FARM BUREAU, WINDSOR, CT
SEE PROGRAM ON FRONT COVER**

**CHECK YOUR EMAIL AND THE TIMPRO WEBSITE FOR THE
MOST UP-TO-DATE EAB-RELATED INFORMATION.**

Get Involved

The Board of Directors is seeking members who are interested in helping out with various activities throughout the year such as CEU programming, fairs, Ag Days at the State Capitol in March, Plant Science Day in August in Hamden, programs at the Agriscience Centers and more. The Board, made up of business owners, just like yourselves, is keenly aware of the demands on your time. Any amount of time, no matter how minimal, is greatly needed.

Contact TIMPRO CT for more information:
860-948-0432 or e-mail: info@timproct.org.