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Cover Art: Deborah Roach

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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 our members.

## TIMPRO CT NEWS

## BOARD NEWS

A special thank you to outgoing President Scott Rogers. He put aside pressing business and took the position with the understanding that it would be for a year. That year is over and Scott will step down with our gratitude for his service. Please contact Gerald Bellows at timprosecretary@gmail.com if you are interested in joining the Board and being a leader. All are welcome!


Horses have long been critical for forestry work. Even now, with highpowered machinery available, there is still a place for them in the woods.

Read pp.4-5 about Scott Rogers' plans for hybrid logging in his own woods. For more information: Third Branch Horse Logging, run by Brad Johnson and Derek O'Toole; Draft Animal Power Network (DAPnet), a devoted group of loggers and farmers; and Healing Harvest Forest Foundation, run by Jason Rutledge of Virginia.

# JOIN US FOR THE TIMPRO ANNUAL MEETING FRIDAY, APRIL 21 DEER LAKE FACILITY KILLINGWORTH, CT 

## VISIT TIMPROCT.ORG FOR MORE PROGRAM INFORMATION

## 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 Gutting EdIE 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.


## 2022 LOG A LOAD DONORS

TIMPRO will donate $\$ 7800$ to the Children's Miracle Network hospital in Hartford. This is a record donation thanks to a record number of donors. We are grateful to them all!

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## SCHOLARSHIP UPDATES



Rhiannon Martin, shown here holding an almost 2-year old rainbow trout, reported: "My second semester is going very well. I'm taking 14 credits and I'm still absolutely loving the environmental engineering program at Three Rivers Community College. I've also been continuing my work at the Quinebaug Valley Trout Hatchery while going to school. I've been out the past couple of months getting the opportunity to stock trout for fishing season. We just hit the midterm mark of the semester. My grades are doing very well and I'm finding that I have been more productive and inspired this semester than in the Fall. Things are honestly going great!"
Colden Williamson sent a picture of his work desk for surveying and wrote: "My spring semester started a few weeks back. I am in a few new forestry classes as well as a wildlife management class. I am currently learning how to survey land. I am enjoying it very much. The wildlife management class has a lot to do with the history of our land: the laws put in place to manage fish and game as well as different methods to physically change, preserve, or reintroduce habitat, species and other areas of wildlife survey land. I am enjoying it very much."


## TALKING ABOUT HORSES



Inspired by family history with horse logging, Scott Rogers is currently training two Shires, Sonny and Buddy, to work in the woods. He admits, "Family history in logging did get me thinking about horse logging. I remember going to my grandparents in Patten, Maine. All their wood went down Penobscot River to be milled. Now that generation is gone." His greatgrandfather James Leigh McKinney cared for more than 300 horses in the northern Maine woods logging camps for the Eastern Manufacturing Corp., a large paper mill in Brewer Maine. He loved horses and horses loved him.

Shire, the breed Scott works with, is very rare. It was the primary draft horse in England, renowned for its strength and personable nature. Those qualities made it valuable as a war horse in WWI when this breed was almost slaughtered out of existence. Sonny and Buddy are two of perhaps five to ten in the state, maybe fewer. Scott's wife, Anne Hall, commented that "our vet thought we might have doubled Connecticut's population of Shires!"

Buddy, 12 years old, was trained by an Amish farmer over three summers. Hall, a historian and also an accomplished equestrian in dressage and jumping, elaborated: "First they learn to stop. You start with the brakes. Then you start walking them and the gas pedal is the last thing they learn. They have to be focused on you. They can't respond when a twig snaps or a fly buzzes." Hall fell in love with the Shires during her years in the United Kingdom where she saw them being used for low impact logging in areas of ecological or historic sensitivity. She found the United Kingdom and Europe ahead of the US in developing machinery that can be used in hybrid operations with horses for very small forest lots.

Scott plans to start on his own property by having Buddy train the younger Sonny. Only three and still growing, Sonny won't be ready for real work for another year. Scott is leaning towards a hybrid system in which horses do short-term skidding to bring logs to a main skid road or landing. From there, a forwarder can bunch and stack the log piles. So Scott has bought a Gaffner forwarder fittingly called an Iron Mule to do that job. "It's small and useful. It's economical to operate and parts are available." he explained.

Scott sees value for this hybrid system in Connecticut. It uses very small landings and can work on very small parcels, 50 acres and under. "I can't tell you how many landowners over the last 40 years I have talked with who would love to have a timber harvest to improve the health of their forest but have a real hard time finding anybody that will do it. These parcels also have access issues as well that make it
hard for the guys with larger equipment to operate in. The other problem with the big equipment is that they require very large landings which start to make the landing look to the public like a house lot site."

The horses are a low impact approach that is well suited to "worst first" selective harvesting, a form of harvest that emphasizes cutting the poorest quality trees first and minimizing the impact on preferred trees. The state of Virginia has found this method a positive way to improve regeneration of wood lots otherwise too small or unprofitable for large operations and where clear cutting is undesirable.

There seems to be a gap in the market for owners of ten or twenty-acre parcels who want some timber removed but the land left looking undisturbed with no obvious trails. That calls for either a very small machine or a horse or ox. Hall says that all the horse loggers they have talked with have more than enough work to do it full time. "People have been calling Scott up and asking if he can come out, and I have to keep saying, 'wait up Sonny is only three!'"

It is definitely not the fastest or most economically profit-
 able approach. Hall noted, "You aren't going to get rich working with the horses, at least not monetarily. You work with horses in part because of the lifestyle; it isn't for everyone." Nonetheless, there is a niche market for landowners who want to take a different approach or are managing their woods for aesthetics, recreation, and wildlife in addition to timber.


Rogers also thinks that having horses do the skidding may help create a more positive view of timber harvesting in peoples' minds here in CT.
"We'll see," he concluded.

Photos courtesy of Anne C Hall

Facing Page: Buddy with Scott Roger
This page above: Sonny

This page left: Buddy harnessed up with Anne C Hall and Scott Rogers

## DRAFT HORSE GENETICS AND BOTTLENECKS

Anne C. Hall



The Shire breed registry only began in 1878; however, the "type" goes back as far as human records. The Shire was the primary cart/plow/draft horse across England. The only other English breed was the Suffolk Punch, which was almost exclusively used as a plow and farm horse in the counties of Norfolk and Suffolk; it was, and is, extremely rare. The Clydesdale was the closely related cousin to the Shire in Scotland; in the post war era the Shires and
Clydes were crossed in order to help rebuild the Shire population's genetic diversity. It is very hard to say how different they were previously.
The triple blow of the two world wars, serious economic downturn, and mechanization meant that draft horses, especially cart horses that pulled big wagons/canal boats/and heavy freight loads, vanished almost entirely from the UK between World War I and the 1950s. The Shire population went from over a million in 1914 to as low as one or two thousand in the UK. In the US, it was virtually extinct with only 25 horses registered in the 1950s.

In the US, the Shire was never as common as the Percheron, of French origin, or the Belgian, from Belgium. The lower number of Shires was partially because they do not fare as well in the humid, hot summers of the Southern and Midwestern United States. They adore the snow though! Additionally, the Shires were most abundant in the large eastern and northern cities where mechanization came earlier and completely. Lastly, the communities that continued to use draft horses (mostly Amish/Mennonite) were more inclined to use Percheron/Belgian breeds. So those breeds have remained far more common. Nonetheless, just before World War One there were perhaps ten to twenty thousand Shires in the US.

Beginning in the 1960s, there was a concerted effort to prevent the breed's extinction. The current estimate is at most 3000 registered Shires in the US and Canada; while the UK book currently has approximately 1000 mares registered. So, a reasonably safe estimate is that around 5000 registered Shires exist, and that includes geldings and horses past breeding age. Around 200 to 250 foals are born and registered, worldwide, each year.

There is also a grade population, i.e. not registered. Our two are part of that group which probably adds another 500 or so to the US population. To illustrate the difference, the Belgian and Percheron registries each have around four thousand registries each year, in the US alone, plus thousands of uncounted grade horses.

Today's Shire is blessedly free of any serious genetic diseases caused by the bottleneck of the post War era. However, that is a concern. In the UK there is now a computer program that allows breeders to match the best possible 'out' breeding to foster genetic diversity. The modern Shire is increasingly taller and lighter in bone than a Shire from 150 years ago. While this is making the breed more attractive for riding and show purposes, that change concerns breeders as it is moving the breed away from its original heavy draft capability.

I deliberately sought out Shires that are shorter and heavier than the preferred 'show look' because I wanted to use them as draft horses, not as riding horses. I love their temperament. I was comfortable taking on a "hot"* sensitive horse and Scott was okay with taking the time. Of all the breeds the Shire is the most people-oriented, they want to 'help' with whatever you are doing. That sensitivity and intelligence makes them great partners if you are willing to listen to them!
*full of energy and can be difficult to control


Joseph Orefice, Director of Forest and Agricultural Operations at the Yale School of the Environment, shared this picture of a Canadian draft horse team carrying out a single-tree removal operation he conducted while on the faculty at Paul Smith's College in New York State. He hopes to resume horse and oxen logging demonstrations at Yale-Myers Forest.

## Bits and Chokers

## LUMBER SOURCE MYSTERY

A March 10 email from Chris Donnelly raised an interesting question. He wrote:
"Two weeks ago, I happened to be in the Home Depot in East Haven and decided to take a look at the lumber racks. As I was looking at the grade stamps, I found something that was very different from what I was expecting. There was $2 \times 4$ lumber that bore a WCLB (West Coast Lumber Inspection Bureau) grade stamp (nothing unusual there), with the species mix listed as N.SPR - S. FIR. That I had never heard of. There was also reference to something like "GER DRY". The stamp did not include any reference to the grading rules used but appeared to be using the standard ALSC lumber grades. It looked like a normal grade stamp.

So - I looked it up on my phone. It appears that the reference is to Norway Spruce / Silver Fir lumber, from Germany, which the article found said, indeed, WCLB inspectors are now grading. The article also mentioned that the use of this lumber as structural dimension lumber may be questioned, even if it is graded according to ALSC rules, as the structural properties of the species mix has not been tested according to ALSC procedures."
Later, Chris continued, he happened to be in the New Haven terminal and saw bundles of lumber from Austria, mostly or all dimension lumbers sizes and from a range of different mills, based on the packaging. It was way more wood than a single Home Depot could use. He began to wonder what European softwood lumber was doing here and if it might enter the US dimensional lumber market.
His interest piqued, he visited Home Depots in both Wallingford and North Haven and found both stores had the usual stock of D Fir, SPF, maybe some White Fir or Hem-Fir - for $2 \times 4$ 's, (even some SPFs - meaning, quite possibly, New England material). Further sleuthing at the East Haven store revealed that all of the $2 x$ stock he found there was the same North American mix he had seen elsewhere. "I scoured the lumber section," he wrote, "wondering where the European stock could have gone - when I found it. Off in a corner was a small display of 'precuts' $-2 x$ lumber that was cut into short two-foot and three- foot pieces. And yes, most of this material bore the European grade stamps. So now I know what they did with at least a percentage of this non-NA lumber! Basically, they are selling it as scrap."
"I still think that there is a lot more to this story," Chris concluded.
If you have any ideas, email us at info@timproct.org


Founded 1875

SPOTTED LANTERNFLY QUARANTINE RENEWED


#### Abstract

The Connecticut Agricultural Experiment Station (CAES) in cooperation with USDA APHIS Plant Protection and Quarantine (PPQ) continued to detect expanding populations of the spotted lanternfly (SLF) in Connecticut through 2022. The Director of CAES hereby announces the renewal of the Order of Quarantine for SLF that was established 1 July 2021, effective January 1, 2023.


In 2020 through 2022, multiple adult SLF populations were detected in Fairfield, Hartford, Litchfield, New Haven, and New London Counties. The distribution of this insect continues to expand, posing a threat to the agriculture and forests of Connecticut, hence the renewal and expansion of the quarantine noted in the original order. Early detection is important, and the public is urged to report potential sightings of this invasive pest when they become active again in 2023. Currently, the insect is overwintering in egg masses. If you suspect you have found a SLF, snap a picture of it, collect it if possible, and report it to ReportSLF@ct.gov.

Companies moving regulated articles from the State of Connecticut should enter into a compliance agreement to help mitigate movement of this pest, to prevent the spread of the insect and to protect our trading partners. Native to China, India, and Vietnam, the spotted lanternfly is an invasive sapfeeding planthopper that was discovered in Pennsylvania in 2014. SLF infestations have
 been reported in Connecticut, Delaware, Indiana, Maryland, Michigan, New Jersey, New York, North Carolina, Ohio, Pennsylvania, Rhode Island, and West Virginia. The nymphal stage of this insect is currently active with adults appearing late summer. In the fall, adults about 1 inch long can often be found congregating on tree-of-heaven (Ailanthus), willows and other trees. They will lay egg masses on trees and almost any nearby surface like rocks, decks, houses, outdoor equipment, and furniture, etc. Nymphs of SLF will hatch from the eggs in the spring (late April-June). This insect attacks many hosts and has the potential to severely impact Connecticut's farm crops, particularly apples, grapes, and hops, and several tree species. The secretion of excess sap called honeydew can also be a nuisance for residential infestations.

Additional information is available at the DEEP website.

## THE GROWING GLOBAL PROBLEM OF TREE THEFT

Lyndsie Bourgon, author of "Tree Theft: Crime and Survival in North America's Woods," reported on the growing world-wide problem of tree theft. One driving force is the shift from fossil fuels to woodstoves for heat. But poaching also supplies a thriving black market for manufacturers of hardwood flooring and flat-pack furniture.

In one stand in Germany alone poachers removed 100 pine trees one by one. Throughout Germany the value of timber poached annually reached millions of Euros. The US Forest Service estimates that timber worth more than $\$ 100$ million is poached every year from its land. And every year around Christmas time, evergreens disappear from forests and even from local parks. In Canada, the Province of British Columbia reports the theft of timber valued at over $\$ 20$ million. Globally, the theft is valued at over \$152 Billion.


Bourgon reported, "Each region's bounty is locally unique: in eastern Missouri, poachers take walnut and white oak; the bark is stripped off elms in Kentucky; bonsai are stoIen from gardens in San Diego and Seattle; redwood burl is carved from sequoia in the towering redwoods of northern California."

The poaching is certainly driven by the rising demand for heating with wood. Bulgaria, Switzerland, and Poland all report that the price of firewood has doubled. In the UK, where demand for wood stoves rose 40\%, the sales of chainsaws rose quickly as well. In Dorset, wood worth \$20,000 was poached from one Wildlife Trust in January. And people are being scammed into paying high rates for a cord of wood (about 3.6 cubic metres/128 cubic feet) that were never delivered.
"As I came to know poachers through my research, many of them detailed how they poach wood that they dry to fill their woodstoves, or the stoves of their family members. Some sell their bounty online to needy neighbors, connecting through social media," Bourgon wrote. And she cautioned against outright condemnation of those who poach for firewood. "In times of energy unaffordability and insecurity, wood is a reliable source for many, both in harvest and use. Energy insecurity remains a pressing concern for Europeans across the board - the End Fuel Poverty Campaign estimated in October 2022 that 7 million people live in fuel poverty."

## THINKING OUTSIDE THE BOX

## WOODEN BATTERIES - FOR REAL



Wooden nutmegs? Fake.
Wooden nickels? Don't try to spend them.

Fashioning nutmegs from wood was said to be a thriving fraud in colonial New England. And wooden nickels issued as commemorative tokens were fobbed off on the unsuspecting as legal currency.
But wooden batteries could be a real thing.
Prompted by a drop in demand for paper, Finnish company Stora Enso, one of the largest forestland owners in the world, hired engineers to find uses for lignin, a common byproduct of processing. The conclusion? It could be used to make electric vehicle batteries that charge up in as little as 8 minutes.
"Lignin is the glue that kind of glues the cellulose fibres together and also makes the trees very stiff," explains Lauri Lehtonen, head of Stora Enso's lignin based battery solution they have named Lignode.

Lignin, which makes up about 30\% of a tree, is a polymer that contains carbon. Carbon, in the form of graphite, is already a vital component in the anode of lithium ion batteries. Stora Enso's engineers decided that they could extract lignin from waste pulp already being produced at some of their facilities and process that into a carbon material for battery anodes. The fim is partnering with Swedish company Northvolt and plans to manufacture batteries as early as 2025.

Stora Enso and Northvolt won't reveal exactly how they turn lignin into a hard carbon structure or what the structure is exactly except to say that the process involves heating the lignin but to temperatures nowhere near as high as those required for synthetic graphite production.

This article was adapted from a feature by Chris Baraniuk for BBC online.



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
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## CHECK OUR WEBSITE TIMPROCT.ORG FOR LISTINGS

## TIMPRO ANNUAL MEETING

JOIN US FRIDAY APRIL 21
DEER LAKE FACILITY
KILLINGWORTH,CONNECTICUT
2 CEUs
FREE FOR MEMBERS

## 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.

