



Lockwood Farm Twilight Meeting

*Article on
Page 8*



Featured Article

*A Timeless Craft: Navigating Challenges and
Embracing Sustainability in the Wreath Industry*

Starting on Page 16



*Save the Date: Field Day
August 19th
Yetter Road Tree Farm*

Full Details on Page 7



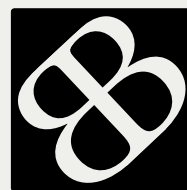
The Real Tree Line is the official magazine of the Connecticut Christmas Tree Growers Association.

Connecticut's Largest Farm Insurer

Personal & Commercial Insurance Coverage for:

- Hobby & Large Farm
- Christmas Tree Growers
- Bee Keepers
- Farmers Markets
- Sheep Breeders
- Organic Farms

FOR OVER
40
YEARS



**Blumenthal
& Donahue
Insurance**

CONTACT US FOR A QUOTE

800-554-8049

www.bludon.com

In this Issue of The Real Tree Line...



COLUMNS

- 5 **CCTGA President's Comments: Summer 2023**
Kathy Kogut
- 6 **Executive Director's Report: Summer 2023**
Lisa Angevine Bergs
- 18 **Tales from the Tree Farm: The Road Taken**

NEWS & ANNOUNCEMENTS

- 7 **Welcome New Members**
- 7 **2023 Fall Field Day**
- 15 **Connecticut Agricultural Experiment Station Scientists Receive Grant Support**
- 15 **2023 John F. Ahrens Memorial Scholarship Awardees**
- 19 **Remembering Our Members**

ARTICLES

- 8 **Twilight Meeting Recap - Lockwood Farm**
- 11 **The Science of Frost/Freeze Damage and Frost Protection**
Dr. Richard Cowles, Valley Laboratory, CAES
- 16 **A Timeless Craft: Navigating Challenges and Embracing Sustainability in the Wreath Industry**
Kirk Weyant, Three Rivers Wreaths, NH

DEPARTMENTS

- 22 **Index of Advertisers and Buy * Sell * Trade * Wanted Ads**

Maintain & Harvest with Equipment from OESCO



FELCO
ELECTRIC PRUNER,
POWER BATTERY PACK,
& EXTENSIONS
Strength, speed, ergonomic
construction and reliability.



BRUSH ROVER
6" maximum cut height,
breakaway blades. 38" cut width and 4WD for any tree farm.



SAMURAI WALK-BEHIND MOWER
4.5" maximum cut height; 27.5" cut width and front wheel for easy maneuverability.



SHEARING KNIVES
Trim and shape trees.

BOW SAWS
Trim branches and harvest trees.

CALL US for a catalog or just stop by!
800-634-5557 oescoinc.com

8 Ashfield Road / Route 116, P.O. Box 540, Conway, MA 01341



Supplying Growers, Gardeners
OESCO INC.
and Groundskeeping Professionals. Since 1954.

OFFICERS

President..... **Kathy Kogut**
304 Parker Avenue, Meriden, CT 06450
(203) 641-1632 • wkogut@cox.net

Vice President..... **Ron Olsen**
319 Ekonk Hill Road, Voluntown, CT 06384
(860) 639-7545 • ronolsen1@yahoo.com

Secretary..... **Dr. Richard Cowles**
73 Barber Hill Road, Broad Brook, CT 06016
(860) 429-5383 • Richard.Cowles@ct.gov

Treasurer..... **Natalie Fillion**
19 Willowbrook Road, West Hartford, CT 06107
(860) 712-6910 • Nat4782@aol.com

DIRECTORS

Fairfield..... **Louis Bacchiocchi** (3/26)
16 Spector Road, Woodbridge, CT 06525
(203) 623-0646 • loubacj@gmail.com

Hartford..... **Bill Syme** (3/24)
72 Windsorville Rd., Broad Brook, CT 06016
(860) 623-5925 • symetrees@cox.net

Litchfield..... **Tim Angevine** (3/26)
40 Angevine Road, Warren, CT 06754
(860) 868-0814 • timothyangevine@hotmail.com

Tolland..... **Prescott Lehmann** (3/25)
21 Checkerberry Lane, Glastonbury, CT 06033
(860) 633-7949 • mplehmann@myyahoo.com

Windham..... **Dirk Hansen** (3/24)
424 Route 198, Woodstock, CT 06282
(860) 974-1572, Email: d.hansen@charter.net

Middlesex..... **Chris Staehly** (3/24)
278 Town Street, East Haddam, CT 06423
(860) 873-9774 • staehlys@att.net

New Haven..... **Joe Vignola** (3/26)
208 Kirk Road, Hamden, CT 06514
(203) 248-8955 • josephvignola@sbcglobal.net

New London..... **Tom Umrysz** (3/25)
(860) 536-3359
yetterroadtreefarm@gmail.com

National Representative..... Kathy Kogut

Director at Large (East)... **C.G. (Pete) Merrill** (3/25)
194 Edmond Road, Jewett City, CT 06351
(860) 376-2473 • merrill@snet.net

Director at Large (West) **Michelle Cumpstone** (3/25)
104 Parker Hill Road Ext., Killingworth, CT 06419
(860) 663-2747 • xmastreesrus@sbcglobal.net

Executive Director..... **Lisa Angevine Bergs**
(860) 601-5906 • executivedirector.cctga@gmail.com

Newsletter Editor..... **Erika Smialowksi**
erikalfulton@gmail.com

Website Manager..... **Emily Syme**
webmaster.cctga@gmail.com

Facebook Manager..... **Lisa Angevine Bergs**
lisa.angevine@gmail.com

Auditor..... Frank Davis

ADVISORS

Dick Jaynes Bill Kogut
Tom Langlais John Cimochowski
John Gilbert..... Joe Goodreau
Charles Langevin..... Scott Edwards
Bud Gavitt John Angevine
Kathy Angevine..... Will Jones
Mark Parker..... Terry Jones

COMMITTEES

The first name at left chairs the Committee

BUDGET

Natalie Fillion John Cimochowski
Scott Edwards Shelley Cumpstone

PROGRAM

Will Jones Ron Olsen
Bill Kogut Bill Syme

FAIRS

Brooklyn

Eric Lapointe geersg1@gmail.com

Durham

Josh Miller jmdmct@gmail.com

Hebron

Patrick Hedden patchshillsidefarm@aol.com
Prescott Lehmann . mplehmann@myyahoo.com

Woodstock

Mark Parker mnparker269@charter.net

Eastern States Exposition

Pending

MEMORIAL/RESEARCH

Dr. Richard Jaynes Natalie Fillion
Tom Langlais Chris Staehly

NOMINATING

Tim Angevine..... Bill Kogut
Chris Staehly

MERIT AWARD

Chris Staehly Bob Merriam
John Cimochowski

TREE IMPROVEMENT

Joe Vignola..... Dr. Richard Jaynes
Dr. Richard Cowles Dr. Yonghao Li
Tom Rathier Pete Merrill
Charles Langevin Terry Jones
Bill Kogut

HISTORIANS

Pete Merrill..... Dr. Richard Jaynes

The Real Tree Line is a quarterly magazine published in winter, spring, summer and fall of each year by the Connecticut Christmas

Tree Growers Association, Inc. It covers the Association's programs, services and activities for members and presents information regarding the growing and marketing of Christmas trees.

Please send letters, news items, photographs and articles to Erika Fulton.
Email: erikalfulton@gmail.com

We also accept advertisements from individual growers and businesses in the Christmas tree industry.

Printed at the R. Frank Printing Company, Wallingford, Connecticut 06492.
Phone 203-265-6152.
Email: richard.frank@rfrankprinting.com

CCTGA Web Site:

http://www.ctchristmastree.org
Emily Syme, Webmaster
Email: webmaster.cctga@gmail.com

Advertising Rates (One Insertion-

FULL PAGE:..... **Black & White: \$135⁰⁰ / Color: \$190⁰⁰**
(Vertical: 8.5" w x 11" h)

HALF PAGE:..... **Black & White: \$80⁰⁰ / Color: \$112⁰⁰**
(Horizontal: 7.5" w x 5" h) (Vertical: 3.5" w x 10" h)

THIRD PAGE:..... **Black & White: \$65⁰⁰ / Color: \$90⁰⁰**
(Horizontal: 7.5" w x 3.25" h) (Vertical: 2.25" w x 10" h)

QUARTER PAGE: **Black & White: \$55⁰⁰ / Color: \$75⁰⁰**
(Horizontal: 7.5" w x 2.25" h) (Vertical: 3.625" w x 5" h)

BUSINESS CARD: **Black & White: \$75⁰⁰ / Color: \$105⁰⁰**
(Four Insertions at 3.5" w x 2" h)

Rates for other sizes upon request to:
Lisa Angevine Bergs

Advertising Payments

There is no set-up fee for setting type for advertisements in **The Real Tree Line**. Print ready proof ads are accepted. Email Digital ads to: executivedirector.cctga@gmail.com. Payment is due within 31 days after receipt of the bill.

Deadlines for Submissions

Deadlines for articles, items and advertisements are: January 1 for the Winter (February) issue, April 1 for Spring (May) issue, July 1 for the Summer (August) and October 1 for the Fall (November) issue.

Correspondence

All correspondence regarding activities and other matters relating to **The Real Tree Line** should be addressed to Erika Smialowski.

Reprint Policy

Articles in **The Real Tree Line** may be reprinted provided that credit is given to the publication. Listing of commercial products in this magazine is for informational purposes. Endorsement is not intended by the Connecticut Christmas Tree Growers Association.

Membership Dues

Annual dues in the Connecticut Christmas Tree Growers Association is \$70 per person.

Please contact:

Lisa Angevine Bergs, Executive Director, CCTGA
984 Burr Mountain Rd., Torrington, Connecticut 06790
Or pay online at www.ctchristmastree.org.

President Comments - Summer 2023

Kathy Kogut, CCTGA President

Wow – what a crazy July! First, we have no rain when we were all planting our seedlings and transplants and then we get so much rain that they almost drown and float away. Who knows what will be next for our trees. Will it be weeds? or will it be insects?? or what kind of disease will be affecting our trees? I guess we will just have to wait and see.

Last year it was difficult to get wholesale trees to supplement your own inventory. Whether it was the demand for real trees or probably because many of us overcut during the pandemic, there was definitely a shortage. The price was high for those wholesale trees and the quality may not have been like your own trees. This dilemma caused many farms to close early. I wonder what will happen this year?

Our customers are looking to buy their trees earlier and earlier. We need to remind them that once a live tree is cut it is now a dead tree. We don’t want to lose a sale but we don’t want to be replacing trees the week before Christmas. Yes, certain species do have better needle retention than some others, true, but not all varieties last for 4 weeks or longer. We need to remind our customers that it is essential to keep the trees watered, away from any heat source and to use quality lights. The Christmas tree is the “centerpiece” of the family celebration. We want our customers to have great memories around that tree, so it needs to be a “perfect” tree.

Our twilight meetings and the Fall Field Day are great ways to network with other growers. It is a time to ask questions, get new ideas and even figure out how to handle a problem on your farm. We are so fortunate to have the CAES scientists available to help with any concerning issues about our trees, bugs, weeds and whatever is troublesome on our farms.

On June 13th had a great twilight meeting at Lockwood Farm in Hamden. There was so much to see with all the experiments the scientists are working on. Remember there is brush available in November for wreaths from the experimental trees. Rich Cowles will let us know the exact dates when the cutting will take place.

On July 11th, Jon Sederquist and his family hosted a fabulous meeting on their farm in Harwinton. The evening started with a tour of their farm including their strawberry, pumpkin and gourd fields and then onto the Christmas trees. Jon then gave the attendees a brief history of the farm and how he started the business. A pruning demonstration was done as well as a field analysis was included. At the conclusion of the meeting, everyone was invited to the Sederquist home for cocktails and a very special treat. Jameson, Jon’s son, an accomplished pianist, performed on

his baby grand piano so many beautiful songs. How his fingers did fly across those keys. Such talent for an 18-year-old! In addition to the wonderful music, many of us had the pleasure of seeing a 300 lb. bear up close and personal as he helped himself to the empty pizza boxes in the trash! You never know what to expect at these meetings!

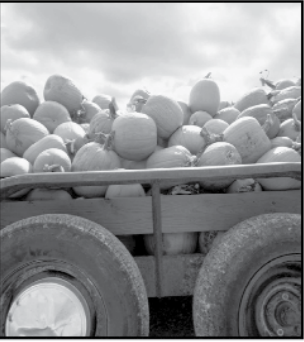
Please mark your calendars for our annual Fall Field Day (even though it still will be summer) will be held August 19 at Yetter Tree Farm in Mystic, hosted by Tom and Pantea Umrysz. Fraser Knoll will once again be there so placing your orders early and save on shipping. Hope to see you there.

Remember to support your local agricultural fairs and participate into any of the contests they hold. It is wonderful advertisement for your farm and you can even take home some prize money.

Enjoy the rest of your summer and be sure to make time to smell the roses! ☺

Dzen Brothers Farm

Quality wholesale growers of:



- Christmas Trees (Fraser, Balsam, Blue Spruce)
- Greenhouse Flowers
- Strawberries
- Blueberries
- Pumpkins

Dzen Brothers Inc.

South Windsor, East Windsor & Ellington, CT

Connecticut growers for all seasons!

Call Joe or Donny Dzen today

Tel: 860-648-1355
Email: jmdzen@comcast.net

Executive Directors Report - Summer 2023

Lisa Angevine Bergs, CCTGA Executive Director

Dear Members,

I hope this message finds you well during this hot and damp summer season. It never fails to amuse me when customers inquire about what we do outside of the Christmas season. In truth, this period is our busiest as we are fully engaged in essential tasks such as mowing, pruning, mulching, swatting sweat flies and planning for the upcoming market season.

I am pleased to share that the recent twilight meetings were met with significant success and impressive attendance. It is always a pleasure to engage in fruitful discussions, exchange innovative ideas, and foster meaningful connections with fellow Christmas tree growers. I extend my gratitude to the staff at Lockwood Farm, including our wonderful scientists and the Sederquist Family for hosting this year!

Additionally, it brings me great joy to announce the recipients of the 2023 John F. Ahrens Scholarship, which is awarded by the Connecticut Christmas Tree Growers Association. I extend my warmest congratulations to Kate Landis from Brooklyn, CT and Jackson Jones from Jones Family Farm in Shelton. Kate will be embarking on her educational journey at Colorado State University, pursuing studies in Forest and Rangeland Stewardship. Likewise, Jackson will be attending The University of New Hampshire, focusing on Sustainable Agriculture and Food Systems. Both applicants demonstrated exceptional recommendations and academic achievements, and we wish them the utmost success in their future endeavors.

Furthermore, I am thrilled to share that we have been awarded a substantial block grant of \$34,400 titled the "CT Grown Christmas Tree Branding and Marketing Project." This grant will empower us to undertake a range of initiatives aimed at enhancing the visibility and impact of our association. These projects include a logo update, significant improvements to our website, strategic social media advertising, and targeted Google ads to promote our website and much more. As part of our grant requirements, we will be sending out an initial anonymous survey via email. We kindly request that you take the time to fill it out and send it back to us. Your participation in this survey is greatly appreciated as it will help us gather valuable information and feedback to enhance our programs and initiatives.

The Choose and Cut Brochure, a valuable resource for customers, is in the production stage. If you have an interest in obtaining copies to share with your customers, please do not hesitate to reach out.

Just a friendly reminder, please promptly submit your website update forms to ensure your information is included on the website. Our ongoing efforts to enhance the site, along with a paid ad program, are expected to bring a significant increase in website traffic this year. Our new home page will also include an interactive map that will significantly enhance customers' ability to locate growers in their area. In the event that you have not received or misplaced your form, please feel free to contact Emily at webmaster.cctga@gmail.com.

Please mark your calendars for the highly anticipated Fall Field Day Meeting, which will take place on August 19th, 2023, at Yetter Road Tree Farm in Mystic, hosted by the Umrysz Family. We have received confirmation that Fraser Knoll will be in attendance, which presents an excellent opportunity for you to save on shipping costs by pre-ordering and conveniently picking up your items during the meeting.

Wishing each of you a delightful and productive summer season! I hope to see you all at Fall Field Day in beautiful Mystic. 🌲

JIM ROCKIS



RELIABLE SOURCE

Seeds & Transplants

Reliable Source, a Jim Rockis company, is about providing the highest quality Christmas Tree seed, Christmas Trees, transplants, and tree seed processing equipment.

SEEDS & TRANSPLANTS

304-282-3470

Morgantown, West Virginia
www.jimrockis.com JERockis@gmail.com

Welcome New Members

Being a CCTGA member is a wonderful way to share ideas, have access to experienced growers, researchers, equipment dealers and specialty suppliers.

The CCTGA schedules two Twilight Meetings a year as well as the Annual Fall Field Day Meeting. Speakers recognized in their fields are invited to share their expertise on various aspects of the Christmas tree industry. The Annual meeting, held the first Saturday in March is always an exceptional educational opportunity while networking with friends.

As you are aware, by being a member of CCTGA you will receive four newsletters a year featuring updates on the latest cultural

and marketing practices, the ability to list free wanted to buy, sell, or trade ads and read several articles related to Christmas tree growers.

The CCTGA would like to welcome the following new member:

Raymond Ganim
Ganim Tree Farm, Easton, CT

*Learn more about CCTGA membership
at CTChristmasTree.org*

2023 Fall Field Day

Yetter Road Tree Farm

Saturday, August 19, 2023

Registration: 8:30 AM

Meeting: 9:00 AM - 3:00 PM

Cost: \$25 per person (members)

Address: 94 Yetter Road Mystic, CT 06355

Directions:

From Route 184 (Gold Star Highway) take Flanders Road south, then take a left onto Yetter Road.

From Route 1, take Flanders Road north, then right onto Yetter Road.

Hosted By:

The Umrysz Family

(860) 536-3359 | (860)-912-8779 Tom

History of Yetter Road Tree Farm

Yetter Road Tree Farm was founded by John & Irene Whittle Umrysz. John served in War World II on USS Rodman, a destroyer, as a torpedo man. Then worked with the City of Groton for over 30 years. Irene Whittle Umrysz worked as a nurse at a local Pediatrician's office. What started as a passion project, planting trees for the love of nature in the 60s, evolved over the following decade into a small family tree farm. Yetter Road Tree Farm opened for business in 1974. Their five sons, Curt, Gary, Lee, Tim, and Jeff grew up working on the farm. Yetter Road Tree Farm was passed down from John to their son Lee. Now Lee and his son, 3rd generation Tom Umrysz, work on the farm year-round, taking care of the trees and carrying on the family business.



Visit ctchristmastree.org, CCTGA on Facebook, or watch for our emails for more information.



Twilight Meeting Recap - Lockwood Farm

The first Twilight Meeting for growers was held on June 13 at the CT Agricultural Experiment Station's Lockwood Farm in Hamden. Beautiful weather greeted the visitors attending the meeting. Scientists with active research projects involving Christmas trees, Drs. Jatinder Aulakh and Richard Cowles, provided presentations, and the Executive Director, Lisa Angevine Bergs, kindly provided food and refreshments. Two hours of pesticide applicator continuing education credits were approved for this

meeting by CT DEEP, and a representative Cyrena Thibodeau, from CT Department of Agriculture gave an overview of their programs which included the CT Department of Agriculture, weekly Ag report, a newsletter every Friday with funding updates, events, workshops, etc. She also reviewed the CT Farm Stress Relief Resources and phoneline, grant opportunities, farmland preservation and CT Farmlink.

Rich started the meeting with a brief history of the Lockwood Farm, which has supported the efforts of CAES scientists since 1910. He then described the background of the efforts in the Station's Christmas tree genetic improvement program, which was initiated by Dr. John Ahrens and Rich in 2010 and has had experimental plantings continuously since then. John Ahrens expressed the need for firs that could withstand wetter soils, to avoid losses from phytophthora root rot, but other aspects of climate change demand that we find trees that can withstand other harsh conditions. The focus has been to test growth performance of tree

species native to Turkey, such as the Turkish, Trojan, and Nordmann firs (which can collectively be called Mediterranean firs). Studies by Drs. John Frampton and Mike Benson from North Carolina found no sign of genetic variability in resistance to phytophthora root rot among Fraser fir, but some degree of tolerance among the Mediterranean firs. The 2010 planting demonstrated that the Mediterranean firs could survive wet soils and phytophthora that killed within three years every Fraser fir.

Growers observed the qualities of these species from the trees planted in 2013, of which only about 63 trees out of the original 3,000 will be retained as a seed orchard. The trees selected for this purpose had excellent needle retention, growth rate, form, and later bud break. Advantages of these species include extraordinary foliage quality, heat, drought, and wet soil condition tolerance. Trees being culled so that they cannot hybridize with the exceptional seed orchard trees have been made available to CCTGA members for greens. Lisa Bergs recently shared with Rich that foliage from the Lockwood Farm trees harvested in early November of 2022 and kept cool and protected from drying were still green, supple, and could still have been used for making wreaths on May 13, 2023. The Mediterranean firs have not been observed to harbor injurious populations of spider mites, balsam twig aphids, or armored scales, and so typically do not require insecticide applications (except a root dip to protect against white grubs at the time of planting). These species grow an enormous tap root, and so are best planted from two-year-old plugs. Root pruning



Dr. Richard Cowles demonstrating a backpack sprayer in field. Photo credit: Will Jones.

Twilight Meeting Recap - Lockwood Farm

associate with lifting them from transplant beds sets their growth back at least two years, and so buying them as bare-root transplants should be avoided. Negative qualities of these species include lack of scent, weight (they have large butts), early bud break and sensitivity to late freezes, and susceptibility to browse damage from deer and rabbits. Rich noted that that his recipe for deer repellent published in the RTL last year can prevent vertebrate damage.

Transplants from the CoFirGE2 experiment were planted this spring. The Lockwood Farm had little damage to these or the older trees from the May 18 freeze. Although this field is at the bottom of a slope and could have been a frost pocket, the air temperature was about 8 °F warmer (~ 40 °F) than in the Hartford area, and so there was minimal damage. The similar planting in Bloomfield at the 4H Auerfarm experienced extensive damage from the freeze.

Jatinder had established herbicide plots among the trees to demonstrate the effectiveness of two herbicides, Tenacity (mesotrione) and Frequency (Topramezone) for postemergence weed control and Conifer tolerance. Tenacity is still not labelled for weed control in US Christmas tree plantations. Frequency is similar chemistry (HPPD-inhibitor) and is labelled for annual grasses and broadleaf weed control in Christmas trees. Mission (Flazasulfuron) is another new pre- and post-emergence product for weed management in Christmas trees. It was not included in this experiment because of delay in its availability. A crop sensitivity test was conducted, with products applied at the labeled rate (1x) and at two times (2x) and four times (4x) the labeled rates per acre.



Photo credit: Joe Vignola

Tenacity was applied at 7.5 (1x), 15.0 (2x), and 30 (4x) fl oz/ac and Frequency rates were 4 (1x), 8 (2x), and 16 (4x) fl oz/ac. A modified vegetable oil surfactant (Dyne-amic 99%) was added to the herbicide treatments at 1% v/v basis (1 quart per 25 gallons solution). Products were applied on May 9, 2023 using a backpack sprayer calibrated to provide 20 gallons per acre. There was one to two week new growth of conifers at the time of application. Principal weed species included Mugwort, common ragweed, Wild violets, and Wild carrot. Weeds varied from 6 to 10-inch size. Five weeks later on



Photo credit: Joe Vignola

June 14, we were able to observe not only the performance in weed suppression from application of these products, but also the degree of injury (bleaching) to the fir foliage. Bleaching was observed from the higher than labeled application rates only for Tenacity but not for Frequency herbicide tested at rates up to 16 fl oz/ac. This experiment and those done in previous years at the Windsor valley laboratory and the Kogut Tree Farm in Enfield has shown excellent tolerance of firs to Frequency herbicide. More weed efficacy and crop tolerance trials are underway at the Jones family farm in Shelton and the Kogut Tree Farm in Enfield. These experiments also include Mission herbicide.

Rich provided an additional explanation for why these herbicide sensitivity tests are so important when he discussed herbicide and backpack sprayer calibration. Unless you are walking at a constant speed or using a tractor to make a pesticide application, the volume of spray mixture applied per acre is entirely dependent on the applicator's spray technique. A case in point was the herbicide application for the CoFirGE2 planting. He used a sprayer that when used in an over-the-top spray application would be expected to deliver 20 gallons per acre. Because he had to slow down and use a shield to protect the foliage from the spray being applied, he found that he was delivering about 60 gallons of spray per acre and had use one third as much product per tank to apply the correct amount of product per acre.

The same principles apply for calibrating use of a backpack mist blower sprayer. He suggested the following procedure: (1) Fill the tank with water to a level that can be measured precisely. (2) Spray a representative group of trees, using spray techniques that will be typical for spraying the whole field. A convenient number of trees with a 5 x 6 foot spacing would be 72 trees, which is about one-twentieth of an acre. (3) Carefully measure the amount of liquid required to refill the tank to the original level. Use proportions to calculate the number of gallons to spray an acre. In our example of 72 trees and a 5 x 6 foot spacing, the volume needed to refill the tank is multiplied by 20 to calculate the gallons per acre.

Twilight Meeting Recap - Lockwood Farm

This then provides the information needed to calculate the amount of product to mix in the tank. For example, if you needed to spray Envior at 18 fluid ounces per acre, and you determined that your spray technique delivered 18 gallons per acre, then you would mix 1 fluid ounce of Envior for each gallon in your sprayer. A lower volume of spray per acre will require a proportionately higher quantity of product per gallon of spray mixture. He suggested to not spray a whole tank to calibrate a backpack mist blower sprayer, because it can be difficult to judge when the tank is empty.

Rich demonstrated mist blower spray technique with his new InvaTech Italia Model 870 sprayer (\$400 from an online distributor). It generates an air flow of 800 cubic feet per minute, and so the operator should stand about 10 – 20 feet from the target to allow spray droplets to swirl around the foliage to achieve efficient droplet deposition.



Photo credit: Joe Vignola

Stay Tuned...

The recap of the wonderful Twilight Meeting at Deeply Rooted Farms will be in our Fall Issue!

Thank you everyone who attended!

Although there were no balsam twig aphids or mites to see at the Lockwood Farm, Rich discussed why many farms are seeing problems with these pests this year. Rain events wash pests from foliage and is essential for development of fungal diseases of arthropods. Drought in the spring thus promotes higher pest populations. Fertilizer applied at the correct time would have been carried into the soil, but then drought leads to elevated nutrient levels in foliage, which then enhances the growth rate, survival, and fecundity of the pests. This allows their population increase to outpace that of their natural enemies. Rich described why the spray of Envior and TriStar around the time of bud break is a good strategy for managing these pests and armored scales. By being selectively toxic to the pest and not the natural enemies, this spray provides conditions in which the predators can “mop up” the remnant population of pests, thereby preventing the survivors (which could carry genes for resistance to the pesticide) from reproducing. 🌿

The Science of Frost/Freeze Damage and Frost Protection

May 18, 2023, will be memorable for many farmers, and not in a good way. After having had a reasonable start to spring with just enough rain to keep our transplants alive, we were hit with a dry, cold air mass. Although weather forecasters had warned about a frost/freeze event, the severity of the damage to the new growth on some Christmas trees was sobering. At my house, we have a weather station that records temperature, dew point, wind direction and wind speed. When I woke and saw that our lowest air temperature recorded 33.6 °F, I thought that we might have escaped plant injury. However, under the conditions we had, namely a clear, still night, the air temperature recorded above ground does not represent the temperature of surfaces facing the sky, which can continue to radiate heat and reach a much lower temperature. The recording showed that the dew point between midnight and 5 a.m., when the damage likely occurred, ranged from 22 to 26 °F. Finding heavy frost on leaves signifies that the temperatures of the plant surfaces must have gone below the highest dewpoint, or 26 °F. Knowing the exact temperature would have required observing exactly when frost formed, and knowing the dew point at that moment, or having a sophisticated thermometer that can measure low surface temperatures. During the day, the sun’s rays are absorbed by and warms soil, and so the warmest air is near the ground. As air warms it expands, becomes less dense, and rises via convection. As air rises temperatures become colder at greater heights, with a drop 5.4 °F in dry air associated with a 1,000-foot increase in altitude. However, cold air is denser than warm air, so under still conditions cold air can sink to the ground. This results in an inversion – colder air near the ground is trapped under a cap of warmer air at a higher elevation.

Colder air sinking means two things: (1) if you have trees planted at the bottom of a slope, they may be more subject to frost damage than elsewhere, because cold air pouring downhill will have nowhere to go. Such locations are called “frost pockets” and (2) even on a single tree, you may see a gradient of increasing damage as you get closer to the ground (Fig. 1).

Curiously, the temperature at which ultra-pure water freezes is not 32 °F, but –40 ° (°C or °F). However, ice crystals usually start forming when the temperature reaches 32 °F around nucleators, which are impurities in water. Ice crystals forming inside plants expand, which can cause cells to rupture and die. Research demonstrated that a hydrophobic-modified kaolin clay particle film applied to plant surfaces prevented ice nucleation (the initial formation of ice crystals) on the plant surface, which then prevented freeze damage of plant tissues (Wisniewski et al. 2002). The same effect can be observed when replacing populations of bacteria (usually *Pseudomonas syringae*) from the leaf surface,



Figure 1. The Douglas-fir on the left and the concolor fir in the middle show the gradient of damage increasing with the new growth closer to the ground. The Korean x balsam mix on the right had “hardened” foliage at the bottom of the tree that was killed by the freeze event. This manifestation of freeze damage is rare.

which trigger ice nucleation (these are ice-plus bacteria) with ice-minus bacteria. Apparently, ice crystals forming on the outside of the leaf leads to propagation of ice formation into the leaf interior. This was demonstrated (accidentally) among my pepper plants in the vegetable garden, which I forgot to cover.. They were exposed to identical conditions, but two plants were completely unaffected, while the other nine were frozen and top-killed. Since the environmental conditions were the same among all plants, the difference must have been due to presence/absence of ice nucleating bacteria on the plant surfaces. Approaches related to preventing ice formation on the outside of plant tissue for frost/freeze protection are only effective up to the point at which tissues can supercool (chill below 32 °F), and have not been commercialized to provide a practical means to protect crops from freeze damage (Gross 2021). Copper compounds in foliar sprays have been used to eliminate *Pseudomonas syringae* from the outside of plant surfaces, but have to be applied 5 – 10 days before a frost event to allow the bacterial proteins that cause ice nucleation to decompose.

Serious frost damage to Christmas trees is luckily not a routine occurrence. Experienced growers in our association tell me that they haven’t seen damage like this for 20–40 years. This year has me wondering whether, like so many other bad consequences of climate change, frost damage will become more common.

My guess is that we probably will. Two factors cause me to take this pessimistic view: (1) our winters are warming, so trees will start growing earlier, and (2) the erratic behavior of the jet stream is more likely to push cold air over us after growth has started, even though our average temperatures have increased. The “last frost date” is not a good measure of when we can safely plant sensitive vegetation outside. It is defined as the average date for the last frost, and so by definition, 50% of the time we should expect frosts to happen after the last frost date! More erratic behavior of the jet stream caused by global warming can be expected to increase the statistical variance for the last frost for each year. So, even though the “last frost date” as a statistical average may creep to an earlier date, we may paradoxically have a greater likelihood of experiencing frosts at unusually late dates, especially relative to when there is sensitive new growth.

There are five principle practices, listed below, that can protect vegetation from frost/freezing injury. These vary from being very expensive, and thus probably not cost effective, to being relatively inexpensive. These methods usually only work when temperature inversion has taken place, not when a very cold air mass with moving cold air (a polar vortex event) has arrived. The expense and effectiveness of these methods are compared in a cooperative extension guide found online (Gohil 2018).

1. Irrigation

Application of sprinkler irrigation to plants, starting well before the freezing point is reached, maintains a temperature of 32 °F for as long as a film of water is maintained. This method requires an extraordinary amount of water, a sprinkler or mist irrigation system, and ice accumulation itself could damage trees. This approach is most practical for protection of tree nurseries and strawberry fields. A modified approach is to only water the surface of the ground, so that the latent heat of freezing warms nearby vegetation Gohil 2018).

2. Mixing of Air

Powerful blowers can mix the air closest to the ground with warmer air and might even interrupt the formation of a local inversion layer. Windmill-like fans are occasionally used to protect fruit orchards,

with models that are either permanently built in place or are portable (<https://orchard-rite.com/>). A single fan can protect up to ten acres (Gohil 2018), making this tool attractive for high-value fruit crops. Neighbors may complain about the noise, as they may sound like a helicopter. Helicopters have also been used, but they are very expensive and flying at night is hazardous.

3. Heaters

Generating heat could counteract the effects of cold air, but unlike fans, which can cover several acres, 36 heaters are needed per acre, and this method is only useful for 3 °F of frost protection (Gohil 2018). In the old days, people thought that smoke could protect against frost, which is not true. Rather, the smoke from “smudge pots” used for frost protection is ineffective for blocking infrared radiation and subjects people to breathing dangerously polluted air trapped by the temperature inversion. A modern and increasingly popular option is a “Frost Dragon” a device that burns propane to generate a jet of heated air extending 150 – 200 feet in either direction. A tractor operator drives the device through the area being protected once every 10 minutes to maintain frost protection (Gohil 2018; <http://www.dynamicdezigns.com/frostcontrol.html>).

4. Covers to Prevent Radiative Heat Loss

Placing a fabric cover over foliage can prevent the plant surfaces from radiating heat to the sky. This is usually only practical for vegetable transplants but has also been used for fruit crops. Any foliage touching the fabric may be subjected to damaging temperatures, though. Christmas trees can be protected from frost injury if they are even partially covered by overhanging branches from hardwood trees that have leafed out (though this also means they will suffer from shading and competition from these trees’ roots). New transplants may be small enough to be protected by the cover from surrounding weedy vegetation, but of course they also will suffer from this competition, too (Fig. 2). A “FogDragon” device is sold in Europe that generates a warm moist air blast that condenses into a fog (smog?) in cold air trapped by an inversion event. A similar approach is available in the U.S. with thermal fogging devices (<https://www.dramm.com/html/main.isx?sub=755>).



Figure 2. Turkish fir in a new genetic improvement study were badly affected by the freeze. The transplant on the left was partially protected by weedy vegetation cover, whereas the one on the right was not.

This fog layer can slow radiative heat loss, as water droplets in fog are impenetrable to infrared radiation and thus can act like an insulating blanket (<https://fogdragon.eu/en/>). Fog generators should not be used where they may block visibility for drivers on nearby roads!

5. Genetics

Species of trees vary in timing of bud break, and also in their physiological ability to avoid freeze damage. Many growers appreciate Fraser and Canaan firs because their bud break is so late that young, sensitive tissue is unlikely to be damaged from freeze events. When we see frozen damage on some species and no damage on others that have the same amount of fresh new growth, that suggests that either (or both) that (1) the species protected from freeze damage is covered with bacteria that prevent ice nucleation, or (2) that internal tissues are protected from damage caused by the formation of ice crystals. One mechanism for avoiding cell rupture from ice crystal formation is that plants may shunt water from the interior of the cell into air-filled spaces outside the cell. Ice crystals forming there can expand without damaging the cell, and when the freeze event ends, the partially dehydrated cells resorb the liquid water. Conifer tissue that has developed sufficiently, or “hardened” clearly is protected through this mechanism, which is evident from the fact that mature foliage is usually not affected by very cold temperatures experienced each winter and is also unaffected by spring frosts. Table 1 reveals the 20 species/hybrids grown at Humming Grove Farm, of which representative samples were examined for signs of injured shoots about one week after the freeze event. I have included data on the height of the trees (in feet), which could be related to the extent of injury, as small trees may have been subjected to the coldest air near the ground, and on the length of the shoot growth (in centimeters), so that the amount of new growth exposed to the freezing temperatures can be compared. The clear “winners” in this table are the pines, in which no damage was observed, white and Colorado spruce, which like the pines had considerable new growth, and the late bud break firs such as Canaan and Fraser firs. The balsam firs on my farm were surprisingly frost tolerant, despite having exposed new growth.



Figure 3. Delayed evidence of freeze damage apparent in mid-June included glyphosate injury-like symptoms of balsam fir side shoots, and damage at the tip of leader shoots on a few Colorado blue spruce. The leader on the blue spruce can be replaced by tying up the longest side shoot to take its place.

Note that under other conditions the ratings for damage could be different. An even later frost could allow the Douglas-fir foliage to be somewhat hardened, while new growth on Fraser fir could be at a susceptible stage.

In addition to the nearly immediate impacts of frost on newly expanded shoots, there were delayed effects of the freeze event on shoots that were just starting to emerge from buds at the time. This damage was fully evident about one month after the freeze event. The shoots that were affected included some lateral buds on balsam firs and leader buds on Colorado blue spruce. The appearance is remarkably like what I have identified as glyphosate injury in the past, with yellowish shoots presenting dwarfed needles, or just the tip of the new growth killed (Fig. 3).

Another delayed effect may actually present a silver lining, of sorts. I have Nordmann firs that I planted two years ago on my farm. They had been lifted from a transplant bed and were mercilessly root pruned at the nursery prior to shipping. For two years, these trees have struggled to grow, as they obviously first had to develop a



Figure 4. The shoots on some Nordmann firs had supercharged growth. The photo on the left shows the appearance before, and the photo on the right after limb spreading through gentle manipulation of the shoots.

new root system. The freeze killed most of the shoots along with the leader bud. The dramatic reduction in the number of shoots growing resulted in very vigorous growth in those shoots remaining. However, with the loss of the leader, multiple shoots are vying to become the leader. One method to deal with this would be to cut all but one of those shoots off. However, because the tree has so few shoots to begin with, a better remedy is a trick I learned from fruit

Group	Species	Height (ft)			Growth (cm)			Damage ^a (%)	n ^b
		avg	min	max	avg	min	max		
Pine	Austrian	6.0	4.0	7.0	15.0	15.0	15.0	0 d	6
	White	5.5	4.5	8.0	15.2	15.0	16.0	<1 d	5
Spruce	Colorado	2.9	1.5	8.0	4.8	1.0	9.0	2 cd	11
	Meyer	0.9	0.5	1	3.4	2.0	6.0	95 a	9
	Norway	2.3	1.5	6.0	4.8	2.5	7.0	6 bc	9
	Serbian	1.2	1.0	1.5	1.6	1.0	3.0	53 a	9
	White	6.7	3.5	9.0	10.0	9.0	12.0	<1 d	5
Fir	Balsam	3.7	2.0	5.0	5.0	2.0	10.0	<1 cd	9
	Balsam (blue)	4.1	3.5	4.5	3.6	3.0	5.0	<1 d	5
	Balsam x Fraser	3.0	n.a.	n.a.	1.0	n.a.	n.a.	0	1
	Balsam x Veitch	4.3	4.0	4.5	6.3	5.0	7.0	2 cd	4
	Canaan	6.3	6.0	7.0	0.8	0.5	2.0	0 d	10
	Concolor	4.4	1.5	9.0	4.9	2.0	8.0	23 b	7
	Fraser	5.0	n.a.	n.a.	0.0	n.a.	n.a.	0	1
	Korean	4.3	4.0	5.0	0.6	0.0	1.0	<1 d	6
	Korean x balsam	3.0	n.a.	n.a.	5.0	n.a.	n.a.	24	1
	Korean x corkbark	5.3	4.5	6.0	0.5	0.5	0.5	6 bed	3
Other	Momi	4.5	4.0	5.0	3.0	2.5	3.5	53 ab	3
	Nordmann	1.2	1.0	1.5	1.9	1.0	3.0	94 a	6
	Turkish	4.0	n.a.	n.a.	4.0	n.a.	n.a.	93	1
Other	Douglas-fir	2.2	1.5	3.5	4.9	4.5	5.0	96 a	5

^a Damage values followed by the same letter are not statistically significantly different, Fisher's protected LSD test performed on logit-transformed proportion data, P < 0.05; where letters are not present, there were insufficient samples to make statistical comparisons.

^b The number of trees examined. Where n = 1, the data could not be subjected to statistical interpretation.

Table 1. Comparison of the effects of freeze injury occurring May 18, 2023, to different species being grown as Christmas trees in Broad Brook, CT

tree culture called limb spreading. The excess competing shoots can be gently bent to a more horizontal position, which changes the plant hormone relationship and trains them to become side branches (Fig. 4). I sometimes use this same technique to modify the growth habits of competing leader shoots on firs and spruce, when the tree can benefit by having additional side shoots at the top of the tree and to encourage more vigorous extension of the remaining leader shoot.

If spring freeze events become more common, then being prepared with frost protection measures will be warranted. I am impressed by the prospects that thermal foggers and appropriate Christmas tree genetics can play for limiting the freeze damage, as these approaches may meet our needs without being outrageously expensive. The application of ice minus bacteria presents another opportunity which I hope will become commercially available. ☞

Acknowledgment:

Thanks go to Rebecca Syme, Research Assistant, for having helped with the data collection, entry, and table creation.

References:

Gohil, H. 2018. Frost protection in the orchard – Methods, updates, and costs. <https://njaes.rutgers.edu/peach/orchard/pdf/Frost-Protection-in-Orchards-Methods,-Updates-and-Costs.pdf>

Gross, L. 2021. Ice fighting bacteria could help California crops survive frost. Inside Climate News, March 25, 2021. <https://insideclimatenews.org/news/25032021/ice-fighting-bacteria-could-help-california-crops-survive-frost/>

Wisniewski, M., Glenn, D. M. and Fuller, M. P. 2002. Use of a hydrophobic particle film as a barrier to extrinsic ice nucleation in tomato plants. J. Amer. Soc. Hort. Sci. 127(3):358–364. 2002.

Connecticut Agricultural Experiment Station Scientists Receive Grant Support

Three projects submitted to the CCTGA Board were awarded funds at their May meeting. The grants, their amounts, and a summary of what is being studied is summarized here.

Dr. Jatinder Aulakh is being awarded \$1,200 to study the tolerance of balsam fir, Canaan fir, Fraser fir, Nordmann fir, Douglas-fir, and Colorado blue spruce to Mission herbicide applied at the labeled (2.85 fl. oz. per acre) and twice the labeled rate, and will also measure its activity against bedstraw, perennial sedges, and thistles. This and other post-emergence herbicides are valuable for managing weeds that are actively growing and competing with our trees during the summer when preemergence herbicide applied early in the season are no longer effective, and to control weeds that have escaped earlier weed control measures.

Dr. Richard Cowles is being awarded \$500 to evaluate water quality effects on needle retention for various species of Christmas trees. His preliminary data demonstrate that when brine has recently been recharged in salt-based water softeners, the resulting tap water can be harmful when used to water cut Christmas trees. Filling a tree stand with such water may cause the tree to dry quickly, discolor, and to drop its needles more rapidly than when watered with municipal tap water or deionized water.

Dr. DeWei Li is receiving \$500 to study a species of Ganoderma fungus (a butt rot fungus) found growing on Christmas trees at the Valley Laboratory, and which may be a new Christmas tree disease. He will isolate pure cultures of the fungus and analyze gene sequences to identify it, and will determine whether it is pathogenic by inoculating it into healthy trees to see whether those trees become diseased.

Nutrien
Ag Solutions™

Broad Brook, CT 06016
1.860.623.2694
1.800.406.9344

Call Us for All of Your Fertilizer
and Chemical Needs

Featuring: 18-11-17
Christmas Tree Mix
or

Your Own Custom Blend

NutrienAgSolutions.com

2023 John F. Ahrens Scholarship Awardees

The Connecticut Christmas Tree Growers Association is pleased to announce our 2023 John F. Ahrens Scholarship awardees.


Congratulations to Kate Landis and Jackson Jones!

Kate will be attending Colorado State University majoring in Forest and Rangeland Stewardship.

Jackson will be attending The University of New Hampshire to pursue studies in Sustainable Agriculture and Food Systems.

Both applicants had exemplary recommendations and grades. Best of luck to you both!






Enjoy Life to the Fullest

Elizabeth McClelland, CFP®
Managing Director – Investments

Let us make sure you have a financial plan in place that helps you enjoy your life to the fullest. We offer top-notch service and advice you need to build a plan that fits your unique goals and objectives.

Trust. Integrity. Mutual Respect.

We look forward to serving you and encourage you to stop by.



BENJAMIN F. EDWARDS®
INVESTMENTS for GENERATIONS®

2321 Whitney Avenue | Suite 502 | Hamden, CT 06518
P 203-287-9266 | TF 877-344-0499

benjaminfedwards.com
2021-0090 Exp. 01/31/2024 Member SIPC

A Timeless Craft: Navigating Challenges and Embracing Sustainability in the Wreath Industry

By Kirk Weyant, Three Rivers Wreaths, NH

Note: Kirk was supposed to speak at our annual meeting in March, but couldn't due to prior commitments. Will Jones asked him to share some thoughts for our growers.

My foray into the wreath industry began in the late 1970s. I began working for a sod farm and nursery, which dealt in Christmas tree distribution, where trees were purchased from several Canadian Maritime province locations, with a shipping yard in Nova Scotia.

In 1979, the tree business expanded to include wreaths, where I managed the operations. Each fall, I moved my young family to Down East, Maine. We established a wreath shop and found local people who were involved in the cottage industry of hand-crafting wreaths at home. They did other seasonal work as well like raking blueberries, gathering fish scales, and digging potatoes.

Upon opening a small shop in Maine, we produced 5k wreaths in our first season. At the height of my time working for the company, we had 30 machines producing wreaths and expanded the business to 300K wreaths per year. As my relationship grew with new partners in New Brunswick and Quebec, I decided to start my own wreath business under Eagle Mountain Evergreens. Wreath-making begins with balsam tips or branches. They are picked after several hard frosts and loaded out of the forest to be weighed. This job was done mostly by men who hunted and trapped and knew where the best balsam was growing. They would snap off 18 inches of new growth and layer and spiral it onto a six-foot pole to be dragged or carried out of the woods. They were paid by the pound. Many Canadians would come to my shop near the border to sell their wreaths and tips or branches to the U.S. market. The Provincial Government issues permits to begin the harvesting of the greens every year on crown land.

In this way, I met many contacts, competitors, and friends.



The workforce grew more scattered as the older generation aged out and the younger generation moved on to other employment. As Eagle Mt Evergreens grew, we decided to move operations to NH where my family would not have to be uprooted each year. We utilized the H2B program where we hired apple pickers who had finished with their season and could transition over to wreaths. We had a dedicated experienced team of Jamaican wreath makers who were a pleasure to work with over many years. After 9/11, Immigration disallowed the transfer of an H-2A visa to an H-2B visa and we lost our well-trained crew.

In the early 2000's we bought land and built a permanent site to facilitate production and decoration. We changed our name to Three Rivers Wreath Company as our land is located at the confluence of the Merrimack, Pemigewasset, and Winnepesaukee Rivers. We were privileged to hire refugees from the Bosnian conflict who relocated to NH for work and housing. They knew little English at the time but proved to be wonderful employees and friends. Over the years folks moved on, found year-round employment, or relocated and we were left with staffing problems again.

This is the point where I developed my wreath shops in Canada. Where most of our double-double-face wreaths are made to our specifications. We continue to make our garland, decorate, and distribute with seasonal employees at our shop in Franklin.

It is becoming more difficult to produce quality balsam wreaths to be delivered before Thanksgiving. The main reasons are the weather, high temperatures in late October and early November, followed by snowstorms mid- season. This makes it difficult to have a good supply of greens to work with and lost days of production can't be made up. As we know, picking the brush early can cause needle shed and yellow, while heavy snowfall and ice make it almost impossible for people to harvest the greens. Wreath production depends on daily fresh greens for continuous production of wreaths. Wreaths, like agricultural crops depend on good weather. This problem is worsened when permits in Canada to harvest balsam branches are issued too early, usually by the third week of October. When the markets demand early products, it is better to use Fraser which is less prone to needle drop. Unfortunately, Fraser is much less fragrant, and the tips are harvested from the basal pruning of tree plantations, making wreaths more difficult to produce.

There a relatively few native stands to harvest greens from. These pruning generally lack the full form of branches harvested from wild trees which have never been sheared. This leads to a Fraser

A Timeless Craft: Navigating Challenges and Embracing Sustainability in the Wreath Industry

wreath that holds up better but lacks the fragrance and symmetry of a balsam wreath made with wild-harvested greens.

So, what is the answer?

Understand the factors that affect the quality and durability of the product. Source early season products from Frasier or West Coast greens and then move to Balsam.

For Retailers:

- Be knowledgeable and be aware of the different products: West Coast Noble and mixed Fraser & Balsam.
- Clamp ring, single-faced, crimped ring, double-faced.
- Offer the right product at the right time.
- Educate consumers to know the difference and to see the value.

For Producers:

Know your brush sources and don't be pressured to start production early as this will sacrifice quality and durability. Diversify using the appropriate greens to maximize your production.

Final thoughts:

Climate change is a real factor in the Christmas tree and wreath industry. Not factoring this issue into your planning will cost you.

Finding skilled craftspeople to produce products is an ever-shrinking resource, take great care to compensate, encourage

and support these people. Educate the consumer so that they can understand and value the product they are purchasing. Three Rivers Wreath and Plant Company believes that the Balsam double-faced wire-tied wreaths are the true premium wreath. They are the most fragrant, symmetrical, and long-lasting when made at the right time. West Coast fir and Fraser wreaths are beautiful and have a solid place in our business as well.

As a family-owned, multi-generational business we are committed to offering a high quality environmentally sustainable product. We continue to explore and apply the best practices in our business. ♻️



BTF-Wholesale at Goderie's Tree Farm

Wholesale Distributors for the Floral, Craft and Christmas Tree Industry

Large Selection of Wreath Rings • Ribbon Picks • Tree Netting

- | | | |
|--------------------------------|-------------------|----------------------|
| • Tree Balers | •Tree Waterers | • Wreath Decorations |
| • Tree Stands | • Florist Wire | • Easels |
| • Removal Bags | • Garland Wire | • Floral Boards |
| • Wreaths and Garland Machines | • Florist Netting | • Styrofoam Balls |

Check Our Website for Current Pricing and Availability

BTF-Wholesale

338 Co. Hwy 106, Johnstown, NY 12095

phone: 518-883-8196 • fax 518-762-5054

www.btf-wholesale.com • pgoderie@btfwholesale.com





Tales From The TREE FARM



~ The Road Taken ~

Story by Chris Keneally • Keneally Tree Farm, Easton CT (1993)

A family came to cut a Christmas tree at our farm one December, late in the afternoon. There were clouds and rain in the forecast, hopefully changing to snow, which it did.

They were new friends, a mother, two grade school daughters, and a father with no legs. He had lost them above his knees in a horrible, almost fatal accident as a young man. He walked quite capably with prostheses and crutches. He said it would be no problem to negotiate the 200 or 300 yards into the tree lot.

I caught up with Ellyn and the girls about twenty minutes later, dusky now. Tom had walked to what we now call the "way back", the third lot, furthest from the driveway, about 100 yards beyond us. Ellyn said he was resting after the trek over uneven ground. We walked back to meet him; he had claimed a fine Douglas Fir.

The family agreed on his choice, and I asked Tom if I could cut it for him. Ellyn said, "no, Tom can cut it!" He lowered himself to where his knees once were and with powerful arms and shoulders, and a turn each for Ellyn, Kyle, and Devon, felled the evergreen with his bow saw. He rested briefly then muscled himself back up. Tom said, "the only time I can't talk is when I'm raising myself up from the ground." He was out of breath—I was speechless.

I carried the tree back to their van and we walked at a good pace, easy conversation along the way. ~

Daybreak Farm



Christmas Greens
Wreaths • Kissing Balls
Roping • Brush
Grave Blankets



1843 Route 80, Guilford, CT 06437 • P.O. Box 167, Blaine, Maine 04734
Grower & Shipper - Member CCTGA, CFA, CNLA

James S. Molloy

203-457-1344

207-429-8264

Remembering Our Members



Richard B. McCarthy

Richard B. McCarthy, 88, of Norwich, passed away May 10, 2023. He was born April 17, 1935, in New London, the son of the late Thomas and Emma (Poyerd) McCarthy.

Moving to Norwich at an early age, he grew up in the Bean Hill section of Norwichtown. He attended local schools and graduated from Norwich Free Academy in 1953. He later graduated from Union College in Barbourville, Ky., with a BS in biology and received his master's degree from the University of Connecticut. He was united in marriage to the former Elaine Dugas, Aug. 16, 1958, in Sacred Heart Church in Taftville.

Mr. McCarthy was a biology teacher at Norwich Free Academy for 34 years, retiring in 1991. In addition, he was the head track coach for many years. In 1976, he was inducted to the Norwich Sports Hall of Fame. He was also active in the Norwich Little League, coaching many of his son's baseball teams and served administrative roles within the league. Aside from teaching and coaching, he had a great interest in the environment and was a Christmas tree grower in Lebanon. He was a member of the Connecticut Christmas Tree Growers Association and former director of the New London chapter. During the summer months, he enjoyed spending time at his favorite place, the "Cottage" in Belfast, Maine, with family and friends.

Besides his beloved wife Elaine, of nearly 65 years, he is survived by his three sons and their families: James and Judi McCarthy of Old Lyme, Brian McCarthy of West Hartford, and Kevin McCarthy and Kim Hirst of Ledyard; three siblings, Patrick McCarthy of Texas, Nancy Green of Noank, and Mary Ellen Troland of New London.

He was also an adored "Grampy" to his three grandchildren, Ashley and Lily McCarthy of Ledyard, and Collin McCarthy of West Hartford. He was predeceased by a brother, Thomas McCarthy. ~





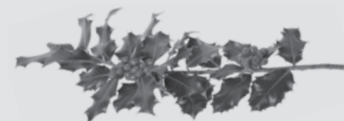
WAGNER'S
fraserknoll
SUPPLIES + EQUIPMENT

We select and offer the best-working products!

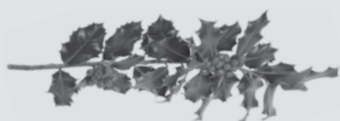
BALERS • NETTING • WREATH-MAKING SUPPLIES • SHAKERS • TREE STANDS • TAGS • COLORANTS • BANNERS • SHEARING MACHINES • REMOVAL BAGS & MORE

As an experienced grower and retailer, we can help you select products for a more productive and profitable business.

1-877-352-7355 • www.fraserknoll.com
384 BURNT HILL ROAD • LAUREL SPRINGS, NC 28644 • PHONE/FAX: 336-982-3517



A Directory of Yule Tree Business and Services



Massey Ferguson - Tractors Takeuchi - Compact Excavators
Gehl - Skid Loaders Kobelco- Backhoe Loaders

Al Preston's Garage, Inc. Quality Equipment Sales and Service Since 1923

Tel: (203) 924-1747

810 Howe Avenue
Shelton, CT 06484



**Compliments of
Bud Gavitt**
Former Writer, Editor
of the Real Tree Line

The Elm's
22 Elm St. Apt 301E
Westerly, RI 02891
401-388-8122

Natural Resources • Environment • Agriculture



194 Edmond Road
Griswold, CT 06351
860-376-2473

Clarence G. Merrill

Forestry Consulting Services

Native Red Cedar Products
Tax Classification Work

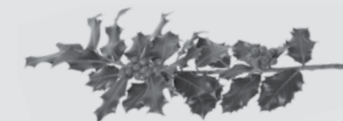
CT Certification #F000101



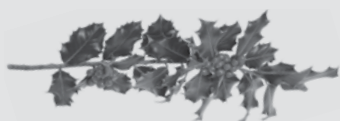
NEW! SPECIAL DISCOUNT PROGRAM for CCTGA members from
Kurt Adler for ALL your Christmas needs!

GET 5% OFF YOUR ORDER FOR ORDERS OF \$1000+!

Contact Jeff at 800-562-0088 or jpaykuss@aol.com for details.



A Directory of Yule Tree Business and Services



CAROVAIL
Healthy Plants, Healthy Soil, Healthy You

**Trusted advisor and supplier for
custom fertilizer, crop protection and seedings**

Carolina Eastern-Vail • 1.413.648.9900 • CaroVail.com



Wholesale Christmas Trees & Wreaths

Ryan W. Fitch
Fitch Family Farm LLC &
Scotts Christmas Tree's
11 Bunker Hill Road
Andover CT 06232
fitch.familyfarm2021@gmail.com
860-205-0480

Email for
Wholesale
Price List



Berkey's Nursery

44251 Rodgers Road
PO Box 215
Spartansburg, PA 16434

Phone: 814-654-7513

Fax: 814-654-7503

Website: www.berkeysnursery.com

Owners: Duane T. Berkey & Bradley P. Berkey
"Growers of genetically Superior Evergreens"

CT Christmas Tree Growers August Zoom Gathering

Tuesday, August 8 at 7pm



Design/Print/Copy/Mail

The R. Frank Printing Company

184 Center Street
Wallingford, Connecticut 06492

Phone 203.265.6152
Cell 203.623.0943
Fax 203.265.1365

Email: richard.frank@rfrankprinting.com



TM Agricultural & Ecological Services, LLC

Todd Mervosh, Ph.D.
Plant Diagnostician & Weed Scientist
CT Supervisory Pesticide Applicator S-3530

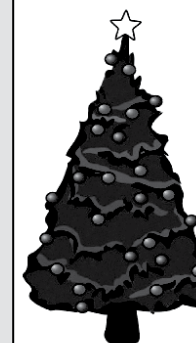
125 Ellison Street, Suffield CT 06078
860-502-7765 (cell) / 860-668-2988 (office)
Email: tmervosh@att.net



Allyn Brown, III

MAPLE LANE FARMS LLC

57 Northwest Corner Road Preston, CT 06365
tel 860.889.3766 fax 860.887.3087
email allyn@MAPLELANE.com



Hartikka Tree Farms

Wholesale Christmas Trees

Fraser ♦ Canaan ♦ Balsam ♦ Nordman
Concolor ♦ Blue Spruce ♦ Meyer Spruce
Transplants also available

(860) 319-2351

www.treeman2.com Voluntown, CT

A TURN FOR THE BETTER



**ROTARY TREE
PRODUCTS, INC.**

(FORMERLY TREE TECK, INC.)

rotarytreeproducts.com | 1.855.437.6777

AUTHORIZED HOWEY DEALER | MADE IN THE U.S.A.

Please Reply Soon!

Promote Your CT Grown
Christmas Trees



CCTGA Website Listing (Cost \$35)

Didn't Receive Your Form? Contact Emily at

Webmaster.CCTGA@Gmail.com



Hull
forest products

Call Today for a Free Consultation

Woodland Management & Timber Harvesting

101 Hampton Road Pomfret Center, CT 06259
(860) 974-0127 www.hullforest.com

DEEP Pesticide Training

Access the RU list, exam and certification info,
re-certification meetings, etc.

Visit:

[https://portal.ct.gov/DEEP/Pesticides/
Pesticide-Management-Program](https://portal.ct.gov/DEEP/Pesticides/Pesticide-Management-Program)

Our Advertisers Deserve Your Support

Al Preston's Garage, IncPage 20 Shelton, CT	Hartikka Tree FarmsPage 21 Wholesale Christmas Trees and Transplant1 Voluntown, CT
Blumenthal & Donahue InsurancePage 2 Home • Auto • Commercial • Farm Deep River, CT	Hull Forest ProductsPage 21 Pomfret Center, CT
Benjamin F. Edwards & Co.Page 14 Investments	Kelco IndustriesPage 23 Milbridge, ME
Berkey's NurseryPage 21 Spartansburg, PA	Maple Lane Farms LLCPage 21 Allyn Brown III, Owner Preston, CT
BTF WholesalePage 17 Wreath & Garland Machines • Wreath decorations Johnstown, NY	Nutrien Ag SolutionsPage 15 Chemicals & Fertilizers Broad Brook, CT
Bud GavittPage 20 Westerly, RI	OESCO, IncPage 3 Sprayers, Mowers and More Conway, MA
CaroVailPage 21 Fertilizer Bernardston, MA	Peter Saalman AssociatesPage 20
Daybreak FarmPage 18 James S. Molloy Blaine, ME	R. Frank PrintingPage 20 Design/Print/Copy/Mail Wallingford, CT
DEEPPage 21 Pesticide Training	Reliable SourcePage 6 Seeds and Transplants Morgantown, WV
Dzen Brothers FarmPage 5 Wholesale Growers for All Seasons South Windsor, East Windsor, Ellington, CT	Stihl ChainsawsPage 23 Kahn Tractor and Equipment, Inc. North Franklin, CT
Fitch Family Farm, LLCPage 21 Ryan W. Fitch Andover, CT	TM Agricultural & EcologicalPage 20 Services, LLC Todd Mervosh, Ph.D.
Forestry Consulting ServicesPage 20 Clarence G. Merrill	Rotary Tree ProductsPage 20
Fraser KnollPage 19 Supplies & Equipment Laurel Springs, NC	

BUY * SELL * TRADE

Wanted ads are free to CCTGA members

Do you have equipment or other items you want to purchase or sell or exchange with something of equal value? Do you want to hire workers part-time or full-time?

All you need to do is to list the item(s) for Buy * Sell * Trade * Wanted Ads in an email for publication in this magazine. Email your item(s) to Erika Smialowski at erikalfulton@gmail.com.

The deadline date to submit your free classified ad(s) for the 2023 Summer Issue is July 1, 2023.

FOR SALE - EQUIPMENT

2 Stand-up Clamp Tables w/ mach's. Large selection of Boxen Clamp Rings + specialty shapes. Bow making mach. Etc 1,000 for lot. Single Row Friend Mist Blower 3ph/PTO - 100 gal. tank now \$1,500. PTO/3ph Cord Wood Saw 450. Troy-bilt Tiller w/ Kohler pwr \$250. All Best Offer - Peter Bergen: 860-267-4341

WANTED - EQUIPMENT

Electric tree baler needed for larger trees. Preferably a Howey 400RC. Let me know what is out there. Mike Sabia, Sabiatriee-farm@gmail.com or 203-650-4429.

Wanted used 40 inch 3 point hitch mower. Call Bill at 203-641-1632 or email wkogut@cox.net





Kelco INDUSTRIES
MILBRIDGE MAINE, 04658
Your Complete Source For Christmas Tree And Wreath Supplies

Visit our website or call for a catalog to see our full line of tree planting, farming equipment and supplies.
www.kelcomaine.com
800-343-4057



Happy Growing



Are you ready for #1?

Then you're ready for STIHL, the number one selling brand of chain saw worldwide!

STIHL makes over 30 models of chain saws designed for homeowners and professionals, and your servicing STIHL dealer can match you with the model that's right for your needs!

Don't settle for the number of other brands at the big box stores – get the world's number one selling brand of chain saw at your local **STIHL** dealer.

Are you ready for a STIHL?



Available at participating dealers.

STIHL - 8,000 Servicing Dealers Nationwide!

Please wear protective apparel as recommended in your instruction manual...



Kahn Tractor and Equipment, Inc.
Jct. 32 & 207
North Franklin, Connecticut 06254
Tel: 1-860-642-7596 • 1-800-327-5246 • Fax: 1-860-642-6364
Website: www.kahntractor.com

stihlusa.com

Are you ready for a *STIHL*?

2023 State Fair Schedule

Brooklyn Fair, Aug. 24–27

Woodstock Fair, Sept. 1–4

Hebron Harvest Fair, Sept. 7–10

Durham Agricultural Fair, Sept. 21–24

Eastern States Exposition, Sept. 15–Oct. 1

**Represent Connecticut Proudly.
Enter your trees and wreaths!**



Est. 1960

Join Us at the 2023 Fall Field Day | Details Inside

The Real Tree Line

Lisa Angevine Bergs, Executive Director
984 Burr Mountain Rd., Torrington CT 06790

FIRST CLASS MAIL