



# NJCTGA News

Spring 2020

## President's Message



Chris Nicholson

Winter has turned to Spring, and oh my how things in our world have changed. One could never imagine how our lives could be turned upside down in an instant. As we attempt to move forward during these most trying and difficult times I take some solace in knowing that once again my tree farm is playing a critical role in keeping me and my family safe. Never before have I spent so much time working on my farm. Its where I go to keep safe and out of harms way. I can only hope that you are all safe and healthy, as am I.

Our twilight meeting has been cancelled for obvious reasons. I still am holding out hope that our summer meeting can be held in some capacity, even if we have to do things a little differently this year to make this happen. The annual tree contest is also a question mark. It is always held at the Middlesex county fair. I think county fairs are going to be on hold for a long while. We will keep you posted about any cancellations or changes to our summer schedule.

As for our farms? The Christmas season? Agritourism? We will weather this storm as we have so many others. We grow Christmas trees. That's what we do. And perhaps now more than ever our trees will be in demand this upcoming season. Perhaps when this is behind us, and it will be, families will more than ever want to spend time together on our farms enjoying the outdoors and all that we work so very hard for to provide for them.

As I have written in the past, the best thing about the NJCTGA is how we help each

*continued on page 2*

## Working from Home

### Longtime Rutgers Plant Diagnostic Lab Director Richard Buckley Moves Microscopes from the Lab to his Extra Bedroom

By Matt LaWell

*Editors Note: NJCTGA's good friend, Richard Buckley, a frequent speaker at our meetings and field days has found a way to continue his important pest diagnostic work from his home during the Coronavirus pandemic. This article was provided by the NJ Nursery and Landscape Association.*



Richard Buckley has worked in various states of solitude during his decades as the director of the Plant Diagnostic Lab and Nematode Detection Service at Rutgers University. Turn on some Grateful Dead and tune out the rest of the world.

Since the university shut down its physical campuses earlier this month, though, he has worked in total solitude, studying submitted samples in a satellite lab he set up in his extra bedroom.

Yes, his extra bedroom.

Buckley and his assistant, Sabrina Tirpak, worked around various restrictions related to the COVID-19 pandemic since March 1, but they were still permitted on campus until April 10. After that, "we were kicked out," Buckley says. "They closed down all the research, everybody. No one could come on campus unless you had something critical."

Buckley and Tirpak discussed applying

for an agronomy exemption, "but both of my bosses up the chain are plant virologists and they were, like, 'No way,'" Buckley says. "They're concerned about the whole situation."

April is a slower season for Buckley and Tirpak, but they wanted to continue to provide support for the industry, "so as soon as the deans started talking about closing us," Buckley says, "we were scrambling for ideas."

Their best option, like so many other Americans, was to just work from home.

Buckley packed a dissecting microscope, a compound microscope and an inverted microscope he uses for nematode counts, along with various slides, beakers and other various equipment, and carted it home. It now shares space with a queen bed in a room about one-tenth the size of his lab.

Challenges emerged during the first week of remote work. How would Buckley and

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## Summer Meeting Set for Saturday, August 15

Save the date for our annual summer meeting. Katrina Alger of the Alger Tree Farm in Califon has volunteered to host the 2020 Summer meeting on Saturday August 15th. Many thanks to Katrina and her crew!

Look for an invitation in the mail and an email update from Executive Secretary Donna Cole early this summer.



## Working From Home *continued from page 1*

Tirpak exchange samples and enter information into the database — especially with Tirpak set up with a centrifuge and nematode-washing equipment in her garage about 30 miles away? The duo is in constant contact, about 10 times per day right now, texting images of submission forms and sending email attachments of various letters, and will likely be in near-constant contact as the busy season starts up in late June or early July.

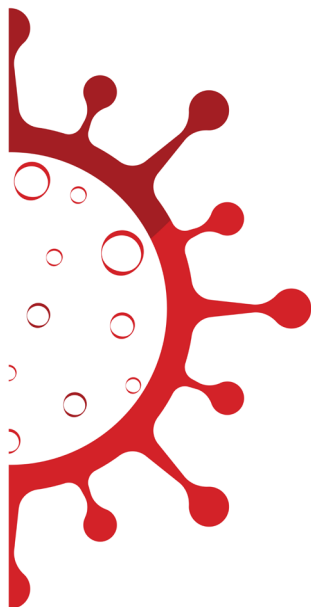
And how would superintendents and other industry professionals submit samples when the lab is not only closed but access to the grounds is prohibited? "All of the mail that would come to our lab has been transferred to the central post office on campus, and they let us come pick that up," Buckley says. "We got some samples that way, but we've also had golf course superintendents contact

us directly, our emails are on the website." One superintendent mailed samples to Tirpak at her home and another dropped off some on Buckley's porch. "That's an option, too," Buckley says with a laugh. "If they contact us directly, we can work with them to meet whatever needs they have."

Rutgers has already cancelled all classes and events on its campuses into August, and Buckley is prepared to work from his unique home office for the long haul. He leaves his home maybe once a week for groceries and other supplies, and more frequently for his solo bike rides. He picks up samples from the central post office. Outside of those activities, "I'm keeping my head down," he says. "I heard a guy say, 'You can't get sick if the virus can't find you.'"

Finding his lab equipment will be far easier.

*Matt LaWell is Golf Course Industry's managing editor.*



## News from the National Christmas Tree Association

### Coronavirus Resources

Through our partnership with AmericanHort NCTA is able to offer their Coronavirus Resource Center to the Christmas tree industry. It offers information on federal relief efforts, small business assistance, updates on foreign labor processing, best business practices, employee and customer communications guidelines and links to many federal government resources. You can find the resource website here: [www.americanhort.org/page/Coronavirus](http://www.americanhort.org/page/Coronavirus)

## Choose & Cut Guide Reminder!

**Last call for Choose and Cut Guide applications.**

Remember:  
Dues must be paid in full.

Participation in the Guide gets your farm listed in the "Find a Farm" section on the website and also gives you the option of a link to your own farm website.



## President's Message

*continued from page 1*

other so much. In a way we are all family. Only we know how much goes into producing a quality tree. Only we know how difficult it really is to fight the weather and so many other obstacles. Yes, we are friends and together in this as a family. With that in mind, now more than ever we all need to lean on one another as we begin to get closer to Christmas. We are all going to need to think outside of the box

as to how we are going to sell our trees in a safe and responsible way while adhering to social distancing standards. Now more than ever we will need to stick together and share ideas and thoughts with one another so that when the time comes, we will be prepared for the changes in the way we sell our trees. We will have the opportunity in the next few months to observe how the summer and fall agritour-

ism activities progress. Apple picking and pumpkin picking season should give us all some clues as to the successes and failures that will no doubt take place in the agriculture community this season.

Stay safe and I hope to see you all at the summer meeting.

Christian Nicholson  
President, NJCTGA



Published by the New Jersey Christmas Tree Growers Association  
**[njchristmastrees.org](http://njchristmastrees.org)**

Contact Donna Cole, Exec. Secretary, at (908) 735-4658 or email [execsecretary@njchristmastrees.org](mailto:execsecretary@njchristmastrees.org)

DESIGNED AT ROWAN COLLEGE AT BURLINGTON COUNTY



# Grower's Spotlight:

## CHAD SMITH FARM

### Pohatcong Township, Warren County

By: Tim Dunne



Tim Dunne

Chad Smith and his family enjoyed cutting a Christmas tree at a local New Jersey Choose & Cut farm for many years. Around 2005 he began a journey to one day cut his Christmas tree at his own farm. He began planting trees in 2015, yet he had joined the NJ Christmas Tree Growers Association (NJCTGA) about 10 years before planting his first tree! Chad said "I wanted to learn what to do when starting a farm, but also what not to do".

The NJCTGA helped him learn the trade as he attended Association meetings, farm tours and educational events. He obtained his pesticide applicators license from continuing education credits he received at meetings. From my experience as a relatively new grower, I think Chad did absolutely the right thing by learning all he could, almost 10 years before he began planting. I often tell folks "if I knew 15 years ago what I know now, things would be a lot different on my farm".

"I cannot imagine starting a Christmas tree operation without the education I have received from being a member of the Association; I have learned a tremendous amount about growing trees from the meetings," Chad told me. "Everyone I talked to was willing to give me advice and also to help me get started," he said.



*Nice field of young Canaan fir trees on Chad Smith's farm in Warren County*

In 2013 he purchased his 10-acre farm in picturesque Pohatcong Township, high above the Delaware River in southern Warren County. The farm was purchased, in part, with the future Christmas tree farm in mind. Chad began planting trees in 2015, planting about an acre to an acre and a half each year for several years. He plans to open his Choose & Cut operation in 2021, with 7 years of growth on his trees.

Chad has Fraser fir, Canaan fir, Colorado blue spruce, Douglas fir and Concolor fir currently growing on the farm. He plans on selling some greens and wreaths when he opens the farm. He does not yet have a farm name, but is thinking about a creative name before opening in 2021.

Some advice from Chad to any newcomer wanting to start a Christmas tree farm; "Put up a deer fence if you live in an area with a lot of deer. They nearly wiped out my entire first planting". Chad also suggested trying to figure out a tree species that has no disease problems, and few insect pests and planting that species. We are all looking for that!

*Field of well maintained Fraser fir that should be ready for harvest in a few years.*

*Tim Dunne, owner of Woodsedge Farm, Belvidere, Warren County, visits farms throughout the state and writes the Grower's Spotlight.*





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## Welcome New Members!

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**Kurt Alstede**

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**Frank and Ross Germanio**

Germanio Brothers Farms

Belleplain, Cape May County

**Marie Whittle and Kamal Egodage**

Whitehouse Station,

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## NJCTGA Newsletter Ad Sizes & Rates

### FULL PAGE

7.75" wide x 9.875" high..... \$100

### HALF PAGE

7.75" wide x 4.863" high..... \$60

### QUARTER PAGE

3.795" wide x 4.863" high..... \$35

If possible, ads should be submitted in PDF format. Contact Exec. Secretary Donna Cole for additional details.

**N J C H R I S T M A S T R E E S . O R G**

# Christmas Tree Promotion Board Research Funding

## *Christmas Tree Research: A Growing Investment*

The science behind growing and caring for Christmas trees is constantly evolving. The Christmas Tree Promotion Board is dedicated to funding scientifically sound, unbiased research that will have far reaching impacts on the industry. Over \$730,000 has been invested in a slate of research projects designed to produce high quality Christmas trees, manage ever increasing production costs, and minimize environmental impact. Listed below are projects that are complete, and ongoing, being funded by Christmas Tree Promotion Board Checkoff funds from 2016 to 2020. Additional projects have been approved for funding by the Christmas Tree Promotion Board for 2019-2020 and will be listed on our website once agreements are in place.

- **The Cooperative Fir Germplasm Evaluation (CoFirGE) project is designed to identify regionally adapted sources of Turkish and Trojan firs that produce excellent Christmas trees, and to obtain a better understanding of how site and environmental conditions are affecting the growth and postharvest quality of Turkish and Trojan firs.**  
Connecticut Agricultural Experiment Station, Oregon State University, Washington State University, Pennsylvania State University, Michigan State University, North Carolina State University **\$72,000**
- **Understanding the Impact of Elongate Hemlock Scale on Select Tree Species Native to Florida**  
North Carolina State University **\$29,750**  
University of Florida **\$5,470**
- **Survey of Slug Species and Development of IPM Strategies for Management of Slugs on Christmas Trees**  
Oregon State University **\$65,000**  
Washington State University **\$15,000**
- **Cultural Options for Managing Cone Formation on Fraser Fir**  
Michigan State University **\$67,331**
- **Fraser Fir Cone Control Research**  
North Carolina State University **\$15,903**
- **Developing Strategies for Leader Control in Nordmann and Turkish Fir**  
Oregon State University, Michigan State University **\$12,200**
- **Spray Drones to Apply Agricultural Materials to Christmas Trees**  
North Carolina State University **\$39,600**
- **Post-Entry Elimination of Megastigmus Seed Larvae in Imported Conifer Seed**  
Washington State University, Oregon State University **\$27,575**
- **Enhanced Establishment and Growth of Bareroot Transplants Using Controlled-Release Fertilizers**  
Connecticut Agricultural Experiment Station **\$1,000**
- **Management Options for Herbicide Resistant Weeds in Christmas Tree Production**  
North Carolina State University **\$41,629**
- **Effectiveness of Preharvest Application of 1-MCP in Reducing Needle Loss on Cut Christmas Trees**  
Washington State University **\$32,519**
- **Evaluation of Nordmann Fir (Abies nordmanniana) Seed Sources for U.S. Christmas Tree Production**  
Oregon State University, Washington State University, Pennsylvania State University **\$76,839**
- **Twig Weevil – A small poorly understood pest inflicting havoc in the PNW export markets**  
Washington State University, Oregon State University **\$95,331**
- **Susceptibility of Trojan fir to Phytophthora Root Rot**  
Washington State University **\$26,040**
- **Exploring Sustainable Management for Armored Scales in Christmas Tree Plantations**  
Connecticut Agricultural Experiment Station **\$36,528**
- **Investigating Soil Acidification Mechanisms for Inhibiting Phytophthora**  
Connecticut Agricultural Experiment Station **\$22,000**
- **Regional Variation in Needle Loss from Trees in CoFirGE Planting Sites**  
Washington State University, Oregon State University, Pennsylvania State University, North Carolina State University, Connecticut Agricultural Experiment Station, Michigan State University **\$15,033**
- **Surveying for Oregonian Slugs in Hawaii with the Goal of Removing their Quarantine Status**  
Oregon State University **\$9,976**
- **Spotted Lanternfly: A New Exotic Pest Threatening the Mid-Atlantic Christmas Tree Industry**  
Pennsylvania State University **\$4,598**
- **Breeding to produce the next generation of Virginia Pine for Texas/Oklahoma Markets**  
Texas A & M Forest Service **\$7,061**
- **Incorporation of Soil Amendments for Managing Phytophthora Root Rot in Fraser Fir in North Carolina**  
North Carolina State University **\$14,264**

In addition to the projects listed above and those awaiting final agreements, the CTPB funded just over \$26,000 of consumer research in 2015-16. Additional consumer research has been funded through the promotion budget. The CTPB also has established a research reserve that currently has approximately \$66,000 available.



# One Farm's Approach to Managing Ticks

By: Bob White

All of our workers in the maple woods got bit by ticks this year early in the sugaring season. Since late April, when I was finally able to get them all serious about protection, no one has been bit. We had one worker who was bit in May on the Christmas tree farm in a field that never had ticks before. They are very active in our area the majority are infected and spreading fast.

Instead of using tweezers, as some recommend, we have found special (very inexpensive) plastic removal tools available online that do a really good job at removing all sizes of ticks, and so far we have been able to remove what we believe is 100 percent of the tick—I've found that tweezers often leave the head of the tick embedded. I supply the tick removal tools to all workers to keep at their home.

While some resources say to discard removed ticks, I don't think that makes sense. Why would you discard the one piece of evidence that can rapidly identify if you may or may not be infected. We place them in a Ziploc bag and ship them to UMass (tickreport.com); for \$50 dollars (cheapest money ever spent) a few days later we get a report on all the pathogens the little SOB did or did not have. Our results this year on six ticks tested for Lyme: five came back positive, one came back clean. And there were no bull's-eye rashes left by any of them.

We've found that it can be difficult to get medical treatment without results from an official Lyme test, or if a bull's-eye has not appeared. But in all cases once the tick report came back positive,

with this in hand each person then was given treatment.

In our maple woods it's pretty easy to identify where the ticks are, in the Christmas trees I was not too sure. So I started doing a drag test using a fluffy bright towel on a rod with some baler twine to pull it with. I dragged the mature tree area for a couple hours and found nothing (thankfully they do not seem to like being around our trees).

Then I dragged the road area around the field. What a shock, there were very high numbers all the way around the outside of the field. I pulled them off the towel with packing tape, checking it every 100 feet or so. I had walked unprotected in front of the towel and did not pick up any on me. Then I moved to our main farm, which also has never had a tick found on it. I dragged the whole thing and was glad to find just two in one outside corner, again none in the Christmas trees.

The next day I applied a very low dose of Bifenthrin treatment of the road and outer border areas around the farms. The day after that, I re-dragged the whole thing again and found no ticks at all. Time will tell if and when they repopulate. Dragging is an effective way to look around your yard or farm. Our house had none. Another property that I checked was loaded—it is hard to know, as they can become established in an area very rapidly. Good luck and try your best to stay safe.



Reprinted from the June 2019 New Hampshire-Vermont Christmas Tree Association's Newsletter **Treeline**



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# Weed Control in Christmas Trees

*Editors Note: Many new Christmas tree growers struggle with weed control in new seedlings and transplants. Weed control of new plantings is probably the biggest challenge for new growers. Successful weed control can have a big impact on new planting survival, and the production of quality Christmas trees. The information below includes excerpts from a document authored by Larry Kuhns, Professor Emeritus of Ornamental Horticulture from Penn State. The entire document can be seen at <https://christmastrees.org/wp-content/uploads/2018/10/Weed-Control-Recommendations-for-Christmas-Tree-Growers.pdf>*

## INTRODUCTION

There are many reasons to control weeds in Christmas tree plantings. Weeds compete for nutrients, water, and light; adversely affect needle color; cause lower limb loss through light competition; lodge in the lower limbs of trees, soiling the trees; reduce air drainage and movement increasing tree susceptibility to frost damage and foliar disease; provide cover and food for rodents resulting in girdling in winter when food is scarce; are a fire hazard when dry, and fire sources are in the area; interfere with standard Christmas tree maintenance practices (e.g., shearing, insecticide and fungicide applications, mowing); and interfere with choose and cut tree sales and customer experience and satisfaction.

## LEVELS OF CONTROL

Some growers ignore weeds, while others mow, apply herbicides, plant cover crops, or use a combination of these methods. Some growers that ignore weeds plant their trees on rocky, infertile soil that is not suitable for growing much else other than Christmas trees. Not even weeds grow well on these sites. Surprisingly, several Christmas tree species grow in rocky, infertile soils in their native range. This means they will survive and grow on these sites, but they will not produce optimum growth. Growers that rely on low fertility soils to provide their weed control are not producing uniform, high quality trees in a reasonable length of time.

Other growers rely entirely on mowing for weed control. For best control with mowing, the planting should be mowed both with and across the rows. This means the plantation must be very carefully planted so that all rows are straight in both directions. Though relying only on mowing eliminates the risk of herbicide injury, there is the constant risk of hitting trees with the mower. Mowing is time consuming and therefore expensive. Also, mowing alone does not provide all the benefits of a weed control program that includes herbicides. Many weeds, especially grasses, stunt the growth of trees even when close-mowed.

Combining the careful use of herbicides and mowing provides several advantages over mowing alone. The herbicides can be used in the rows to provide a weed free band 30-36" wide. Weeds growing between the rows can then be mowed quickly with little risk of hitting the trees with the mower.

Maintaining the weed free area around the trees limits the competition between weeds and trees and keeps the weeds from interfering with maintenance of the trees. There are several problems associated with letting naturally occurring vegetation grow between the rows. One is varying growth rates of weeds. One part of a field may have quackgrass, which starts growing early in the spring, while another part may be dominated by foxtails, which start growing in early summer. To maintain uniform control in the field it must be frequently mowed. Another problem is the lateral spread into the clean rows by the rhizomes (underground stems) of perennial weeds and the foliage of large or creeping weeds. The optimum level of control would include maintaining a weed free band in the rows and a controlled cover crop between the rows. A properly selected cover crop would crowd out fast growing, aggressive weeds and require little mowing.

The development of safe and effective herbicides for use in Christmas tree plantings has revolutionized Christmas tree production. Growers in the past avoided high fertility sites and the application of fertilizers because of the weed growth associated with them. It was not unusual to take 10-15 years to complete one production cycle. With the aid of herbicides, growers can now grow trees on higher fertility sites and provide supplemental fertilizer applications on an annual basis without fear of excessive competition from weeds. On carefully managed sites, superior trees can be produced in 5-8 years. Some people still avoid using herbicides for a number of reasons. Some fear the risk herbicides may pose to their trees. Others are concerned about how the chemicals will affect their health or the environment. Still others simply believe they don't need them. Use only herbicides that have been approved for use by the U.S. Environmental Protection Agency. They have been extensively tested by the companies producing them and research personnel at universities across the country. Used according to directions, they are safe for the trees, the applicator, and the environment.

Postemergence herbicides are used to control existing weeds. Postemergence herbicides are formulated as contact, systemic, nonselective, and selective herbicides and are chosen and used based on the goal of the applicator.







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## Weed Control in Christmas Trees *continued from page 7*

Contact herbicides kill or injure only the part of the plant with which they come in contact. Annual weeds may be killed; however, perennial weeds may regrow from below ground structures.

Systemic or translocated herbicides are absorbed by the treated leaves, stems or roots and move within the plant. Systemic herbicides are necessary to kill below ground perennial weed structures.

Selective postemergence herbicides kill the plants listed on the label but do not effect or do little damage to non-label weeds.

Nonselective herbicides kill or injure almost all plants. Roundup is systemic and nonselective and has been the standard postemergence herbicide used in Christmas tree plantings for many years. The chemical glyphosate is the active ingredient in Roundup, and the patent on it has expired. Now there are many products on the market that contain glyphosate as their active ingredient. Roundup Original, Roundup Pro, Roundup Ultra, Accord, Glyphosate, and Glyfos are examples. All contain four pounds of glyphosate per gallon. The difference between all of these products is the type and amount of surfactant they contain. The surfactant improves the activity of the glyphosate by helping it cover, stick to, and penetrate the leaves of the weeds.

### WEED CONTROL PROGRAMS

Too many growers look at weed control as fire fighting - when weeds become a problem, they try to control them. This is a difficult and dangerous system. It is much easier to prevent weed growth than to kill existing weeds because preventive measures are safer and longer lasting. Christmas tree growers must think in terms of a weed control program. This means planning how to control weeds before ever planting the crop. The program has three parts:

1. Eliminate all weeds prior to planting. It is especially important to kill all perennial weeds because they are not controlled by pre-emergence herbicides, which are the safest to use in existing plantings. Postemergence herbicides, like Roundup (glyphosate) and Garlon, which can be applied freely prior to planting must be used with extreme caution after planting.
2. Prevent weed growth. Preemergence herbicides are the only practical way to prevent weed growth in rows of trees. They should be applied in the spring and fall. Weed growth can be controlled between the rows by mowing or by growing a cover crop that competes with, and limits the growth of weeds.
3. Eliminate problem weeds. Some weeds may escape the preventive measures. Light stands of annual weeds can be ignored; they will die at the end of the growing season. Dense stands of annual weeds or tough to control perennial weeds such as quackgrass, goldenrod, or Canada thistle should be killed before they get too well established and spread. Some growers believe it is too time consuming and expensive to walk through a field and spot treat weeds. This is a management decision that needs to be made-- which is going to cost the most in the long run, the weeds or the spot treatments?

### SITE PREPARATION

Growing a crop like corn, and following the recommended weed control program for it, will suppress or kill most perennial weeds. But many can survive and develop into problems if not controlled after the trees are planted. For general, broad spectrum weed control, glyphosate is the best herbicides available for site preparation. It is best to apply it in August or September the season before planting. Use low rates for fields with lighter weed cover, and higher rates for fields with a lot of deep rooted, hard to control weeds. July, August or September are the best months to apply glyphosate because that is when it most effectively controls perennial weeds.

Spring applications are not practical because not many weeds begin growth before optimum planting time. Also, spring applications of glyphosate to perennial weeds generally kill only the sprayed parts. Very little chemical is translocated down to the roots at this time of year. Garlon can be used as a spot treatment to control especially tough herbaceous or woody broadleaved plants, or if the field is infested with woody weeds and vines or hard to control perennial weeds such as milkweed or Canada thistle. After applying the herbicides, the field may be left undisturbed until later in the fall when it is plowed and/or disked in preparation for planting. Plowing and disking should kill any weeds that germinate after the herbicide application. Be sure to test the soil and adjust the pH at this time so that future applications of triazine herbicides will be effective at recommended rates. Alternatively, the field could be plowed and disked 7-10 days after application and a hard fescue cover crop could be planted. The cover could then become established prior to planting in the spring. If this is done, the cover should either be planted in rows, leaving open areas for the trees, or the cover could be band-sprayed with glyphosate in the fall or spring (prior to planting).

### PREVENTING WEED GROWTH

The application of preemergence herbicides is the only practical way to prevent weed growth in the rows of trees. However, with few exceptions, these herbicides will not control existing weeds or perennial weeds regrowing from underground parts. They must be applied to weed free soil or in combination with a postemergence herbicide that will kill the weeds already there. Fall applications of preemergence herbicides are often needed to prevent the growth of winter annual weeds. These weeds germinate in the fall and begin active growth in late winter. Spring applied herbicides do not provide good control of established winter annuals. Newly planted trees are more likely to be injured by herbicides than established trees, so herbicide application rates must be adjusted accordingly. Spring preemergence herbicides should be applied after tree planting, but before budbreak.

## Quick Christmas Tree Facts

From: USDA National Agricultural Statistics Service, National Christmas Tree Association (NCTA) and your local Christmas Tree professional.

- There are approximately 30-35 million Real Christmas Trees sold in the U.S. every year.
- An estimated 175,000 Real Christmas Trees are sold via e-commerce or catalogue and shipped mail-order.
- North American Real Christmas Trees are grown in all 50 states and Canada. Eighty-five percent (85%) of artificial trees sold in the U.S. are manufactured in China.
- Real Trees are a renewable, recyclable resource. Artificial trees contain non-biodegradable plastics and possible metal toxins such as lead.
- Consumers can locate the nearest recycling program by logging onto or calling 1-800-CLEANUP.
- For every Real Christmas Tree harvested, up to 3 seedlings are planted in its place the following spring.
- There are about 21,000 Christmas Tree growers in the U.S., and over 100,000 people employed full or part-time in the industry.
- It can take as many as 15 years to grow a tree of average retail sale height (6 - 7 feet) or as little as 4 years, but the average growing time is 7 years.
- The top Christmas Tree producing states are Oregon, North Carolina, Michigan, Pennsylvania, Wisconsin and Washington. (See a complete list of all 50 states ranked by several variables.)
- The top selling Christmas Trees are: Balsam fir, Douglas-fir, Fraser fir, Noble fir, Scotch pine, Virginia pine and white pine.



Reprinted from the National Christmas Tree Association website at <https://christmastree.org/>

## Weed Control in Christmas Trees *continued from page 9*

### ELIMINATING WEEDS FROM EXISTING PLANTINGS

To eliminate weeds from existing plantings, many different herbicides and combinations of herbicides can be effective. Direct spray glyphosate towards the base of the plants several weeks after bud set. Use off-center nozzles mounted in single-swivel nozzle bodies to keep the spray in the rows and off the cover crop growing between the rows. **Do not spray glyphosate over the top of the trees**, but contacting hardened foliage at the base of the trees will not harm them. Garlon can be combined with the glyphosate in a directed spray application to kill especially tough broadleaved weeds and woody plants, making sure no spray hits Christmas trees. Examples of weeds that are difficult to control with this method are goldenrod, milkweed, and hemp dogbane. The lower leaves of these plants die and their stems harden by September. To control these weeds, mow them off in late-July to early-August so that their regrowth is green and actively growing when the glyphosate is applied in September. An alternative is to spot spray them with Stinger in early summer when they are 12-18 inches tall. The Stinger will stop their growth, but they will remain green until the fall. Stinger/Lontrel can be used as an over-the-top band application at 4 to 6 oz per acre during the growing season to control susceptible weeds such as thistles and vetch. To control grasses only, Fusilade II, Envoy, or Segment can be sprayed right over the trees or as a directed spray in June, July, or August. Kerb can be used to kill dormant perennial grasses by applying it in late fall, preferably in combination with Princep. Basagran T/O can be used as a directed spray to control nutsedge. Do not apply

Basagran T/O over the top of any trees. Foliage of spruces and firs contacted by Basagran T/O may be burned. Patches of tough to control perennial weeds should be killed before they spread. Glyphosate, Garlon 3A, Stinger, Fusilade II, Envoy, or Segment can be used, depending on the weeds to be controlled. A carefully directed spray or a wick applicator can be used to apply Roundup Pro or Roundup Ultra during the growing season. Mowing is of course used to reduce the height and competitive effects of weeds growing between the rows. Growers who are uncomfortable using herbicides can also use mowers or weedeaters to control the growth of weeds in the rows.

### SUMMARY

If you follow these instructions and do a good job of controlling the weeds in your plantation, you can expect the following benefits:

1. Higher transplant survival
2. Faster growth
3. Fewer rodent or deer problems
4. Reduced labor costs for maintenance
5. More and higher quality trees available for sale at an earlier date.

Make sure to always follow herbicide label directions. Consult with herbicide manufactures, Extension Service personnel or experienced Christmas tree herbicides users before using herbicides on your trees.