

# ECOLOGICAL CHRISTMAS TREE FARMING GUIDE



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# Introduction

Christmas tree farming represents a unique intersection of agriculture, forestry, and cultural tradition. While the practice of decorating Christmas trees dates back centuries, commercial Christmas tree cultivation is a relatively recent agricultural development that has evolved significantly over the past century. This guide examines the historical development of Christmas tree farming, conventional and alternative production methods, and current market dynamics, with a particular focus on emerging ecological and organic practices. By understanding both traditional approaches and innovative sustainable methods, we can better appreciate the challenges and opportunities facing this distinctive agricultural sector as it adapts to changing environmental and climate conditions and consumer preferences.

This guide to Ecological Christmas Tree Farming can be an asset to current tree farm producers, land owners, and curious learners who want to learn more about Celebration Tree Farm & Wellness Center and other producers interviewed who practice ecological forestry. Many unique practices will be outlined within this guide, one of which is known as “Coppicing” which will be detailed at length due to its importance to our and other ecological Christmas tree farm’s production practices. Our focus in this guide is on the Eastern Balsam Fir (*Abies Balsamea*) since that is the tree of choice in Maine and very common in the Northeast. Not all of the practices described below may exactly apply to all tree species used for Christmas trees, but we feel many of them could be adapted.

We developed this guide out of a desire to increase the resources and information available to existing tree farmers and aspiring tree farmers about ecological, organic Christmas tree farming. Our farm, Celebration Tree Farm & Wellness Center (originally Brookside Farm) was started in the early 1980s. The farm is located in Durham, Maine on the traditional territory of the Abenaki people who are part of the Wabanaki Confederacy. The founder and previous owner, John Ackerman, who was a forester and landscape architect, had always grown his trees organically using ecological forestry practices, including coppicing. John passed away in 2014, and Jonah and Elizabeth Fertig-Burd took over Celebration Tree Farm & Wellness Center in 2015. The farm was converted to a worker cooperative in 2020 with the addition of Thomas Prohl as a third owner, and 110 acres of land was purchased and preserved by Land in Common Community Land Trust. When we took over the farm, we learned some aspects of the production system from John’s niece and a friend who had worked with John, but found very few resources about organic and ecological Christmas tree farming. Thanks to the support of a Northeast Sustainable Agriculture Research and Education grant, we have been able to conduct research into the topic through interviews with other farms, documentation of our own practices, and connecting with other service providers, academics, and tree farmers. We continue to learn and evolve our operations and welcome the feedback, questions, and knowledge of other tree farmers. We hope that together we can elevate the possibility of organic and ecological Christmas tree farming to be more widespread in the industry.



# History of Christmas Tree Farming

Unlike many other forms of agriculture, Christmas tree farming is relatively new. Trees have been used in celebrations in many different cultures and traditions for millennia, but the first record of a Christmas tree was in 1510 in Latvia. Christmas trees started to gain popularity in Germany and then spread in the US in the 19th century as German immigrants brought the tradition with them.

Christmas tree farming emerged in the late 19th century in the United States. The first commercial Christmas tree farm was established in 1901 by W.V. Maginnis in New Jersey when he planted 25,000 Norway Spruce. Prior to this, families would cut trees from forests or purchase them from local woodcutters.

By the 1930s, organized tree farming began to take shape, with farmers recognizing the economic potential of cultivating evergreen trees specifically for holiday sales. The Great Depression and World War II accelerated the development of Christmas tree farming as a stable agricultural enterprise. In the 1960s, the introduction of tree shaping and maintenance techniques created more uniform trees. Christmas tree farming experienced significant expansion in the United States in the 1970s and 80s.

Today, Christmas tree farming is a multi-billion dollar industry in the US. According to the Agricultural Marketing Resource Center, there are over 16,000 Christmas tree farms in the United States, covering approximately 292,050 acres, with Oregon, North Carolina, Michigan, Pennsylvania, and Wisconsin being top-producing states. According to the National Christmas Tree Association, the annual gross revenue for Christmas tree farming in the United States is approximately \$2.04 billion as of 2022. The industry sells around 25-30 million trees each year, with the average retail price ranging from \$75 to \$100 per tree depending on the region and tree type.

Specific data on the number of Christmas tree farms and total acreage in Maine is limited. However, the 2022 Census of Agriculture reported that the state had sales of cultivated Christmas trees valued at approximately \$3.140 million. The Maine Christmas Tree Association lists 92 members on their website, and there are most likely other farms that are not members.

Modern farms typically grow trees like Douglas fir, Fraser fir, and Scotch pine, using specialized cultivation methods to produce high-quality, symmetrical trees for the holiday market. In Maine, Balsam Fir is the tree of choice for many tree farmers, but tree farmers also grow Fraser fir and other varieties.



# Conventional Christmas Tree Farming

Organic practices have broken into the mainstream awareness and markets for many crops and livestock products since the 1990s. This has not been the case in Christmas tree production where organic and ecological forestry practices are relatively uncommon. The following process describes conventional Christmas tree farming operations (note that each farm operation may have slightly different practices).

## **Site Selection and Preparation:**

Most Christmas tree farms use field cultivation, planting trees in fields in rows in blocks. Farmers may use existing fields that were used for other agriculture, or may clear an area of the forest. Ideal soil for Christmas trees has good drainage and a slightly acidic pH (5.5–6.5).

## **Planting**

Seedlings are often purchased from a nursery and planted each year in the field, generally in the springtime. They are generally planted 5-8' apart to allow adequate air flow and sunlight, and for mowing equipment to mow between rows.

## **Maintenance and Care (6–10 years after tree planting)**

Conventional growing of Christmas trees includes:

- **Weed Control:** Regular mowing, mulching, or herbicides prevent weeds from competing for nutrients and water.
- **Watering:** Young trees need consistent watering, especially in dry periods.
- **Fertilizing:** Nutrients are applied to maintain healthy growth and vibrant foliage.
- **Pest and Disease Management:** Farmers monitor for threats like aphids, mites, and fungal diseases and may use integrated pest management (IPM) techniques or spray insecticides more liberally. Farmers may also spray fungicides to address fungal growth.
- **Pruning and Shearing:** Annual shearing shapes the trees into the classic Christmas tree silhouette.

## **Harvesting**

Harvesting rotates between different blocks of trees based on the maturity of the trees. Trees are generally ready to harvest 6-10 years after planting. Trees can be harvested by hand or mechanically with a harvester. After trees are harvested, their roots are pulled out, and the soil is tilled to get ready for the next planting

## **Chemical Usage**

Conventional Christmas tree farmers may use several chemicals in tree cultivation:

- Herbicides for pre-emergent and burn-down weed control
- Pesticides to control spider mites, aphids, and bark beetles
- Fungicides to prevent root rot and needle diseases
- Fertilizers, including nitrogen-rich fertilizers for tree growth and slow-release balanced fertilizers

Many tree farms now use integrated pest management (IPM) techniques to minimize chemical usage, focusing on biological controls such as Neem oil for organic pest management and micronutrient supplements for soil health.

# Ecological and Organic Christmas Tree Farming

The remaining portion of this guide focuses on ecological and organic forestry practices. We have learned these practices by our hands-on work at Celebration Tree Farm & Wellness Center (CTFWC), through our interviews with Pieropan Farm in Western Massachusetts and Trout Creek Farm in Oregon, and additional research.

## Coppicing-History and Present Day and Coppicing Christmas Trees

Coppicing is an ancient practice that has been used in forestry, and both Celebration Tree Farm & Wellness Center and Pieoropan Farm use it for Christmas Tree farming. Before diving into the long history of coppicing it is important to understand the act of coppicing, its utility for which it is practiced, and the benefit to the end user of the forest product. The term "coppice" is both a noun and a verb, which comes from the old French word "copeiz", meaning to cut. A coppice is not simply the act of cutting the tree but rather the intention and periodically scheduled cutting of that tree or woodlot to achieve a wood product of desired dimension to meet the needs of the harvester. Coppice management is the ancient silvicultural technology where broad-leaved woody plants are cut on cycles of 1 to over 40 years during winter dormancy and allowed to regenerate from the stump. These stump sprouts develop into a new crop of poles harvested during the next felling cycle.

Coppicing, a practice dating back to Neolithic times around 3800 BC (as evidenced by England's ancient "Sweet Track" causeway), offers numerous benefits beyond Christmas tree production. While relatively uncommon in North American Christmas tree farming, this technique has historically provided homogenous wood poles ideal for fence-building, construction, firewood, and easy transport without heavy livestock. Though its popularity declined after World War I when forests were converted to pasture and timber was harvested for charcoal production, coppicing is experiencing a revival today, including "coincidental coppicing" by power companies who trim trees near electrical lines, allowing regrowth at safer heights.



A coppiced tree that is now growing two tree



A recently coppiced tree that is the 2<sup>nd</sup> generation cut.



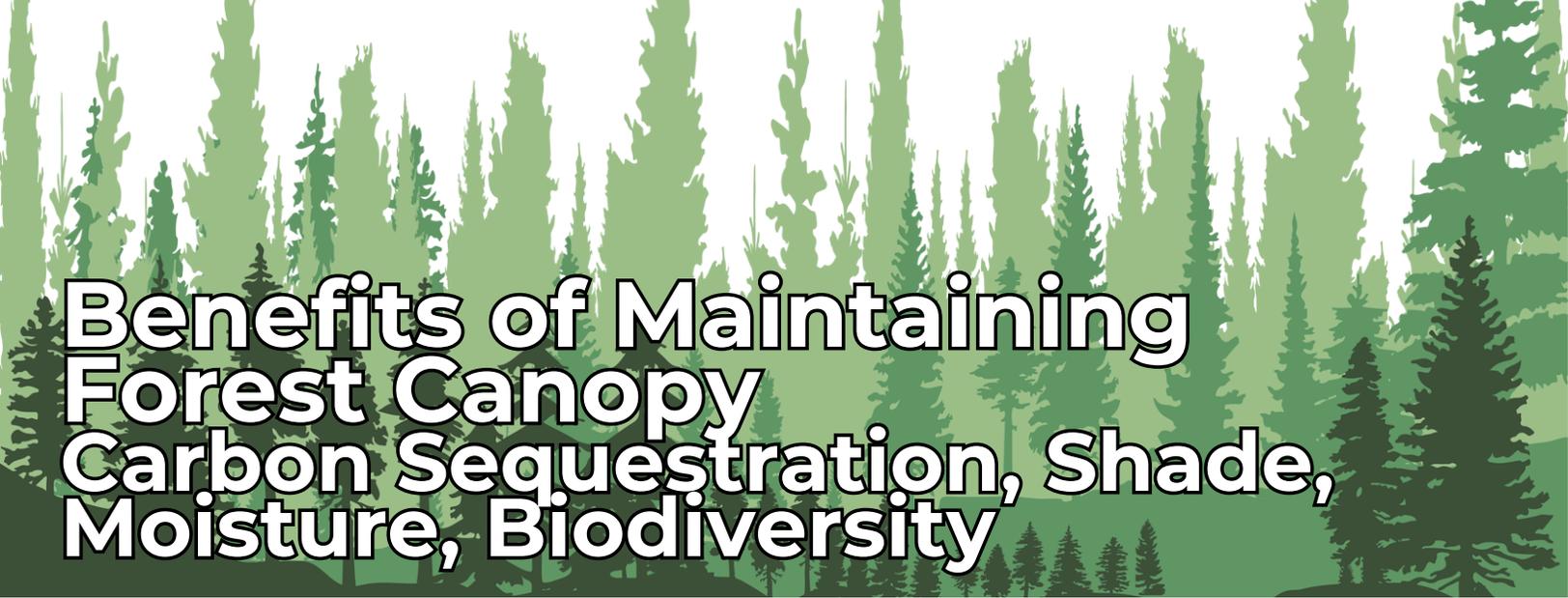
**An example of a tree that has already been coppiced and is being cut a second time.**

## Why Coppicing Works at Celebration Tree Farm & Wellness Center

While coppicing is generally favored with hardwood species such as Maple, Chestnut, Dogwood, Ash, Oak, Willow, and Elm, it is possible to coppice a softwood species such as the Eastern Balsam Fir. The Eastern Balsam Fir is the species of utmost importance for our operations at Celebration Tree Farm & Wellness Center. On our 118 acres of land, the Eastern Balsam Fir is well-represented in our forest tree species composition and is the target species for our Christmas Tree, wreath, and cut-your-own operation. We satisfy wholesale, retail, and direct market cut-your-own operations of the Balsam fir, all of which is harvested with the coppice method. Our incentives for doing so include:

1. Sequestration of carbon dioxide & maintaining a future population of harvestable trees
2. Low labor availability favors a coppicing harvest strategy
3. Allows flexibility of harvesting trees of all sizes and maturations, benefiting our customers.

Coppicing Eastern Balsam Fir in this fashion has proved successful, sustainable, and rewarding over the 10-year tenure during which owners at CTFWC have practiced the method. The practice of Coppicing was also utilized under previous management on the land in the 1980s to the early 2000s. Successful coppiced root systems from the 1980s are alive and thriving on the land to this day. Coppicing-based production systems are quite rare, especially operations with significant tenure, even if only a decade. Research was conducted to identify and interview other coppicers and our research yielded a single additional producer in the Northeast known as Pieropan Farm in Ashfield, Massachusetts, which has been operating since 1953. We conducted an interview with the current owner Emmet Van Driesche. We are pleased to find that our operations have much in common, a low-maintenance and lightly staffed operation with an inspired customer base that values the aesthetic of “wild” trees and a strong ecological value system, as well as the owner holding an additional full-time job, similar dynamics of operations at CTFWC. See a Case Study of Pieropan Farm in Appendix A.



# Benefits of Maintaining Forest Canopy Carbon Sequestration, Shade, Moisture, Biodiversity

Celebration Tree Farm & Wellness Center (CTFWC) is a major outlier in how our target species, the Eastern Balsam Fir (*Abies Balsamea*) is both managed and harvested. Traditional and conventional Christmas tree production is most commonly produced on land well suited for, or previously in, grassland or hayfield. Trees are planted in a monocropping layout, with rows of trees planted at ideal spacing for productive growth, and in clean straight lines. The grassland is an easier land type to start a Christmas tree farm on for a number of reasons:

1. A forest and tree roots do not have to be removed to install/plant the trees, which is both labor-intensive and costly.
2. Newly planted trees have limited to no competition from tree species, where shading and competition for sunlight are problematic and can impede growth.
3. A grassy area can be easily mowed and maintained, and irrigation lines can be installed without impediments, and lastly
4. Equipment such as tractors and mowers can be utilized with ease in and around the grove of planted trees.

There are many economic and labor yield benefits to producing Christmas trees in this fashion, which is why it has become the standard of North American production.

Contrary to the industry norms, CTFCW utilizes a more holistic, whole forest management technique in which naturally existing pockets of forest with high Eastern Balsam Forest density already exist. These forests are managed through coppicing. Trees in these groves are not in straight rows, and are of varying heights, from 18 inches to 60 feet in height. Additionally, the understory is a mix of grasses, mosses, and early successional hard and softwood species such as birch, beech, pine, and elderberry. This diversity in tree density, understory species diversity, and canopy height offers a vast array of microclimatic conditions that increase not only biodiversity, but also soil moisture and wildlife habitat.

CTFCW is one of Maine's only certified organic Christmas tree producers. Benefits achieved from increased biodiversity are an excellent means of ensuring a tree crop that is not only native and wild-grown, but also more resilient to environmental stressors that currently hamper the production of conventionally grown Christmas tree crops. These stressors include, but are not limited to, extreme drought, extreme wind, and pest pressure associated with monocropping a single species in high density. The ecological approach to Christmas tree management addresses those challenges by taking employing more holistic, forest-based management practices and maintaining healthy biodiversity within the tree farm.



# Ecological Practices

**Trout Creek Farm** in the Pacific Northwest that is bridging the gap between large-scale (thousands of trees harvested annually) production and ecologically minded forestry. Trout Creek plants and harvests thousands of trees annually, but utilizes a robust Integrated Pest management plan including installation of pollinator species such as bees, cover cropping within groves, and release of beneficial insects such as praying mantis and ladybugs to combat pests. Trout Creek is proud of their ecologically minded practices and uses it as an effective marketing strategy that attracts like-minded consumers to buy their trees vs. artificial alternatives or conventionally produced trees. It is encouraging to see the ecological production niche being filled at an operation of their scale and could provide an incentive for Northeast growers on larger tracts of land to follow suit. See Appendix A for more on Trout Creek Farm.

**Celebration Tree Farm & Wellness Center** predominantly relies on the wild reproduction of trees through natural cone drop and seed sprouting. This practice is encouraged by thinning/ removal of high-density seedlings, augmented by coppicing of mature aged trees, and intentional non-harvesting of mature reproductive age “seed trees”. Fifty to one hundred trees are manually planted by tree farm owners annually. These tree sprouts are dug up on the property and replanted in areas conducive to future growth and management. A multi-tier wild canopy is a valuable asset in seedling production, as young seedlings are planted beneath mature canopy systems which allows the seedling to grow in partial sun, in shaded moist soils with an ideal soil PH. This environment is favorable for seedling success as no alternative irrigation system exists. A shaded moist planting environment yields resilience to dry climate events and drought conditions.



# Organic Pest Management

## Balsam Gall Midge Damage

Common Pests of the Eastern Balsam Fir include, but are not limited to:  
(Maine Forest Service: Maine DACF)

- Balsam Gall Midge
- A variety of Aphid species
- Balsam Twig Aphid
- Cooley Spruce Gall Adelgid
- Eastern Spruce Gall Adelgid
- Spider Mites
- Spruce Budworm

In conventional mono-cropping of Eastern Balsam Fir, pest outbreaks can be common due to the nature of thousands of trees of the same species being packed into an area with little tree species diversity. Pest outbreaks can be economically damaging and are generally treated by scouting for affected trees and pest populations, followed by treatment through the application of approved pesticides (Maine Forest Service: Maine DACF). While CTFWC is affected by common pests such as the Balsam Gall Midge, we have a largely hands-off approach to treatment for a variety of reasons. First, our organic certification, which is held by the Maine Organic Farmer and Garden Association (MOFGA), prohibits the use of most chemicals utilized by conventional tree farm operations. Second, our 118 acres of land can be described as a working forest, rich in biodiversity and natural predators, offering our trees a more naturally resilient way of protecting themselves from large-scale outbreaks of common pests. However, in the last 4 years, we have had small, localized outbreaks of the Balsam Gall Midge. Careful scouting is done by owners to ensure affected trees are not harvested for sale as affected trees will drop needles post-harvest due to their weakened state. Our strategy is to allow the trees to grow through their infestation of the gall midge, as it is rarely fatal to the tree, and infestations generally last 2-3 years before the midge moves on to different locations (Maine Forest Service: Maine DACF). Non-organic chemical intervention will never be utilized within our production system as it is unauthorized by our certifier, MOFGA (although there are some OMRI-approved products for Christmas tree production), unnecessary due to forest resilience, and not in line with our regenerative forestry practices. Instead, careful scouting to identify pest infestation & damage, coupled with avoidant harvesting strategies, has proved to be a successful means of insect pest management over the course of the last decade.



# Pre & Post Harvest Considerations and Storage

Christmas tree production runs on a very unique and expedited harvest schedule as compared to most other crops produced for sale in New England. Balsam producers find themselves with a very eager and engaged market from Thanksgiving to December 20th as customers rush to purchase their trees, and other value-added Balsam products such as wreaths, garland, and other Balsam decorations.

Pre-Harvest conditions for Balsam are generally decisions made by the owner-operator with consideration of their labor force, market environment, and pre-existing product orders. Balsam producers find it advantageous to get a head start on harvesting trees and Balsam greens to stockpile saleable material ahead of the busy season. This is especially true for the harvest of Balsam greens for wreath production, which is both time-consuming to harvest and time-consuming to build and decorate the wreaths. This early harvesting and stockpiling of materials requires careful storage to ensure little to no degradation of high-value crop material. Best management practices for the storage of Balsam materials are as follows:

- Harvest only after the trees have experienced 2 hard frosts of 28 degrees Fahrenheit or colder. This ensures the tree is dormant and the tree sap and sugar have been translocated to the root system.
- Harvest on cold, cloudy days when possible.
- Store harvested material in dry, covered, unheated locations such as a barn, shop, or garage. Dry conditions ensure the plant material will not mold. Cold conditions are crucial for maintaining plant material internal moisture and the prevention of premature needle drop and browning. Indoor storage protects the tree from being rained on or snowed on, which will be a time-consuming hindrance for wreath making or tree sale aesthetics. In the absence of indoor space under conditions as described, it is recommended that plant material be covered with a tarpaulin to prevent the ill effects of snow or ice.

This early needle drop and poor product quality will be damaging to the producer's reputation and future repeat sales potential.

Another harvest condition is both present and future weather conditions in and around the harvest window. Harvesting in wet, muddy conditions where trees may have to be dragged through the forest before loading can result in trees with a muddy appearance, which can be a detriment to sales. Harvesting after heavy snow or ice can result in a tree that needs shaking, cleaning, and otherwise more labor to get a product that customers can view and imagine in their homes. Snowy conditions coating the tree may also obscure the color of the needles; dark green needles are desired by customers and are a sign of a healthy tree and a desirable product. Harvesters who cannot view the tree properly may accidentally harvest a tree experiencing temporary yellowing; this tree is unlikely to be sold. Additionally, heavy rain/ice formation on the tree branches can result in the tree becoming fragile with limbs breaking in transit or display- or result in a slender and less robust appearance as the weight of the ice on the needles is weigh the branches down hindering their ability to spread out and display to their fullest potential. A customer will not want to deal with an icy or snowy tree. To prevent these hindrances, it is recommended to harvest before snowy or icy weather events when possible. Another pre-harvest consideration is careful scouting of the tree to ensure it is not infested with pests, which may lead to poor shelf life outcomes for the tree. The Balsam Gall Midge lays eggs very discreetly in the balsam needles. Harvesters should be trained to identify and avoid infested trees.

Post-harvest considerations mirror the thinking of pre-harvest considerations- assuring your product looks fantastic and has a long shelf life. Once tree and wreath material are harvested, it is essential to store materials in a cold, dry environment free from the elements. This may require additional labor considerations if trees are displayed in a retail fashion outside. Trees are often removed from their outdoor display and manually carried indoors prior to snow and ice events, and then returned to the display post-weather event. This ensures the customers will not have to handle an icy or snowy tree and lay eyes on the tree exactly how it will appear in their home. Another post-harvest consideration is additional pruning and care for the tree to ensure a trouble-free customer experience when setting up the tree at home. This may include trimming unsightly branches, trimming the base or stump of the tree so it slides effortlessly into the tree stand without knobs or branches, and in some cases, trimming the crown of the tree if it is deemed excessively long. Tree wrapping is a common practice, and there are mechanized and manual tree wrappers that put a plastic netting around a tree and make the tree more convenient to transport. At Celebration Tree Farm & Wellness Center, we only wrap trees for our one wholesale account so they are easier to transport and display at the store. While many farms offer tree wrapping to their retail customers, we have chosen not to do that to reduce plastic usage in our operations and limit the labor that it takes to wrap a tree.

At the end of a season, a tree farmer may have extra trees or boughs. We have donated our leftover trees and wreaths to local food pantries, and unusable trees or boughs have been donated to local goat farmers. Goat farmers appreciate that our trees are organic, so they are not feeding chemicals to their goats, and the goats love the fresh Balsam.



## Market Opportunities

While organic agriculture is widespread in vegetable production and is increasing in meat, flower, and grain production, organic Christmas tree farming is not well known in the marketplace. In the past decade of operating Celebration Tree Farm & Wellness Center, we have witnessed a growing number of people who appreciate the fact that we practice organic, ecological forestry. People have expressed a desire to have a tree that does not bring unwanted chemicals into their home or leave chemicals in the soil. Similarly, Trout Creek Farm in Oregon expressed that some of their wholesale accounts have sought them out because they want to sell Christmas trees with limited chemicals and more sustainable practices. The broader Christmas Tree industry, through the National Christmas Tree Association and other statewide associations, often promotes and provides education about the environmental benefits of real Christmas trees over fake trees.

Organic and ecological Christmas tree farming practices at this point are generally used at a smaller scale. The only two farms that we have found that use coppicing methods produce around 400-500 trees a year. Trout Creek Farm, which uses cover crops and some herbicides, has achieved a larger scale of 7,000 trees a year on 40 acres. Some tree farms focus entirely on retail with a U-cut operation or pre-cut trees, while others focus entirely on wholesale, and others combine both. For a small-scale tree farmer, a retail operation is generally going to be a better option, as you can demand a higher price per tree and not compete in the large-scale wholesale industry. This could be challenging, though, depending on the location of a tree farm and whether it has access to a market of customer,s and for this reason, wholesale may be a better option for those in more remote areas. Either way, if a farmer is using organic and ecological practices, there is an importance of developing marketing materials and market channels that help inform the retail or wholesale customer about their different practices.



For a cut-your-own operation, there is importance in providing good parking, farm access, and education to your customers. At CTFWC we have developed an online sign-in system where people read our farm guidelines, safety instructions and coppicing practices. They sign in and release their liability as well. With each customer, we explain our coppicing practices and give them instructions on what parts of the farm to find trees. As part of our safety instructions, we do not allow customers to use any power saws.

Both Pieropan Farm and CTFWC do limited to no shaping, resulting in trees that might look more wild, natural, and unique. Some customers respond very positively to these trees, appreciating the space for ornaments and the more natural look, while others want a bushier, more highly shaped tree. Fortunately, there are many other options for these customers at other tree farms or tree lots. But depending on one's market this could be a barrier and organic and ecological tree farms could choose to do heavier trimming and shaping to meet this market demand.

## **VALUE ADDED**

In addition to trees, tree farmers may consider making wreaths or other balsam products. There is a large market for wreaths and they can be sold both on the farm or wholesale. At Celebration Tree Farm & Wellness Center, we make "Lil'trees" using trees that we thin from coppiced trees and put on bases made out of birch. While they have growing popularity, especially amongst trees and some apartment dwellers, the market for these is still much smaller than for full-sized trees.

Our operation has also developed a Community Supported Forest membership program. Each year, we have 50-80 people who sign up for this program that provides members with a tree, a wreath, a lil'tree, Balsam greens, year round trail access and discounts on our wellness services and rentals. Our goal is for our members to be more engaged year round with the farm and deepen their connection to the forest.

Another aspect for a tree farmer to consider is how they want to incorporate more agritourism elements into their farm. Tree farms may incorporate food or drink options at their tree stand or other types of experiences that engage customers and develop more diversified revenue. At Celebration Tree Farm & Wellness Center, we hold an annual "Celebration Market" that creates space for local art, craft, and food vendors to sell their wares during one of our open days. We also offer wellness classes and workshops year-round, have a yurt that people can rent out for meetings, workshops and retreats and the Celebration Bus which provides a space for farm stays. Tree farmers can consider how agritourism could benefit their farm and provide more diversified revenue.

# Conclusion

The Christmas tree industry stands at an important crossroads. While conventional field cultivation methods remain dominant, producing millions of trees annually across thousands of farms, there is growing interest in and adoption of more ecological approaches to Christmas tree production. These alternative methods, including organic certification, coppicing, and forest-based cultivation, offer promising solutions to challenges such as chemical use, labor shortages, and environmental sustainability. Though currently practiced primarily by smaller-scale operations, these ecological methods demonstrate that Christmas trees can be successfully grown while maintaining forest ecosystems, enhancing biodiversity, and meeting consumer demand for environmentally conscious products.

The industry's future likely lies in a diversified approach, where both conventional and ecological methods coexist to serve different market segments and operating scales. As consumer awareness of environmental issues grows, farms practicing organic and ecological methods may find expanding opportunities, particularly in direct-to-consumer markets. However, successful adoption of these practices requires careful consideration of factors such as location, market access, and management intensity. Whether through wholesale or retail channels, traditional or ecological methods, Christmas tree farming continues to evolve while maintaining its central role in holiday traditions and rural economies.



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## Jonah Fertig-Burd

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For over 20 years, Jonah has co-created interconnected transformations rooted in love and liberation. He has played a key role in nurturing cooperatives, nonprofit organizations, grassroots projects, and community spaces. He co-founded Celebration Tree Farm & Wellness Center with Elizabeth Fertig-Burd in 2015, and together they grew the business, and with Thomas Prohl converted the business to a cooperative in 2020. In addition to his work at Celebration Tree Farm & Wellness Center, he is a facilitator, consultant, organizer, and coach with InterRooted, where he works with businesses, nonprofits, cooperatives, and communities to co-create transformative structures, projects, and culture. Prior to InterRooted, he was a Community Partner for Food Systems at the Sewall Foundation, Director of Cooperative Food Systems and the Cooperative Development Institute, and co-founded Local Sprouts Cooperative. He is currently on the Board of the Cooperative Fund of the Northeast, Maine Inside Out, and Land in Common. From developing regenerative cooperative economies to fostering conscious leadership, his work is rooted in the power of shared vision and collaboration.

## Thomas Prohl

Celebration Tree Farm & Wellness Center Farm Coordinator

Thomas Prohl, Farm Manager, is an organic fruit, vegetable, and tree farmer with over a decade of farm experience. He studied Sustainable Agriculture & Food Systems at the University of New Hampshire and moved to Maine in 2015, where he has been managing Organic Fruit & Vegetable production and a Farmer Training program at Wolfe's Neck Farm ever since.

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# Case Study: Pieropan Christmas Tree Farm

### General Info

- Location: Ashfield, MA
- Size: 10 acres of trees across 25 acres of leased land
- Established: 2009 (original farm 1953)
- Ownership: Owned and operated by Emmet and Cecilia Van Driesche

### Production

- Annual Harvest: 400 U-Cut Trees
- Annual Products: 500-600 wreaths, multiple tons of balsam boughs
- Customer Base: Multi-generational, 1/3 new customers annually
- Market Focus: Retail, direct-to-consumer
- Not certified organic, but use organic practices

### Tree Varieties

- Balsam Fir

### Sustainable Practices

- Coppicing practices have been in use for over 50 years
- Tree Management:
  - Manual spacing
  - Minimal pruning
  - 4-5 year rotational rehabilitation
- Pest Management: Focus on soil and water condition optimization
- Natural Approach: Diverse forest ecosystem maintenance

### Infrastructure

- Equipment: Pickup truck with wooden rack
- Facilities: 7x14 hut with woodstove, tarp barn
- Operations: Manual labor focused, no tractor

### Key Innovations

- Ecological farming methods
- Sustainable forest management
- Family-integrated operations

### Challenges

- Farm transition
- Labor management
- Administrative complexity

# Case Study: Trout Creek Tree Farm Farm Profile

## General Info

- Location: Corbett, Oregon (Western Cascade Mountains)
- Size: 80 acres (40 acres in Christmas trees)
- Established: 1998
- Ownership: LLC, owned by Tom Norby and Terri Barnes

## Production

- Annual Harvest: 7,000 trees
- Annual Planting: 10,000 trees
- Market Focus: Wholesale
- Not organic and does use limited herbicides under trees and occasional fungicide use

## Tree Varieties

- Noble Fir
- Nordman Fir
- Transitioning varieties due to climate change

## Sustainable Practices

- Pest Management:
  - No insecticides (eliminated 15-16 years ago)
  - Beneficial insects integration
  - Beekeeping for natural pest control
- Cover Crop Strategy:
  - Hard fescue between rows
  - Annual flail mowing
  - Enhanced moisture retention and soil health

## Infrastructure

- Equipment: Biodiesel machinery
- Operations: Mechanized with sustainable focus

## Key Innovations

- Biodiesel equipment adoption
- Beneficial insect integration
- Pollinator-friendly practices
- Strategic land use and tree placement

## Challenges

- Equipment limitations
- Climate change impacts
- Tree species adaptation management

# Case Study: Celebration Tree Farm & Wellness Center

## General Info

- Location: Durham, Maine
- Size: 118 acres (14 acres in Christmas trees)
- Established: early 1980s as Brookside Farm, established as Celebration Tree Farm in 2015
- Ownership: cooperatively organized LLC, owned by Jonah Fertig-Burd, Elizabeth Fertig-Burd and Thomas Prohl. 110 acres of Land is owned by Land in Common Community Land Trust and Celebration Tree Farm & Wellness Center LLC has a 99 year lease with the land trust.

## Production

- Annual Harvest: ~400 trees retail, ~100 trees wholesale
- Annual Planting: focus on coppicing, annual planting varies from 50-200 tree
- Market Focus: U-Cut, Pre-Cut trees on farm and limited wholesale (selling trees to the Portland Food Co-op and wreaths to 4 accounts)
- Annual Products: 300-400 wreaths
- Customer Base: Residents in Southern Maine, many return customers and new customers every year
- Certified Organic

## Tree Varieties

- Balsam Fir (primarily)
- Fraser Fir
- Blue Spruce and Douglas Fir have been planted too but are not yet commercially available

## Sustainable Practices

- Organic Pest Management:
- Natural cover cropping
- Coppicing practices have been used since the early 1980s

## Infrastructure

- Equipment: Kioti Tractor, Electric Chainsaws, Gas Chainsaws, Handsaws
- Barn & Garage

## Key Innovations

- Cooperative structure and community land trust ownership of land
- Community Supported Forest Membership
- Coppicing practices
- Integrating

## Challenges

- Climate change impacts
- Rapid growth of market and slow growth of trees
- Drought and limited irrigation