



## Food for Thought November, 2011

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### Christmas Tree History & Facts

- 1510 - The first written record of a decorated Christmas tree comes from Riga, Latvia.
- 1530 - There is record from Alsace, France (then Germany territory) that trees were sold in the marketplace and brought home and set up undecorated. Laws limited the size to "8 shoe lengths" (slightly over 4 feet).
- 1700s - In parts of Austria and Germany, evergreen tips were brought into the home and hung top down from the ceiling. They were often decorated with apples, gilded nuts and red paper strips. Edible ornaments became so popular on Christmas trees that they were often

### Greetings,

I'm not sure what happened to this fall but it has flown by and with the recent snow, it feels like winter can't be far off. Autumn is the season for conferences and NHAITC was present at several in the past month. They were wonderful opportunities to present workshops and share ideas about integrating agricultural themes into classroom lessons. I also enjoyed meeting many of you at our information tables and through informal networking. For those of you whom I met at these events and have recently joined our mailing list, welcome. Please know that we are here to help you in whatever way we can. Don't hesitate to contact me if you have questions or ideas about how we can work together. Of course that invitation goes to those who have been long time friends as well, and everyone in between.

In this issue we will be looking at ways to use Christmas trees as a tool for teaching math, science, history and other topics. Often times when we think of agriculture we think about plants and animals that are raised for food or fiber. However, tree farming is also included in our definition of agriculture. Did you know that the US Forest Service is actually part of the US Department of Agriculture? Much of what tree farmers do to be successful is similar to that of other plant-based farmers.

Christmas trees are an ideal crop to grow in New Hampshire because we are ecologically and historically a forested state. At 83% forested, New Hampshire is actually the second most forested state in the U.S., surpassed only by our neighbor Maine. Our climate and much of our soil is conducive to growing Christmas trees and they can be produced in a wide variety of ways anywhere in the state from large commercial farms to backyard plots.

- called "sugartrees."
- 1800s - The Christmas tree was introduced in the United States by German settlers. It rapidly grew from tabletop size to floor-to-ceiling.
- 1851 - Christmas trees began to be sold commercially in the United States. They were taken at random from the forests.
- 1853 - Franklin Pierce is credited with bringing the first Christmas tree to the White House.
- Late 1800s - The first glass ornaments were introduced into the United States, again from Germany. The first ones were mostly balls, but later chains of balls, toys and figures became more common.
- Around 1883 - Sears, Roebuck & Company began offering the first artificial Christmas trees - 33 limbs for \$.50 and 55 limbs for \$1.00.

Timeline provided by The Rocks Christmas Tree Farm, Bethlehem, NH.

- There are close to 350 million real Christmas trees currently growing on Christmas tree farms in the U.S. alone, all planted by farmers.
- There are more than 4,000 local Christmas tree recycling programs throughout the United States.
- There are close to 15,000

I actually grew up raising Christmas trees with my grandfather on a couple of acres at his farm. It was one of the seminal connections that I made with the land. Growing Christmas trees taught me farming skills but also skills in business, marketing, education and more. I generated funds to help pay for college, but best of all, I got to spend time with my grandfather. Some things we gain from farming are intangible and priceless.

Christmas trees are a crop that comes with some unique challenges, from a public education standpoint. They are an icon of a faith-based observance and thus might be considered off limits as a topic of focus. However, when viewed as a tool for teaching rather than a topic of focus, I think rich and meaningful learning can come from lessons that explore Christmas trees, their history, production and importance.

Best wishes,

*Ruth*

Ruth Smith, Statewide Coordinator

## What Christmas Trees Can Teach Us

To get some information about how Christmas trees are raised in NH and about some resources that are available to educators, I spoke with Nigel Manley, the Director of the North Country Properties for the Society for the Protection of NH Forests (SPNHF). Nigel works at the Rocks Estate in Bethlehem where they grow about 50,000 Christmas trees and conduct educational programs for school groups as well as the public. Nigel also represents NH and VT on the National Christmas Tree Association board. The Rocks was a NH Farm of Distinction in 2004. Below are excerpts from our conversation.

**NHAITC:** Nigel, tell us a little bit about the Christmas tree operation at The Rocks.

farms growing Christmas trees in the U.S., and over 100,000 people are employed full or part-time in the industry.

- It can take as many as 15 years to grow a tree of typical height (6 - 7 feet) or as little as 4 years, but the average growing time is 7 years.
- The most common Christmas tree species are: balsam fir, Douglas-fir, Fraser fir, noble fir, Scotch pine, Virginia pine and white pine.

## Christmas Tree Resources

### Christmas Tree Farms of Ontario

[www.christmastrees.on.ca](http://www.christmastrees.on.ca): general information for consumers but also a helpful Teacher Resource section. It focuses on Ontario, but many of the facts about growing trees, tree identification and project ideas for classes are applicable to NH. Very helpful background information.

**Massachusetts Christmas Tree Association** [www.christmas-trees.org](http://www.christmas-trees.org): excellent educational materials for teachers (especially for middle and high school) including curriculum for integrating math, science, English and economics lessons using Christmas trees as a theme.

**National Christmas Tree Association** [www.christmastree.org](http://www.christmastree.org): information about trees around the country, species descriptions,

**NM:** The trees we raise are harvested for a mix of markets. Annually 2000 are for cut-your-own, 300 for mail order, and 2700-3700 are for whole sale. Cut-your-own customers come from all over including lots of tourists from out of state and as far away as California and Florida. Tourists come for the experience as well as the actual trees.

**NHAITC:** How is raising Christmas trees different from other types of agricultural practices?

**NM:** The biggest difference is the time it takes to grow the crop. We plant 4-5 year old seedlings and then nurture them for another 6-9 years in the field before they can be harvested. Other than that, Christmas trees aren't that different really, we grow them and harvest them, like corn or carrots.

Many Christmas tree farmers do everything from seeds to the customer, so this is similar to food producers who sell their own produce from farm stands or at farmers' markets. I like the direct market portion of our work best.

**NHAITC:** What is one of the most challenging things about being a Christmas tree farmer?

**NM:** One challenge we have is to help people understand that cutting a tree is not bad for the environment. A big part of our work is educational, to dispel the myth that artificial trees are more sustainable. Real trees provide many benefits when they are growing, as well as when people take them home and enjoy them. They are a renewable resource and help to keep the land open.



environmental benefits of real Christmas trees, history and traditions surrounding Christmas trees and frequently asked questions about Christmas trees. Resources for teachers such as curriculum (K-12), activities, reading lists and more.

#### New Hampshire Christmas Tree Promotion Board:

[www.nhchristmastrees.com](http://www.nhchristmastrees.com) find Christmas tree farms in your area or learn more about the Forevergreen educational program.

#### New Hampshire Department of Agriculture, Markets and Food

[www.nh.gov/agric](http://www.nh.gov/agric): agricultural statistics including Christmas tree farm contribution to overall agriculture in NH, directories of farms and markets.

#### New Hampshire State Forest Nursery

[www.dred.state.nh.us/nhnursery](http://www.dred.state.nh.us/nhnursery): raises seedlings of various plants including Christmas trees for sale to consumers large and small. Provides tours for groups to learn about growing trees and shrubs. Located in Boscawen, NH.

#### New Hampshire - Vermont Christmas Tree Association:

[www.nh-vtchristmastree.org](http://www.nh-vtchristmastree.org) an organization primarily for growers but also lists information about finding and buying Christmas trees.

#### University of New Hampshire Cooperative Extension

[www.extension.unh.edu/Forestry](http://www.extension.unh.edu/Forestry): information about growing Christmas trees for landowners.

[See the NCTA website for more reasons to buy real trees.]

**NHAITC:** Describe your educational programs.

**NM:** We do programs on various topics from maple sugaring to ecology, but we have about 400 students that come for Christmas tree programs and tours. It's part of our mission to help them understand environmental stewardship. We also address history, science, economics, and help them understand that these trees are a crop to be harvested and that's why we raise them.

We offer a program called "Forevergreen" where the kindergarten class in Bethlehem plants 24 evergreen trees. Each year as the trees grow, the children nurture and take care of them. They learn about fertilizing, shearing, economics, harvest, and this encourages them to get involved in growing things. In 6th grade they help harvest the trees which are shared with the school and community. In addition to all of the facts about plant growth, the students learn the importance of doing something for someone else.

**NHAITC:** That sounds like a great program. How can teachers in other parts of the state do something like that, or integrate Christmas trees into their curriculum?

**NM:** Talk to a local tree farmer. There may be others around the state that would be willing to work with schools on an ongoing basis. Teachers can use the Rocks curriculum and materials from the National Christmas Tree Association (NCTA, see links listed). These materials focus on the history and science of growing the trees, not on the religious piece.

The educational work has been great for us and for the kids, and it also gets the children outside which is really important.

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## Christmas Tree books

*Christmas Tree Farm* by Ann Purmell

A boy tells how his family's Christmas tree farm requires yearlong work, from planting seedlings to weeding, pruning, measuring, cutting, and baling. Energetic, naive gouache-and-acrylic illustrations accompany the narrative, which will give children

## U.S. Forest Service

[www.fs.fed.us](http://www.fs.fed.us): learn about the Christmas tree that is selected and used at the Capitol in Washington, D.C.

## Calendar

November 4  
NH Farm Bureau Annual Meeting, Henniker  
[www.nhfarmbureau.org](http://www.nhfarmbureau.org)

November 19  
Upper Valley Farm to School Conference, Lebanon  
[www.uvfts.org](http://www.uvfts.org)

December 3  
(Nov. 28 registration deadline)  
Focus on NH Forests Teacher Workshop with Project Learning Tree, Concord  
[www.nhplt.org](http://www.nhplt.org)

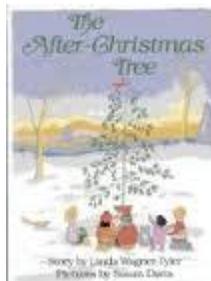
December 16  
Ag Education Night at Manchester Monarchs Game, Manchester  
[www.monarchsjungle.com/ffa](http://www.monarchsjungle.com/ffa)  
see article for details

## Contacts

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an inside look at the workings of a family-owned business. Unfortunately this is currently out of print, but may be found in libraries.



*The After Christmas Tree*  
by Linda Wagner Tyler

A family finds a way to make the post holiday blues fun by using their Christmas tree as a center piece for an after Christmas winter party. The book illustrates ways of reusing and recycling Christmas trees after their prime season is

complete. Best for ages 4-8. ISBN: 978-0140541915.

*The Night Tree* by Eve Bunting

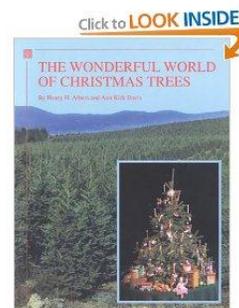
This story tells of a family Christmas tradition of decorating an evergreen tree in the forest for the wildlife. Though it does not address the farming aspect of Christmas trees, it does have a wonderful message of sharing and provides an example of how trees can serve many purposes. Best for ages 4-8. ISBN: 978-0152001216.

*The Wonderful World of Christmas Trees*

by Ann Kirk Davis & Henry Albers

This is a well researched book on the history and traditions of the Christmas tree around the world and through

time. Contents include information on tree species, how trees are grown, the development of the Christmas tree industry in the U.S., use of Christmas trees in famous places and more. Best for high school and adult. ISBN: 978-0931209697.



See the Nov. 2010 *Food for Thought* in our newsletter archives for more book ideas ([www.nhagintheclass.org](http://www.nhagintheclass.org)).

## Resources You Might Not Know About

Did you know that Ag in the Classroom can help you with research on a wide variety of topics? If you and your class are doing a project on peanuts or watermelons, the impact of climate change on what we eat;

school cafeteria food and where it came from; or what we do with all the food that is thrown away everyday, we can help.

The national Ag in the Classroom web site at [www.agclassroom.org](http://www.agclassroom.org) is a wealth of information. This site has links to every state Ag in the Classroom web site in the country. Many web sites include lesson plans from that state and many more from all over the country.

In future issues of *Food for Thought* we will include some lesson plans for more obscure agricultural products and by-products. Did you know that diapers, toothpaste, fisheries scientists, horticulturalists, agronomists and candy bars are all connected to agriculture? Finding these connections is a fun way for students to expand their understanding and appreciation of agriculture. Let us help you find new ways of bringing Agriculture in the Classroom to you and your students.

### **Calling All Hockey Fans NHAITC teams up with FFA for Fundraiser**

Friday, December 16 is Ag Education Night at the Manchester Monarchs hockey game. Anyone who buys a gold or silver level ticket through this link:

[www.monarchsjungle.com/ffa](http://www.monarchsjungle.com/ffa) will be helping NHAITC and the Granite State FFA (Future Farmers of America). Tickets can also be purchased directly from us to avoid the \$4 convenience fee. Call 224-1934 for details.

.A portion of those ticket sales will go to our organizations to help fund the ag. educaion work that we do. The Monarchs will be playing the St. Johns Ice Caps starting at 7:00. See you at the game!