

Ag in 10 Minutes a Day!

Christmas Tree Farms

History of Selling Christmas Trees

Did you ever wonder how selling Christmas trees began? A story tells about a farmer, who in 1851, brought two sleds pulled by oxen of evergreen trees into New York City and sold them all.

At this time, many people went into the woods and cut down their own trees. These trees grew wild and were not carefully trimmed and cared for like the trees we buy today from a tree farm. By the 1920s, nearly every American family had a Christmas tree. When the Great Depression began, nurserymen couldn't sell their trees for landscaping so they cut them and sold them as Christmas trees. Americans liked these trees because they were better shaped than the wild ones. Christmas tree farming as a business began.



Growing Christmas Trees

Just like any other crop a farmer might raise, Christmas tree farmers need to make sure their trees have the proper nutrients, good soil and water.

Christmas tree farming takes a lot of hard work. Soil needs to be tilled before the tree seedlings can be planted. After the trees are planted, tree farmers must monitor and control both animal pests and insects. Mammals such as deer, gophers and ground squirrels can hurt trees because of the damage they may cause to both the roots and buds.



Trees need to be carefully pruned, sometimes several times a year, to maintain the Christmas tree shape. Farmers often have to mow between the rows of trees to eliminate weeds which would take water and nutrients from the trees. It can take from 6 to 10 years to grow a Christmas tree, longer for very large trees. Very cold winters and very hot or dry summers can damage the trees. Early snows can make cutting and shipping the trees difficult.

Harvesting Christmas Trees

There are several different ways to harvest Christmas trees. One of the more popular ways is where customers are allowed to walk around a tree farm, select their tree and cut it themselves. This is known as the **Pick-Your-Own** farm.



Some farmers grow trees that are dug up and the root ball is tied up with a fabric called burlap. Trees harvested this way are called "*balled and burlapped*" trees. Families can leave this kind of tree in their house for about a week and then replant it in their yard after Christmas. Getting a balled and burlapped tree, allows the tree to keep growing in the yard for many years.

Some tree farmers cut their trees down, wrap them for shipping and sell them to organizations like Boy Scout troops. These trees are sold on parking lots and street corners.

During the 1980s, a farm in Oregon that lacked a road to the tree farm used helicopters to move the trees. What a clever way to transport trees without having to build a road!

Christmas Trees Help the Environment

Christmas trees are good for the environment. Every acre of Christmas trees in production produces enough oxygen for 18 people. When you multiple the number of acres planted in Christmas trees across the United States that means that Christmas tree farms provide enough oxygen for 9 million people per day.

After the holidays, Christmas trees can be reused as mulch and large Christmas trees can be piled up as soil erosion barriers. Sometimes the trees are put in ponds as fish habitat or placed in the back yard and decorated with food for birds to eat over the winter.

A very special use of large, overgrown Christmas trees took place in 2002. These huge trees were used in a project to restore an eroded riverbank along the Connecticut River. The trees were placed in the river with their tops pointing downstream. The trees were secured to the riverbank and plants were rooted among their branches. This helped stop the riverbank from eroding. Christmas trees are good for the environment whether they are producing oxygen, acting to prevent soil erosion or just being a special home for wildlife.



Christmas Tree Farms

Directions: Read each question and fill in the best answer.

1. What usually makes a Christmas tree from a Tree Farm better than one from the woods?

- A. its color
- B. its height
- C. its shape
- D. all of the above

2. What do Christmas trees need to grow well?

- A. nutrients
- B. deer
- C. snow
- D. dry summers

3. According to the article, which things can harm Christmas trees?

- A. helicopters
- B. good soil
- C. deer and gophers
- D. snow

4. How long does it usually take to grow a Christmas tree?

- A. 18 years
- B. 6 -10 years
- C. 2-3 years
- D. 19-20 years

5. What is not a way for you to get your Christmas tree?

- A. At a Pick Your Own Farm
- B. Balled and burlapped
- C. From a Boy Scout troop selling trees on the corner parking lot
- D. With a helicopter

6. Which are ways that Christmas trees help the environment?

- A. provide wildlife habitat
- B. produce oxygen
- C. can be reused as mulch
- D. all of the above

Extended Response: Choose either question.

1. What are some differences and similarities between a Christmas tree farmer and a farmer that raises corn?
2. Make a list of some of the things involved in Christmas tree farming. Which ones can the farmer control? How? Which ones can't the farmer control? Why?



Christmas Tree Trivia

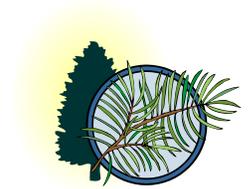
In the first week, a tree in your home will consume as much as a quart of water per day.

- Most Christmas trees are cut weeks before they get to a retail outlet.
- Christmas trees are grown in all 50 states including Hawaii and Alaska.
- 98 percent of all Christmas trees are grown on farms.
- 77 million that's 77,000,000 Christmas trees are planted each year.
- Thomas Edison's assistants came up with the idea of electric lights for Christmas trees.
- California, Oregon, Michigan, Washington, Wisconsin, Pennsylvania, and North Carolina are the top Christmas tree producing states.

TRY THIS AT HOME! EXPERIMENT – WHY DO EVERGREENS STAY GREEN ALL YEAR LONG?

(ASK AN ADULT FIRST!)

Materials needed: 3 paper towels to resemble leaves, 2 sheets of waxed paper, spray bottle, samples of deciduous leaves, evergreen needles and broadleaf evergreens (magnolia, rhododendron) if possible, two plastic cups, 2 pieces of plastic wrap, water



Experiments

- Discuss the fall/winter season and ask what differences are usually seen in the forest between winter and summer (summer - all trees have leaves and are green; winter - evergreens are green; deciduous trees have lost their leaves). A deciduous tree loses its leaves once a year and an evergreen has leaves all year long.
 - If possible, show some large deciduous leaves (like maple), some evergreen samples and some broadleaf evergreens (like magnolia, rhododendron). What are the similarities and differences of the leaves/needles? (discuss thickness, shape, covering)
 - All plants need water, sunlight and nutrients to grow. Which sample do you think will lose water the fastest? the slowest? Why?
 - Conduct the following experiments to discover the answer.
1. Take three paper towels and spritz them each equally with water enough to dampen but not soak them.
 2. Paper towel #1 is deciduous leaf model and should be laid out flat to represent a deciduous oak or maple leaf.
 3. Paper towel #2 is rolled tightly into a tube to represent an evergreen needle.
 4. Paper towel #3 is laid between 2 sheets of waxed paper. This represents a broadleaf evergreen such as a magnolia, cherry laurel or rhododendron leaf with its waxy coating.
 5. Ask, "Which model do you predict will dry first, second, last?" Record your predictions and explain why.
 6. Allow models to remain undisturbed until Model #1 is relatively dry while others are still moist (about 1/2 – 1 hour).
 7. Record and discuss results.
 8. Explain: Plants have adaptations to help them survive the cold of winter and heat of summer. One of these adaptations is different types of leaves.





Deciduous plants drop their leaves in winter as a way to prevent water loss during extreme dry cold. Deciduous leaves tend to be thinner, easier to tear. Deciduous plants tolerate the low light, cold and moisture loss of the freezes in winter by dropping their leaves and becoming dormant.

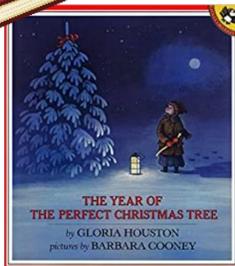
Evergreen plants have leaves that have adapted to help them hold water during changes in seasons. Many evergreen "*leaves*" tend to be shaped like **needles** and very compact. They are also strong and don't tear easily. Botanists discovered that the needles are regular leaves that are rolled up very tightly, an adaptation that allows evergreens to conserve water for photosynthesis during the winter.



Broadleaf evergreen leaves (like magnolias and rhododendrons) tend to be thick, leathery and covered with a waxy coating which acts as a blanket. This makes their leaves resistant to cold and moisture loss with winter's freezing temperatures.



CHECK OUT THESE BOOKS:



THE YEAR OF THE PERFECT CHRISTMAS TREE

BY GLORIA HOUSTON

The town tradition is for young Ruthie's family to provide the Christmas tree to decorate the small Appalachian town. Ruthie's father however is away from home. Find out what Ruthie and her mother do to continue the tradition.



CHRISTMAS TREE FARM

BY ANN PURMELL

Do you ever think about the Christmas trees that you buy every year? Do you ever think about the people who planted the tree, took care of it, and cut it down for you? Enjoy this story of a family who raise Christmas trees on a Christmas tree farm.



A WISH TO BE A CHRISTMAS TREE

BY COLLEEN MONROE

This charming tale of an overgrown pine always being passed by for Christmas, and what his woodland friends do to help him, is sure to become a Christmas classic.



WHO WOULD LIKE A CHRISTMAS TREE?

BY ELLEN BRYAN OBED

Who would like a Christmas tree? From January through December, these trees are food, shelter, nesting grounds, and much more for diverse animals and insects.