FOREST PRODUCTS FOR CHRISTMAS USE

BY

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CHRISTMAS COMES TO THE YOUNG FIR

By Iris Lora THORRE

Last night the tall young fir tree on the hill
Was hung with stars glittering in the still
And frosty violet air like shining wings.
"Of all earth's lovely things
A tree of stars is loveliest", I said
But when tonight I climbed the stairs to bed,
There was no tree........nothing save the hill
Against the dark immensity
Of heaven. And I knew that somewhere
In the town the little tree was brave with light,
Hung with such dazzling jewels as the night
Had never seen........beautiful and proud
This one brief evening in its gorgeous shroud
And then forever dark, forever still,
Lost to sea-bound winds soaring the lonely hill:
To wings at dusk sky-weary seeking rest
And the haven of a green, bough-sheltered nest.
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Purpose

The purpose of this paper is to give the reader a general knowledge of the forest products used at Christmas time. In the main this paper will deal with the more important product of Christmas trees. Treatment of minor products used will not be discussed in detail.

Importance of the Problem

Although Forest Products For Christmas Use are generally considered unimportant in their rank with other forest uses, Christmas tree selling and growing alone represents a ten million dollar industry. This is a sizable business considering the seasonal nature of it.

Scope

As stated above I will attempt to acquaint you with the forest products used during the Yuletide season with their application to Forestry. Most emphasis will be on Christmas trees, the major product. For those interested, data for this paper was obtained from various bulletins and thesis which are listed in the bibliography in the appendix.

History of the Christmas Tree

That the Christmas tree today is one of our most beautiful institutions is generally agreed but just where the idea came from in the first place is still a subject
of scholarly dispute. Investigators however have turned up a mass of lore about the Yuletide custom. To give background I will set forth a brief history of it.

To begin with Virgil in ancient Rome, the people of that time had a custom of decorating evergreen trees at certain times of the year in honor of the god of Wine. Egypt, India and many other countries have or had similar practices. For some reason the fir has been venerated by various peoples from time immemorial. Many strange and exotic legends have centered around the fir tree but not until the time of the Reformation do we find the Christmas tree's pedigree taking definite shape. It is believed by many that Martin Luther gave this custom to the modern world. It is said that he set up a fir tree and decorated it to describe the beauty of the heavens in connection with the Christmas story.

For fifty years after Luther's death there is no mention of a tree such as he is said to have set up but an obscure writer in 1604 mentioned decorated fir trees in the parlors of Strasbourg however these were without lights. Some Puritans later on frowned at the idea calling it "child's play" and vain merriment. Nevertheless the custom took root and grew slowly and surely. For two hundred years it was confined mainly to the Rhine district, when suddenly at the beginning of the nineteenth century, it spread like wildfire across Germany and within fifty years had conquered the whole of Christendom.
An example of the rapidity of its growth is afforded by the fact that Germans residing in Paris, France in 1860 could procure Christmas trees only with the greatest difficulty. Nine years later trees could be obtained in any market, while by the close of the century it took 50,000 of them to satisfy the Parisian demand. (22)

The way the custom finally crossed the English channel is especially interesting. Something like the Christmas tree is known to have enlivened the feasts of Henry the Eighth but the genuine authentic English Christmas tree we owe to Queen Victoria. It was after her marriage to a German prince that in 1841, she caused to be erected and decorated at Windsor Castle a real Christmas tree. From then on, of course, the English people followed in a body.

We in America owe our conversion to the rite to the German immigrants, who carried their tradition to our shores when they came. Always an original people, we Americans have gone the Germans one better and developed the outdoor lighted Christmas tree, which today vies with the stars in reflecting the glory and the spirit of the Christmas season.

And so indoors and outdoors, America joins with the Old World in celebrating with trees the most popular of all Christendom's feasts. Every year countless American homes are made more cheerful by the presence of these aromatic ambassadors from the forests.
History of the Yule Log

The burning of the Yule log is an ancient Christmas ceremony handed down from the Scandinavians, who at their feast of Joul, at the time of winter solstice used to kindle huge bon-fires in honor of their god, Thor. (22)

The bringing in and placing of the ponderous block, which was frequently the ragged and grotesquely marked root of an oak, on the hearth of the wide chimney in the baronial hall was the most joyous of the ceremonies observed on Christmas Eve. It was drawn in triumph from its resting place amid shouts and laughter, every wayfarer doffing his hat as it passed for he well knew that it was full of good promises and that its flame would burn out old wrongs and heart burnings.

As an accompaniment to the Yule log a candle of monstrous size, called the Yule candle or Christmas candle shed its light on the festive board during the evening. The firing of the Yule log was accomplished from a brand of last year's log which had been carefully laid aside for the purpose, and music was played during the ceremony of lighting.

History of Other Plants

The branches and berries of holly have been used since ancient times to decorate churches at Christmas and being thus associated with a sacred season and place. It is quite generally believed that the name "holly" was derived from the word holy. (16)
The mistletoe likewise has been hallowed by history. It was set aside as a plant worthy of consideration by members of the ancient Gaulish and British order of priests, known as the Druids. Early European nations revered it as a ceremonial plant, whence originated the old English custom of "kissing" under the mistletoe that has caused much fun and frolic in the past and present years of its practice. (14)

The Poinsettia, crowned with gay rosetes of vermillion leaves reflects the Christmas spirit in colorful style. It has been a fairly recent introduction to the use as a Christmas decoration being introduced by Joel Roberts Poinsett in 1835. (22)

It might be added here that a great variety of other evergreen plants too numerous to mention along with holly, mistletoe and poinsettia hold permanent place in the holiday life and typify the Christmas spirit. (8)

The Major Product

Before going into the marketing and growing, I want to mention some of the species commonly used for Christmas trees. First, however, I will take up some of the more important qualities necessary for a good Christmas tree. (2)

1. The tree must not have any miss or blank spots in the whorl of branches.

2. The internode must not be greater than nine inches.
3. The limbs should display an eveness from all sides which will give symmetry of form.

4. It should possess a dense crown of foliage.

5. The trunk should be straight. Crooked stems are a defect and such trees are unmerchantable unless the foliage is so dense that it will hide the crook.

6. It is desirable that the tree possess a striking color and fragrant foliage. A blue-green is generally preferred.

7. Branches must possess sufficient stiffness to hold up decorations.

8. It must retain its foliage for a reasonable length of time during the holiday season when it is placed in a warm room.

The spruces and true firs have the qualities mentioned above. The firs are especially adapted since they are often inferior for saw timber and in many localities are not satisfactorily located in regards to paper mills to be used for pulpmwood production. In addition to these two genera other good species are Douglas fir, the true ceders, the sequoias and the cedar-like groups.

In passing it might be of interest to note that other plants other than conifers are used as a substitute for Christmas trees in some localities. For instance in the southwestern part of the United States where the scarcity of trees and the high cost makes purchase prohibitive, cactus and similar desert plants are decorated at Christ-
Supply

The principle remaining sources of wild trees left are in the Pacific northwest, northern part of the Lake states, northern New England and New York. A large part of these areas are privately owned and are therefore not subject to any regulation. Consequently there is much waste due to too many trees being cut. In 1938 over 100,000 trees went to waste New York city alone.

There is no means at the present time to curb the waste in the cities but some important steps have been taken by the individual states and by the United States government to stop promiscuous cutting of Christmas trees on the land over which they have jurisdiction. The city of Denver, Colorado has solved the problem of destructive cutting of Christmas trees. Through the efforts of the Chamber of Commerce and the cooperation of the Forest Service the "Certified Christmas Tree" has been instigated. The public was asked to buy only trees that had a certified tag attached. Each tag had the following message printed upon it, "This tree brings a Christmas message from the great outdoors. Its cutting was not destructive but gave needed room for neighboring trees to grow faster and better." This program greatly stabilized the local market and at the same time made the public more forestry minded. Furthermore, it brought about a scientific removal of the
Christmas tree so that a benefit to the remaining trees was attained instead of haphazard removal that is generally practiced by the average individual.

In 1929 the Eldorado National Forest in California opened up an area for Christmas tree cutting. (1) The Shasta Red fir that grows on this forest is in great demand on the San Francisco market. Its silvery color and even branches make it an ideal tree.

Before the best means of cutting control was found several methods were tried and found unsuccessful. They first tried marking the trees to be cut and then let the purchasers cut their own trees. This proved a failure because unmarked trees were cut and many wasted. The second method was to hire their own crew of cutters and mark only the trees not to be cut. The results of this was a poor quality tree to the purchaser. The most successful means of cutting and handling the trees was to mark the trees to be cut, have their own cutting crews and deliver the trees out to the road where they are counted and bundled ready for shipment. To cover the expense of cutting, marking and bundling the Forest Service charged as follows.

| 1-3'    | .05  | 11-15 | .50  |
| 4-10'   | .25  | 16-25 | 1.00 |

26 and up $5
Present Business Condition of the Industry

The business of supplying the demand for trees is represented by wild speculation. (7) Men engaged in the Christmas tree business start getting ready for the Christmas tree rush around the first of July. Field men are sent out to buy trees from farmers and timber owners. This represents at least a month and sometimes two months work.

Once the trees are bought they are forgotten until October. Cutting crews are then hired and the trees are cut and bundled on the premises then hauled and stored in damp moist places so as to keep them fresh. When the time comes to ship they are trucked to railroad sidings where they are loaded onto railroad flat cars, 450 bundles to the car. (7)

Thus one can see that before the trees are sold dealers sink a considerable amount of money into this enterprise.

Prices

The best that a tree will bring on the market is from fifty cents to four dollars. If the market does not become overcrowded the wholesaler makes a good profit but if too many trees are shipped there results a loss in money not to mention the several hundred trees lost. As an example of prices in 1936, 260 cars with an average of 3000 trees per car were shipped out of western Washington and
sold principally to the southern states. The sales from this shipment netted an average of thirty cents per tree. (2)

Growing

With the forest being rapidly depleted each year there is a tendency for a shortage of Christmas trees in portions of the United States. This is shown by the fact that around five million Christmas trees are shipped annually now to the United States from Canada. (20) Therefore tree sources supplementing the sales areas should be established in thickly populated areas distant from any wild stands of Christmas tree species. Broadly speaking, these plantations would be most profitably located if established in the Central Plains Region and in the Southern States. At the present time most of the demand in these regions is being supplied from forests of the north and west by shipping in carload lots of tightly packed trees. Most of these trees have been cut weeks and even months before the holidays and consequently have poor lasting qualities, when shipped from such distant sources. Thus they generally lose their foliage as soon as taken into a warm room. Other allocating factors are: distance to large cities, site conditions and fire protection. A plantation located within truck hauling distance of a large town or city and remote from an extensive supply of wild trees would appear to be well situated as far as markets are con-
cerned. In regards to site, almost any soil of good texture will grow conifers but best success is achieved where the extremes of coarse sands and heavy clays are avoided. Swamp soils are also undesirable. Land that can be cultivated should be selected if the plantation is going to be permanent. Concerning the protection factor, the chief destructive forces are fire, insects, fungous diseases, and livestock. These must be guarded against on plantations where cultivation is not going to be continuous and where such plantations are grown in conjunction with timber production. In a grazing region fencing must be resorted to in order to protect the plantation. Insect and fungous diseases cannot be completely excluded but selection disease free seed and practice of forest sanitation are feasible along with practicable measures of protection.

Trees to Plant

Norway spruce, blue spruce, white spruce, white fir (concolor) balsam fir, Deodor ceder, Douglas fir, eastern red ceder and others are all good trees. Taking all factors into consideration Norway spruce is to be recommended over the others listed. Blue spruce is a slower grower but has an advantage of having a dense blue crown of foliage. White fir is well adapted to to severe climates. Balsam fir is not successfully grown outside of its natural range. Douglas fir is probably as desirable as Norway
spruce except for its slower growth. Deodor and eastern red ceder are better adapted for warmer climates. For eastern planting when western species are to be used the seed should be obtained from the Rocky Mountain varieties in order to insure hardiness and resistance to temperature, insects and disease.

**Planting**

Planting costs and weeding expenses will be less if the plantation has been adequately prepared before planting by plowing in the fall and discing in the spring prior to planting. Four feet by four feet spacing is to be recommended as this provides ample room for cultivation and proper development of the trees.

Spring is usually the best time for planting but fall planting is permissible if proper moisture conditions are in evidence. Transplants should be heeled in if there is a delay in planting. Watch the following points in planting. Keep the roots moist all the time, crowding of the roots in the hole should be avoided, thoroughly tramp the soil around the roots of the young tree, and do not set the tree any deeper in the ground than it stood in the nursery. (23)

It is recommended that the plantation be cultivated three or four times each summer for the first two years. This may be done at odd times when other work is not pressing.
Plantations and Woodlots

The establishment of a plantation affords a profitable side line for farmers living in some parts of the United States. The crop in addition to being an added source of revenue is sold at a time of the year when extra income is particularly acceptable. In addition to these advantages the growing of Christmas trees is a means of utilizing waste land on the farm. In proper locations small areas of such waste land if planted to Christmas trees before it is reclaimed by brush and briars can be made to yield a return instead of becoming a liability. If desired this production could very readily be combined with forest planting for timber production. A few farmers have recognized the superiority of home-grown trees and the opportunity for selling them. As a result, some trees are now produced on farms on a crop basis principally for local sale. The indications are that this practice could be extended in many localities, managing the crop on a rotation of from eight to ten years.

Christmas Tree Marketing

Up until recently little thought or attention has been given to Christmas tree merchandising. If there is to be an expansion in the industry this will have to be considered.

One method developed is known as the Christmas tree yard where several rows of posts ten feet apart are
erected. Two strands of wire at the top are stretched across these posts. The trees are set in between the wires to hold them erect. This allows the customers to view the trees from all sides while at the same time not cause any damage by trampling or handling the trees.

A recent development which will probably assist in merchandising has been made possible by the discovery that by emersing the butt of the tree into a solution of calcium chloride for a short length of time will make a tree fire resistant. From tests made it is impossible to ignite the foliage by the application of a candle to the branch. In addition this treatment holds moisture in the foliage thus retaining the natural color and preventing the needles from dropping off.

Minor Products

A new use of heretofore thought of as waste products is rapidly coming into its own. In Christmas tree sales areas limbs of the unused portion of the bole are being sold by the ton to be used for decorative purposes. Some of the more common products are:

Roping that is used in street decorations and large building decorations has quite a demand. This decoration is usually made from balsam fir, ceder or ceder-like trees.

Wreaths are usually seen made from holly but they are made from ceder and other trees also.
Cones are used for decorations around the home. The most desirable cones used are cones of the genus *Pinus*.

Needles are also often used. Balsam fir and pine needles are either used whole or ground up or sometimes used for burning or pillow making.

**Conclusion**

Much more is needed in the line of research on growing of trees and legislation followed by efficient law enforcement should be promoted to prevent trespass.

The nature of the enterprise negatives any great expansion in future markets due to the relatively short life of the biggest part of the products and the characteristic traditional use prevents any voluminous increase in the production of materials. An increase over present production can be experienced by preventing any trespass and by encouraging the use of more evergreen decorations in the form of wreaths, garlands and other made up decorations. Higher prices can be enjoyed from cut trees if more attention be given to the selection of the trees that are to go market.

In conclusion I would like to remind you that Christmas tree production in conjunction with other land uses wherever possible means closer and more efficient utilization. In the wild forest areas this fact is evidenced chiefly in improvement thinnings. On plantations it can
be made possible by interspacing Christmas tree species in with the principal tree crop.

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PARTRIDGEBERRY BOWL

A round, glass bowl, approximately four inches in diameter, fitted with a tight glass cover. This bowl has been scientifically filled with Partridgeberries. The work has been so carefully done that they will continue to grow and will become increasingly attractive over a long period. The leaf of the Partridgeberry is evergreen, the berries a brilliant red.

We can ship these Bowls safely, anywhere.

A pretty gift. The red ribbon matches the red of the Partridgeberry.

The Aiken Partridgeberry Bowl, each $1.00
One dozen bowls........................................... 10.50

BALSAM ROPING

By far the finest of all holiday roping for use indoors or out, is that made from Balsam. It does not shed its needles in warm rooms like spruce or hemlock, nor curl like laurel and holly. It fills the house with its fragrance and may be taken apart for filling pillows or fireplace burning after the festive season. Order early for home, store, church or school use. We make two grades.

Heavy hand-made roping 5 yards, $3.00; 10 yards, $5.00; 100 yards, $40.00.
Lighter grade, but well made, 5 yards, $1.50; 10 yards, $2.50; 100 yards, $15.00.

For color variation, we can furnish Hemlock, White Pine, Arborvitae or Spruce at same price as light weight Balsam.

18. PINE CONE CANDLE. Imparts the pungency of burning pine; appropriate rich brown color. A novel holiday decoration. 50 cents
OLD-TIME CHRISTMAS BASKET

An attractive hand made basket of Ash Wood. It is 18 by 10 by 8½ inches, has double handles and a hinged cover. Just the basket for picnics and a dozen other uses and will last a lifetime. We have lined this basket with fragrant Balsam and have filled it with:

- 3 pounds of real bearpaw popcorn
- 2 pounds of Butternuts
- 1 Partridgeberry Bowl
- 2 Half pound boxes of apple jam.

Here is an unusual and a most delightful gift. We know it will bring pleasure to whoever receives it, and recommend it unhesitatingly.

The Old-Time Christmas Basket

- One dozen baskets: $3.50

The Old-Time Christmas Basket is

PINE CONE CANDY CONTAINERS. Top of tray is spread with bed of pine boughs among which nestle cones filled with red, green, and white mints. The candy is tucked between scales. (Flanked by red candles, candy-filled cones make fine buffet supper centerpiece)
CHRISTMAS WREATHS

We have seven wreaths of different size and design—all made of splendid fragrant BALSAM and trimmed with various evergreen cones and with bright berries. This material we gather, painstakingly, after the natural shedding of needles has taken place.

No. 1—12-inch wreath with five cones and five sprays of red berries, $1.00 each, 3 for $2.50.
No. 2—15-inch wreath with six sprays of cones and six sprays of red berries, $1.50 each, 3 for $4.00.
No. 3—20-inch wreath with five large cones and five sprays of berries, $2.00 each, 3 for $5.00.
No. 4—20-inch wreath with continuous decoration of cones and berries, $3.00 each, 3 for $7.50.
No. 5—A large 26-inch wreath built on a frame for store or cemetery use. Decorated with cones, catkins and berries, $6.00 each.
No. 6—The largest wreath we make. Like No. 5, only 30 inches in size. $8.00 each.
No. 7—This 20-inch garland wreath is one of our loveliest. Large cones and sprays are used in a design at the bottom, a large red ribbon bow adorns the top. We offer this wreath with an electric candle and cord. $4.00 each. Without cord or candle, $2.50 each.

OTHER SUGGESTIONS

Fragrant Balsam Pillows.................$1.00
Maple Hearts, 2/3 pound box.............$0.30
Maple Sugar, 1 lb. box cakes.............$0.55
White Pine Cones for Firelace, 2 bushel sack.................................$1.00

BASKET WREATH

An unusual little wreath, about 18 inches across, made and decorated to look like a balsam basket filled with berries and cones. The handle is wound with Balsam and trimmed with red ribbon. $1.50 each, 3 for $4.00.

CHRISTMAS CANDLESTICKS

Made of Balsam tips, red berries and cones on a sturdy frame. About nine inches across, furnished with 10-inch candles.
$1.25 each, $2.00 a pair.
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