Retailing and Wholesaling of Christmas Trees Within Selected Areas, North Central Region

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RETAILING AND WHOLESALING OF CHRISTMAS TREES WITHIN SELECTED AREAS, NORTH CENTRAL REGION

by

G. H. Mitchell and J. G. Kendrick¹/

INTRODUCTION

A large portion of the land area in the North Central Region is adaptable for growing Christmas trees. It has been estimated that the entire market within this area can be supplied by locally grown trees.² In fact, production of Christmas trees by both the plantation and other methods has increased greatly during the past ten years, and forecasts seem to indicate that this trend will be accelerated in the years ahead.^{3,4} However, the mere production of locally grown trees does not mean automatic market acceptance. Knowledge of market conditions and practices has been lacking.

The purpose of this study was to secure information on Christmas tree marketing that would aid growers, wholesalers, and retailers in acquiring a better understanding of markets. Specific information was obtained on these items:

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²American Christmas Tree Growers' Journal, February, 1958, pp. 8 and 9, August, 1957, pp. 15.

³Econogram, Agricultural Extension Service, Columbus, Ohio, December 23, 1958.

⁴Ohio-Grown Christmas Trees - Production and Marketing, Technical Paper 152, Central States Forest Experiment Station, May, 1958.

- 1. What species are prominent with wholesalers and retailers within the market area?
- 2. What quality of tree seems to be favored by wholesalers, retailers?
- 3. What prices are asked by wholesalers and retailers for their trees?
- 4. What are the major sources of supply of trees sold by wholesalers and retailers?
- 5. What is the duration of the market for Christmas trees?
- 6. What are the characteristics of the wholesaler and retailer dealing with Christmas trees?

Methodology and Limitations

The raw data was collected by personal interview, using standard questionnaires.⁵ The cities, and retailers within the cities, were chosen by random sampling technique for the entire North Central Region, not by individual states.

The fieldwork, or actual collection of data, was conducted by trained graduate students, seniors, state foresters, research assistants and/or members of the staff of the cited cooperating Experiment Stations.⁶ All data were collected during the last two weeks of December, 1956, and first week of January, 1957.

When retailers were interviewed, they were asked from what wholesaler (s) they purchased trees. All wholesalers named were noted and questioned at a later time.

⁵See Appendix "A" and "B".

⁶In Ohio, the Central States Forest Experiment Station cooperated with the Ohio Agricultural Experiment Station.

This study concerns itself with selected population areas within the North Central Region. For certain tabulationshowever, the cities and towns are treated as being representative of their respective states. Hereafter when state classifications are used it will be understood that the data are for the cities and towns listed in Table 1, and Chart 1.

Table 1

SAMPLE: Cities and Towns Chosen for Study of Retailing and Wholesaling of Christmas Trees Within the North Central Region, 1956

Area and City	Population	Area and City	Population
Illinois Chicago	8,712,176 3,620,962	Minnesota Minneapolis 🖌 St. Paul	2,982,483 833,067
Iowa Cedar Rapids Davenport Iowa City	2,621,073 72,296 74,549 27,212	Missouri Jackson Jefferson City Sikeston	3,954,653 3,707 25,099 11,640
Kansas Garden City Kingman Manhattan Topeka Wichita	1,905,299 10,905 3,200 .19,056 78,791 168,279	Nebraska Columbus Norfolk	1,325,510 8,884 11,335
Michigan Detroit Grand Rapids Lansing	6,371,766 1,849,568 176,515 92,129	Ohio Canton Columbus Washington C.H.	7,946,627 116,912 375,901 10,560

SOURCE: Census of Population, 1950, Volume I, Number of Inhabitants.

The columns of tables may not add to their respective totals because of rounding.





RETAILERS - WHAT SPECIES DO THEY BUY? WHAT SPECIES SELL BEST? WHAT SPECIES SOLD OUT FIRST?

The headings above are taken together since the purchase of a certain species by a retailer does not mean that that species sold best or was sold out first. Many factors may enter into the picture to alter the relationship that should exist, i.e., that species selling best are those that retailers buy most. Some of these complicating factors could be, and undoubtedly are, nonavailability of wanted species in sufficient quantities and misjudgment of the market by retailers. Table 2 shows tree species offered for sale by retailers compared by states.

Table 2

TREE SPECIES: Percentage Distribution of Various Species Offered for Sale by Retailers, Selected Areas, North Central Region, 1956

Area	Scotch Pine	Balsam Fir	Red Pine	White Pine	Spruce	Douglas Fir	Others	Total
Illinois Iowa Kansas Michigan Minnesota Missouri Nebraska Ohio	19.9 19.5 1.3 33.9 * 0.6 * 18.6	60.7 46.2 12.2 469.0 68.5 1.2 65.4	1.1 1.6 1.4 10.5 16.0 * * 6.4	* 0.1 * * * * * * * * * * * * *	16.3 0.1 0.4 26.7 10.0 1.0 * 3.7	1.6 30.6 83.5 1.9 * 23.0 97.7	0.4 2.0 1.2 3.7 5.0 7.0 1.1 3.5	100.0 100.0 100.0 100.0 100.0 100.0 100.0

* None reported or negligible.

Douglas fir predominates in the cities sampled in the plain states of Mebraska and Kansas. Balsam fir is stronger in the "lake states.' It is suggested by the authors that retailers buy trees of various species based upon consumer acceptance and availability patterns that have been established through the years. These consumer acceptance patterns are largely traditional views of what a Christmas tree should be, based primarily upon what is available.

Table 3 indicates what tree species sold best (i.e., The species with the largest consumer demand as reported by retailers) in various areas.

Table 3

TREE SPECIFC: Percentage Distribution of Tree Species That Sold Best, from Retail Lots, by Selected Areas, North Central Begion, 1956

Area	Scotch Pine	Balsam Fir	Red Pine	Uhite Pine	Spruce	Others/	Total
Illinois Ioua Kansas** Michigan Minnesota Missouri Nebraska Ohio	25.0 21.1 9.5 28.5 sample 5.9 * 25.0	62.5 19.3 5.3 14.3 too sma 41.4 * 61.1	* 1.6 4.8 11 to * 1.3	* * be vali * *	5.0 3.2 38.0 3.4 * 4.2	7.5 59.6 80.4 14.3 48.3 100.0 4.2	$ \begin{array}{c} 100.0\\ 100.0\\ 100.0\\ 100.0\\ 100.0\\ 100.0\\ 100.0\\ 100.0\\ 100.0\\ \end{array} $

/Approximately 95% are Douglas Fir.
*None reported or negligible.
**In Kansas the percentage for Douglas fir was 73.1% of total species

It is of interest to compare this table with Table 2. In Iowa, for example, balsam fir amounted to 45.2 percent of total trees offered for sale by retailers. However, only 19.3 percent of these same retailers indicated that balsam fir sold best of the various species. Missouri has a similar situation. These facts may indicate -6-

that in some locations, within the region, retailers are purchasing balsam fir in excess of consumer demands, and in some areas, Scotch pine is purchased in amounts that are less than that demand. Other such relationships exist, though not of the proportion of the Scotch pine and balsam fir species.

With regard to what species "sold out first," Table 4 shows that the differences between what species "sold best" and "sold out first" are small and both show the peculiar relationship that exists for the Scotch pine and balsam fir species.

Table 4 TREE SPECIES: Percentage Distribution of Tree Species that Sold Out First from Retail Lots, by Selected Areas, North Central Region, 1956

Area	Scotch Pine	Balsam Fir	Red Pine	White Pine	Spruce	Others/	Total
Illinois Iowa Kansas** Michigan Minnesota Missouri Nebraska Ohio	19.4 27.1 10.0 21.4 7.1 11.8 * 25.9	64.5 16.7 5.3 17.9 21.4 37.3 * 50.0	* 4.2 1.4 7.1 42.9 * 5.2	* * * 7.1 * 3.4	6.5 * 32.1 14.3 5.9 10.3	9.7 52.1 80.2 21.4 7.1 45.1 100.0 5.2	100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0

/Approximately 95% are Douglas Fir.
*None reported or negligible.
**In Kansas the percentage of Douglas fir was 76.1% of total species

RETAILERS - WHAT QUALITY TREES DO THEY HANDLE?

In determining the quality of trees handled, approximately 50 trees were graded at each of the retailers contacted according to 4 grades.⁶ These grades were compared between the eight states of the study. The findings are summarized in Table 5. No major differences were noted between states.

Table 5

TREE QUALITY: Percentage Distribution of Tree Quality of all Species Offered for Sale by Retailers, Selected Areas, North Central Region-1956

Alea	<u></u> FTemtum	<u>6000</u>	Utility	Cull	Total
Illinois Iowa Kansas Michigan Minnesota Missouri Nebraska Ohio	5.4 10.2 21.6 7.0 10.0 16.9 31.8 5.5	39.8 38.3 50.3 32.8 30.0 37.0 41.3 25.7	43.2 41.7 24.2 53.0 53.0 53.0 53.0 54.5 21.8 21.8 49.3	11.8 9.8 3.8 7.2 16.0 13.6 4.9 19.5	100.0 100.0 100.0 100.0 100.0 100.0 100.0

Kansas and Nebraska with high percent of imported trees, appear to have a higher percent of trees grading premium and a lower percent grading cull. The study on tree prices has shown (not presented in tabular form) that premium trees sell for higher prices than good or utility trees. Unpublished data dealing with preferences of consumers concerning Christmas trees indicates that consumers want,

⁶See Appendix "C" for method of grading.

and apparently will pay for, premium trees. The point to be made here is that a potential market exists for trees of premium quality.

RETAILERS - WHAT PRICE DO THEY ASK?

In order to get a clear picture of prices asked by retailers, the average price of trees four to seven feet in height and graded "good" was used as a standard. Five major species were chosen, plus another classification of "other" which contains species found only in selected market areas and not common to the region. Some of the species grouped within the "other" class are black spruce, Virginia pine, ponderosa pine, etc. Prices asked by retailers for these various species were compared by city size and results were found to be as shown in Table 6. It is suggested that the prices quoted for red pine, spruce and others be interpreted as "spot prices" and not averages by city size. Meaningful data were obtained concerning balsam fir, Douglas fir, and Scotch pine, however.

Table 6

RETAILERS: Average Price Asked by Retailers for Trees 4 to 7 Feet in Height and Graded "Good" by City Size and Selected Species, North Central Region, 1956

City Size	Balsam Fir	Douglas Fir	Scotch Pine	Red Pine	Spruce	Other
Under 10,000 10,001 to 25,000 25,001 to 50,000 50,001 to 100,000	\$2.20 2.22 2.51 Insuffi	\$2.04 2.29 2.22 cient Inf	\$5.00 4.96 5.37 formation	\$ * 5.37 Availa	\$ * * * able	\$ * 5.25 1.62
100,001 to 250,000 250,001 or over	2.91 2.73	2.46 *	5.23 4.91	4.41 4.30	3.31 3.02	3.50 4.05

*None Reported or Negligible.

As city size increases, prices asked for balsam fir and Douglas fir also increase, suggesting either that retailers in the larger cities are pricing on a basis other than "cost plus," or that retailers experience higher costs in the larger cities. It was first felt that transportation costs for Douglas fir and balsam fir (largely imported) would be less in large cities, due to quantity purchases, and therefore the price asked should tend to be lower as city size increases. It was shown that the reverse is true and may be due to increased operating expenses. Scotch pine prices seem to remain fairly constant regardless of city size.

RETAILERS - WHERE DO THEY BUY TREES?

Table 7 shows from what source retailers in various states purchase their trees.

Area	Local Wholesalers	Local Growers	Truckers	Own Trees	Others/	Not Reported	Total
Illinois Iowa Kansas Michigan Minnesota Missouri Nebraska Ohio	44.0 20.8 40.0 16.1 18.0 8.8 74.3 44.5	4.9 4.7 0.5 40.5 24.0 4.4 0.1 15.5	2.5 49.0 * 2.9 3.0 1.0 * 1.1	1.8 * 1.2 3.0 * 8.7	45.9 20.7 59.5 32.7 52.0 82.8 25.5 30.2	0.9 4.8 6.7 3.0 *	100.0 100.0 100.0 100.0 100.0 100.0 100.0

Table 7 SOURCE OF TREES: Percentage Distribution of Sources of Trees Offered for Sale by Retailers, Selected Areas, North Central Region, 1956

/ Consists mainly of out-of-state wholesalers and out-of-state growers.
* None reported or negligible.

Wide variation in tree sources are noted in Table 6 between individual states. Missouri retailers purchase only about 9 percent of their trees from local wholesalers, and about 83 percent from other sources which are primarily out-of-state wholesalers and growers. Nebraska, on the other hand, indicates that retailers purchase about 74 percent of their trees from local wholesalers.

RETAILERS - WHEN IS THE BUSINESS PERIOD? WHEN DO THEY BUY TREES?

The duration of the market period for Christmas trees is short. Table 8 indicates the average number of days retailers were open for business in the various areas. Wide extremes are noted in each state separating the maximum and minimum number of days retailers are "open for business."

٤	Table 8
BUSINESS	PERIOD: Average Number of Days Before Christmas
	Retailers were Open, by Selected Areas,
	North Central Region, 1956

Area	rea Average		Low
Illinois Iowa Kansas Michigan Minnesota Missouri Nebraska Ohio	13 22 23 18 21 19 21 17	40 34 30 42 30 30 25 50	5 14 10 6 10 15 8

As indicated in Table 8 retailers sell trees for only a few days; however, retailers purchase trees throughout the year. Table 9 summarizes the time of purchase of trees by retailers.

> Table 9 TIME OF PURCHASE: Percentage Distribution of Retailers Purchase of Trees by Selected Species and Time Periods, North Central Region, 1956

Time Period	Scotch Pine	Balsam Fir	Red Pine	White Pine	Spruce	Others*
January thru March	6.2	7.3	0.6	2.1	27.6	23.5
April thru June	12.1	2.5	1.8	0.0	7.0	4.9
July thru September	28.6	17.2	19.8	0.0	8.7	5.3
October thru December	53.2	73.0	77.7	97.9	56.8	66.3
Total	100.0	100.0	100.0	100.0	100.0	100.0

*Approximately 95% Douglas Fir.

It will be noted that Christmas trees are purchased or contracted for during the entire year, but by far the largest percentage of trees are purchased during the last quarter of the year. The significance of the data suggests that regional growers might be able to **ca**pture a larger percentage of the market if retailers and wholesalers were contacted earlier in the year.

RETAILERS - WHO ARE THEY?

Regional retailers of Christmas trees were found to range from Boy Scouts to members of the Chamber of Commerce. Among the occupations found were stockyard workers, students, draftsmen, and truck drivers, to list but a few. Groceries, electrical appliance dealers, drive-in restaurants, feed stores, and garden supply stores were found to be

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common retail outlets of Christmas trees. Christmas trees generally are sold, on the retail level, by people from almost every occupation. The authors felt that perhaps a relationship might be found between city size and the normal business of the retailers of Christmas trees. Accordingly, four general classifications of occupation were established to make the tabulation more meaningful. The four classes chosen were "retail other than grocery", "business other than retail or civic", and lastly, "charity or civic." Six mutually exclusive city sizes were selected, and the results presented in Table 10 below.

Table 10 RETAILERS: Percentage Distribution of Retailers of Christmas Trees, by Type of Business and City Size, North Central Region, 1956

City Size	Retail Grocery	Retail Other Than Grocery	Businesses Other Than Retail or Civic	Charity or Civic	Total
Under 10,000	77.6	18.8	*	3.5	100.0
10,000 to 25,000	74.6	20.3	3.4	1.7	100.0
25,001 to 50,000	83.3	9.5	2.4	4.8	100.0
50,001 to 100,000	47.2	36.1	8.3	8.3	100.0
100,001 to 250,000	20.4	28.0	48.4	3.2	100.0
250,001 or over	21.7	33.5	42.8	2.0	100.0

*None reported or negligible.

One of the first conclusions that can be drawn from Table 10 is that civic or charity organizations account for a relatively small but stable percentage of the market regardless of city size. The percentage for each city size varies, of course, but no trend is noted. With regard to "retail groceries," "retail other than grocery", and "businesses other than retail or civic," a definite pattern or

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trend is observed. As the city size increases the percentage of the total market taken by groceries falls; likewise under the same conditions "businesses other than retail or civic" and "retail other than grocery" absorb an increasing share of the market.

RETAILERS - WHERE DO THEY SELL THE TREES?

Christmas tree sales locations vary widely within the region from churches to empty lots. It was decided to establish six general classifications of lot type and determine if the percentage of each changed with increases in city size. Some types of lots accounted for a relatively stable percentage of total sales, regardless of city size, others showed increases or declines as city size was changed. The results are summarized in Table 11 below.

		Table 17			
RETAILERS:	Percentage	Distribution	of Nature	of	Lots
Sell:	ing Christ	mas Trees, by	City Size	,	
	North Cei	ntral Region,	1956		

	Chain Food	Drive-In	Gas	Local Food	Empty		
City Size	Store	Restaurant	Station	Store	Lot	Other	Total
Under 10,000 10,001 to 25,000 25,001 to 50,000 50,001 to 100,000 100,001 to 250,000 250,001 or over	7.6 24.0 19.6 5.6 5.6	1.1 1.6 0.0 2.8 1.7 8.1	2.2 6.5 0.0 11.1 10.3 11.9	67.0 50.0 64.3 41.7 18.8 16.3	1.1 0.0 2.4 22.2 35.0 21.3	20.9 17.7 14.3 16.7 25.6 36.9	100.0 100.0 100.0 100.0 100.0 100.0

The number of retailers selling from either gas station or empty lot locations rises as city size is increased while the number selling from grocery lots other than chain stores falls. Referring to Table 10, it can be seen that as city size increased more retailers

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A sheared planting of Scotch pine is shown here. The tree plantation is located in New Plymouth, Ohio.



This was a consumer preference display on a lot in Columbia, Missouri. Varieties represented were Red and Scotch pine, Balsam, E. red cedar, Douglas fir and Jack pine. were found to be of the "retailers other than grocery" and "professions other than retail or civic" classification, hence these trends would be expected. In general, it may be stated that in the larger cities more trees are sold from empty lots and gas stations, less in local food stores than is the case in smaller cities. The "other" classification in Table 11 refers to the many different types of lots used to sell Christmas trees, including churches, public property, and nurseries.

RETAILERS - HOW DO RETAILERS PURCHASE TREES?

Within the region three major buying methods were used by retailers. Table 12 summarizes the findings.

Area	Bundled	Cut, but Loose	On the Stump	Not Reporting	Total
Illinois Iowa Kansas Michigan Minnesota Missouri Nebraska	34.6 69.0 94.2 8.4 92.0 98.6	15.1 22.1 5.0 59.4 85.0 8.0 0.1	6.5 9.0 * 18.5 6.0 * 1.3	43.8 * 0.8 13.7 * *	100.0 100.0 100.0 100.0 100.0 100.0

Table 12 BUYING METHOD: Percentage Distribution of Form of Purchase of Trees by Retailers, Selected Areas, North Central Region, 1956

*Negligible.

The high percentage of bundled trees purchased by retailers is probably attributable to the high percentage of Douglas and balsam fir purchased by retailers. Balsam and Douglas fir are sold largely in bundled form. Growers of Christmas trees should note the small percentage of trees in the region that were sold "on the stump". This indicates that retailers do not prefer this method, and growers may experience difficulty if trees are expected to be marketed in this manner, rather than as "on-thetruck" or delivered basis.

RETAILERS AND WHOLESALERS - WHAT IS THE ORIGIN OF THE TREES?

In order to obtain information concerning the origin of trees sold by retailers and wholesalers, two general classifications were selected: imported and locally grown. Imported trees refers to trees grown outside the state in which they were sold. Table 13 indicates the findings.

Table 13 SOURCE OF TREES: Percentage Distribution of Origin of Christmas Trees Offered for Sale in Selected Areas of States in the North Central Region, 1956

Area	Locally Grown	Imported	Not Known	Total
Illinois Iowa Kansas Michigan Minnesota Missouri Nebraska Ohio	2.8 3.3 4.0 81.4 76.0 6.9 * 38.0	63.9 96.7 96.0 18.6 24.1 93.1 100.0 62.0	33.3 * * * * * *	100.0 100.0 100.0 100.0 100.0 100.0 100.0

*None reported or negligible.

Individual states vary considerably from the regional average, and range from Michigan - 81 percent local trees, to Nebraska - 100 percent imported trees. The reader is reminded that the percentages stated in Table 13 may not be exact for each state; however, the predominance of imported trees is correct. For the region as a whole, by far the greater part of trees is imported rather than locally grown.

WHOLESALERS - WHAT TREES DO THEY BUY?

The trees purchased by wholesalers within the region are summarized in Table 14.

Table 14

TREE SPECIES: Percentage Distribution of the Number of Trees Handled by Wholesalers, by Various Species, Selected Areas, North Central Region, 1956

Area	Scotch Pine	Balsam Fir	Red Pine	White Pine	Spruce	Douglas Fir	Others/	Total
Illinois Iowa Kansas Michigan Missouri Nebraska Ohio	11.3 30.2 6.0 49.4 * 20.0	79.1 47.8 2.8 12.8 31.1 4.7 72.1	2.3 8.6 5.1 18.6 * 6.9	* 0.3 0.9 * * 0.6	* 1.6 17.6 5.2 * 0.4	* 85.2 63.7 94.6 *	7.2 3.4 0.8 * 0.7 0.1	100.0 100.0 100.0 100.0 100.0 100.0 100.0

/Includes Alpine fir, jackpine, Norway pine, Austrian pine, ponderosa
pine, Virginia pine.
*None reported or negligible.

The reader will note that the percentages quoted in Table 14 do not agree with the percentages referring to the species of trees offered for sale by retailers as shown in Table 2. This fact does not indicate inconsistency in the data, but strongly points to the fact that retailers purchase trees from wholesalers and growers outside state boundaries as well as from local wholesalers and growers. The wholesalers of Michigan strongly favor Scotch pine, while those in Kansas and Nebraska favor Douglas fir. Balsam fir is preferred by wholesalers in Illinois, Iowa and Ohio. Red pine, white pine and spruce do not command a large percentage of the market in any states of the region. Growers should note that when contemplating shifting places of sale of trees between wholesalers and retailers of a particular state, preferences for species of trees might be somewhat different.

WHOLESALERS - TIME OF CONTACT WITH SUPPLIERS

Wholesalers contact suppliers of Christmas trees earlier in the year than retailers. Table 15 gives this information by quarters.

	with Supplier No	rth Central R	ls Trees, Sele Region, 1956	cted Areas,	
Area	lst Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total

75.0

22.2

42.9

66.7

25.0

55.4

*

×

66.7

15.4

57.1

11.1

75.0 18.8 100.0

100.0

100.0

100.0

100.0

100.0

100.0

25.0

¥

30.7

22.2

11.1

×

Table 15 WHOLESALERS: Time of Original Contact by Wholesalers With Suppliers of Christmas Trees, Selected Areas, North Central Region, 1956

*None reported or negligible.

*

11.1

53.9

×

٭

14.7

Illinois

Michigan

Missouri

Nebraska

Iowa

Ohio

Kansas

The range of data is from Kansas, whose wholesalers contact 53.9 percent of suppliers during the first quarter, to Nebraska, whose wholesalers contact 75 percent of suppliers during the last quarter of the year. The growers of the region will note the relatively small percentage of contacts made during the first and second quarters of the year. In order for growers to obtain a more favorable market position for their trees, the authors urge early contact of wholesalers by regional growers.

CONCLUSIONS

The tables and text presented in this bulletin indicate selected regional conditions and individual state and/or city-size conditions regarding various activities of wholesalers and retailers of Christmas trees during the 1956 Christmas season. A number of conclusions, indicating the various local situations, may be drawn from the data. Wholesalers Contacted

- 1. Favor Douglas fir, balsam fir and Scotch pine species.
- 2. Expressed a limited desire for red pine, white pine and spruce species.
- 3. Contact suppliers of trees during the entire year, but the majority of contacts were made during the last two quarters of the year.

Retailers Contacted

- 1. Majority purchased their trees in cut form.
- 2. Sell trees to the public for a short time, 21 days being average.
- 3. Purchase trees during the entire year, the last quarter being by far the period of heaviest purchase.

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- 4. Obtain the greater part of their trees from wholesalers, either local or out-of-state.
- 5. Sell few premium and cull grade trees.
- 6. Sell trees from all types of lots; local food stores, empty lots and chain food stores are the most prevalent in the order listed.
- 7. Retail groceries and other retail stores are the most common retailers of Christmas trees.
- 8. Ask higher prices for balsam fir and Douglas fir in the larger than in the smaller cities.
- 9. Purchase trees of all species; balsam fir, Douglas fir and Scotch pine are the outstanding favorites.
- 10. Indicate that tree species that sold best are Douglas fir, balsam fir, spruce and Scotch pine.

General

The greater part of trees sold within the North Central region are grown outside the states in which the retail sales were made.

Recommendations

Growers:

- 1. Study local market conditions closely prior to extending plantings, especially of red pine, and white pine species.
- 2. Contact buyers of trees during the first two quarters of the year in order to secure a larger share of the market.
- 3. Plan to transport trees to the buyer or provide an on-the-truck service; few trees are purchased "on the stump."

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Prices were reduced on Dec. 24 in Wooster, Ohio at this lot. A "Reduced for Quick Sale" sign was posted to clear out low quality Scotch pine.



Balsam fir trees were sold at this wholesale lot in Canton, Ohio. The men shown in the photograph handled seven carloads of Canadian balsam trees in 1956. Retailers:

- 1. Contact sources of supply earlier in the year so that wanted species and quality may be obtained.
- 2. Study local market carefully to determine species of trees that consumers desire. In some areas within the region tree species purchased in large quantities are not selling the best.
- 3. Inquire from local wholesalers concerning purchase of locally grown trees instead of imported trees. There might be a favor-able price difference.

Wholesalers:

- 1. Contact suppliers earlier in the year to obtain wanted quality and species.
- 2. Inquire of local growers concerning species, quantity and quality available.
- 3. Study local market conditions concerning consumers preference for various species, especially Scotch pine.

- Bagley, W. and Feder, E. How We Buy Christmas Trees in Nebraska. Station Bulletin, Nebraska Agricultural Experiment Station. 1958
- Brundage, R. C., Nicewander, W. and Kohls, R. L. Christmas Trees Purchased by Families in a Medium - Sized City. Cir. 416, Purdue Agricultural Experiment Station, Lafayette, Indiana. 1955

Retailing and Wholesaling of Christmas Trees Within Selected Areas of North Central Region. Res. Cir. 669. Purdue University Agricultural Experiment Station, Lafayette, Indiana.

- Hacskaylo, J., Goslin, W. E. and Diller, O. D. Managing Scotch Pine for High Quality Christmas Trees. Res. Cir. 64, Ohio Agricultural Experiment Station, Wooster, Ohio. 1959
- Huey, G. M. and Hutchinson, S. B. Marketing Montana Christmas Trees. Bull. 2, Montana State University School of Forestry, Missoula. 1949
- James, L. M. Resurvey of Christmas Tree Marketing in Michigan. Special Bull. 419, Michigan State Agricultural Experiment Station, East Lansing. 1958
- Lorenz, R. W. and Fox, H. W. Returns from Pruning a Young Red Pine Plantation for Christmas Greens. Forestry Note 18, Illinois Agricultural Experiment Station, Department of Forestry, Urbana. pp. 1-3. 1950
- Metcalf, W. California Christmas Trees 1954. California Agricultural Experiment Station, Berkeley. 1955
- Mitchell, G. H. and Quigley, K. L. Christmas Tree Purchasing Habits of Greater Columbus, Ohio Consumers--1956. Department Mimeograph Series A.E. 287, Ohio Agricultural Experiment Station, Wooster, Ohio. December, 1956
- and Casey, R. R. Marketing Ohio Grown Christmas Trees Through Wholesale Outlets. Res. Cir. 47. Ohio Agricultural Experiment Station, Wooster, Ohio. September, 1957

Christmas Tree Purchasing Habits in Greater Cleveland, Ohio, 1957. Res. Cir. 65, Ohio Agricultural Experiment Station, Wooster, Ohio. March, 1959

- Paulsell, L. K. and Nichols, J. M. Marketing Christmas Trees in Missouri. Bull. 719, Missouri Agricultural Experiment Station. 1958
- Quigley, K. L. and Mitchell, G. H. Ohio-Grown Christmas Trees-Production and Marketing. Technical Paper 152, Central States Forest Experiment Station, Wooster, Ohio. May, 1958

- Roth, Paul L. Growing Christmas Trees in Kansas State University, Manhattan, Kansas. 1959
- Sowder, A. M. Christmas Trees, The Tradition and The Trade. Agricultur Information Bull. No. 94, Extension Service and Forest Service. U. S. Department of Agriculture, Washington 25, D. C. Revised, 1957
- Stephenson, J. R. and Engle, L. Christmas Trees Provide Early Returns from Red Pine Plantations. Technical Note 356, Lake States Forest Experiment Station, St. Paul, Minnesota. 1951
- Tyron, E. H., Goodspeed, A. W., True, R. P., and Johnson, C. J. Christmas Trees--Their Profitable Production in West Virginia. Cir. 82, West Virginia University Agricultural Experiment Station, Morgantown. 1951

. Price Range of Christmas Trees and Boughs in Coos County, New Hampshire. Forest Market Report, Table V, pp. 10. 1951

APPENDIX "A"

Sample Retailer Questionnaire

CHRISTMAS TREE RETAILER QUESTIONNAIRE (Individual Reports Strictly Confidential)

- 1. Name of person or firm selling trees______ Operating Address______ Permanent Address______
- 2. (a) What is your year-round business?
 (b) Christmas tree yard located at (check one); Chain Food Store______
 Drive in_____; Gas Station_____; Local Food Store______; Empty Lot_____; Other (explain)______
 - (c) Approximate number of days you sell Christmas trees______ (d) Description of neighborhood
- 3. Christmas tree purchased in 1956 (include trees you grew yourself in this list).

					Check i	f	Check if			
					Grown i	n	Delivered			Date
Name	&	Address	of	Seller	State		to Yard	Species	Number	Purchased

- 4. (a) Source of trees; Local Wholesalers %; Local grower % Trucker %; Own Trees %; Other (explain) %
 (b) Trees bought in following manner: Bundled %; Cut but Loose %; On the Stump %.
- 5. Sample of prices and quality of cut trees on lot. Grade 50 trees or, if less on display, all displayed. Use Michigan grades. Use dot-dash tally. Fill in prices by height class and grade where available. Get number of trees not sold on second contact.

	Sample Tree	Current	Selling	Price by	Height	Class & Grade:
Species					11	Number
(list)	Grade Tally	0-3 3-4	4-5 5-6	6-7 7-11	& over	Not Sold
		ft. ft.	ft. ft.	ft. ft.	ft.	
	Prem.					
	Good				·····	
	Util.					
	Cull					
	Prem.					
	Grod					
	Util.					
	Cull					

	(Additional i (a) Which spe (b) Which spe (c) Were 1956 same as 1	nformation for second cies was sold out fir cies sold best? prices for trees you 955?	contact). st? sold higher, low	er, or about th
	(d) What pric Meet com (e) What was	ing method was used in petitors prices ; average mark-up of tr	n 1956? Mark-up b Other (explain) ees in 1956?	ased on cost
•	Living, balle	d or burlapped trees	sold as Christmas	trees, 1956:
	Species	Numbered	Height	Price
).	Mark-up pe Sales Valu Tree quality: In-state t Out-of-sta	Operators opinion rees te trees (a) p	rice range	
•	(b) Quanti	ty sold		
	(c) Specie (d) Increa (eith	se over normal colore er by tree or per foo	d trees t)	

APPENDIX "B"

Sample Wholesaler Questionnaire

CHRISTMAS TREE WHOLESALE QUESTIONNAIRE

Date	Called
Name	Telephone
Addre	essCountyState
Size	of City
How 1 A.	long handled Christmas trees?years. How many trees did you handle last year? Approximate break-down by species, origination
	Local Trees
Speci (lis	es Number and Prices by Height Total st) 0'-3' 3'-4' 4'-5' 5'-6' 6'-7' 7'-11' 11' and over Number
	Out of Region Trees
в.	(1) How early in the year do you purchase your out-of-state trees How do you contact suppliers? Who pays transportation? Do you go back to the same sources?
	<pre>(2) How early in the year do you purchase your in-state trees? How do you contact suppliers? Who pays transportation? Do you go back to the same sources?</pre>
с.	What are the advantages of out-of-state grown trees? Disadvantages? What are the advantages of in-state trees? Disadvantages?

D.	Do you buy your trees by grades? Yes No Comment
E.	Do you buy pruned (sheared) trees? Yes No Comment
F.	The market for boughs. (1) Do you handle boughs? Yes No Comment (2) Under what conditions would you handle more (any) boughs?
G.	Market for live trees. (1) Do you handle live trees? Yes No Comments (2) Under what conditions would you handle more (any) live trees?
H.	<pre>The market for artificial finished trees. (1) Do you handle artificial finished trees? Yes No Comments (2) Under what conditions would you handle more (any) artificial finished trees?</pre>
I.	How would you describe the local Christmas tree market? (Species desired, reaction to price and quality, competition, number of whole salers, number of retailers, effect of food chains, number of losses, etc.)
J.	 (1) How many trees did you have to burn or discard in 1956?
K.	How do you think in-state Christmas Tree growers could do a better job of marketing?
L.	What method of advertising of in-state Christmas trees would help?
Μ.	What is the nature and extent of trees and boughs sold to companies, fraternal organizations and others who purchase for their own use and not for resale? (enumerate completely by numbers, variety, size and locality.)
N.	Now, Mr, you told me earlier in the conversation that you bought this year, what price did you pay for these? (go back to A and get prices he paid)
0.	Interviewer's comments

APPENDIX "C"

Minimum Standards for Christmas Tree Grades Used in this Study*

Tree		Tree Grade **	
Characteristic	Premium	Good	Utility
Density	Medium	Medium	Light
Taper	Normal	Normal Candlestick taper allowed if tree is otherwise premium grade.	Normal Candlestick taper allowed if tree is otherwise good grade.
Balance	Balanced appearance on 4 faces.	Balanced appearance on 3 faces.	Balanced appearance on 2 faces.
Foliage	Healthy, clean and fresh.	Healthy, clean and fresh.	Clean and fresh; not necessarily healthy.
Deformity	Minor deformity allowed.	Minor deformity allowed. Noticeable deformity allowed if tree is otherwise premium grade.	Minor deformity allowed. Notice- able deformity allowed if tree is otherwise good grade.

*Adapted from Huey, Ben M. and S. Blair Hutchison, Marketing Montana Christmas Trees, Montana State University School of Forestry, Bull. 2, Missoula, 1949. Since the initiation of this study standard Christmas Tree grade specifications have been published by U.S.D.A. (November 1, 1957), which was after this study had begun.

**Cull is any tree that fails to meet the minimum requirements for utility grade.

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