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FARMER MARKETING OF TIMBER IN EIGHT
SOUTHEASTERN OHIO COUNTIES

by

Michael S. Turner
and
Glen H. Mitchell

Ohio Agricultural Experiment Station
Wooster, Ohio

SUMMARY

This publication is based on a study of 241 southeastern Ohio farms from which forest products were sold in 1955 to 1958. The average land area in timber was 66 acres per farm.

The average stumpage sale was \$657 per sale. In nearly two-thirds of the stumpage sales, payment was made on a lump sum estimation. Verbal agreements were used in 60% of the stumpage sales. Three-fourths of the sellers in the stumpage sales stated they would consider selling to the same buyer if future sales were made.

The initial contact which led to the sale of stumpage was made by the buyer in over 75% of the cases. Less than 1/4 of these farmers had sold to the buyer previously. Sixty percent of the persons making stumpage sales failed to contact other buyers in addition to the one involved in the sale. Roughly 1/4 of those interviewed felt they would have benefitted by contacting more buyers.

The average sale of cut products was \$1,155 per sale. About 60% of the agreements were verbal. Over 1/5 of the cut product timber sellers stated that buyers failed to pay the previously agreed price. However, 89% of the sellers stated they would consider selling to the same buyer in the future.

In cut product sales, the seller contacted the buyer in 77% of the cases. Over 3/5 of the farmers had sold to the same buyer before. An average of 1.4 buyers were contacted per sale of cut products. Only one seller out of seven felt he would have benefitted by contacting more buyers.

In approximately 40% of the cut products sales and 47% of the stumpage sales, the seller did not check or make use of price information other than that which the buyer to whom they sold provided them.

In over 3/4 of the cut products sales, the final price was the price offered by the buyer. In stumpage sales, the accepted price was the price which was; offered by the buyer (45%); bargained for, (30%); asked by the farmer (20%).

Sixty-nine percent of the respondents' woodlands contained salable products. However, only 1/3 of the owners indicated intentions of selling any products in the following year.

Less than 1/6 of the sellers received any type of marketing assistance from various government and private agencies.

Nearly all of the people contacted stated that price information, outlook and market information would be useful to them in deciding if, when and where they should sell their woodland products.

Sellers indicated that they consider their forests as multiple purpose assets. If forced to make a choice, nearly 1/2 indicated a preference for monetary benefits rather than home use or indirect values received from woodlands. As a source of value, 1/2 of the interviewees considered their woodland as a periodic source of income for general expense. Three primary home use values of (1) fence posts, (2) fuel wood, and (3) repairs and building materials were nearly equal in relative importance. Approximately 190 farmers used wood from their home forests during 1955 to 1958. Attitudes toward indirect values were primarily directed toward reducing run-off to control erosion, providing wildlife cover, providing recreational area and improving the farm appearance.

Although not empirically proven by this study, it appears that sellers are not producing quality timber at maximum capacity, that price information is desired by sellers, and that sellers marketing practices could be improved. It appears that farmers are not conscious of various timber marketing alternatives. Their time spent on marketing is minimal. Evidently, farmers do not consider timber in the same manner as other cash crops or as a regular farm enterprise.

INTRODUCTION

Ohio, which at one time was nearly all forested, still has a considerable amount of its land in timber. In 1952 approximately 1/5 of the state of Ohio was forested. 1/ This represents 5,446,000 acres of forest land in the state. Of this over 99 percent is available for commercial use.

During the period 1920 to 1954 the value received from the sale of farm timber in Ohio ranged from \$6,652,000 to \$1,239,000 per year. 2/ The total value received by farmers from the sale of farm timber appears to fluctuate directly with the general level of the economy during the period.

The value received by farmers from the sales of timber in 1954 was \$1,531,000 as compared to \$736,000,000, the value of farm crops harvested. 3/ Although income from timber represents a relatively small portion of the total value of all crops, it is an important source of income in certain localities. Incomes of farmers in southeastern Ohio are often supplemented from the sale of farm timber. Buying incomes per household were \$1,902 less in the eight counties studied than the state average in 1958. 4/ Thirty-nine percent of the land area of these counties were forested in 1952.

1/ O. Keith Hutchison, Ohio's Forests and Wood-Using Industries, Central States Forest Experiment Station, Forest Survey Release 19, May 1956. P. 1

2/ U. S. Department of Agriculture, Census of Agriculture, U. S. Government Printing Office, Washington, 1954.

3/ Ibid.

4/ Survey of Buying Power, Sales Management Magazine, May 10, 1959.

Many of the problems which arise in the marketing and utilization of Ohio's timber stem from the fact that the average size of all private holdings, which compose 95 per-cent of the commercial forest acreage in the state, is only 34 acres. 5/ In 1952 farmers owned over 56 percent of the commercial forest land and had an average size woodlot of 23 acres. 6/

Due to the small size of woodlots the average timberland owner sells less than once in ten years. This poses a problem as it is inconvenient for the owner of farm timber to maintain constant contact with the market. Thus at the time his products are for sale, he often has only a vague knowledge of prices and markets which are available for his timber. As a result, he often fails to realize maximum returns from the sale of his products.

At the present time, there are several different grading systems being used through-out the state. The small timber owner who has only a limited knowledge of the timber industry is often quite confused by the significance of log grades.

The lack of understanding about log grades and timber markets often leads to im-proper allocation of timber resources. With approximately 400 different products being produced from Ohio timber, there are numerous markets which require different quality timber. Thus, high quality timber is often channeled into inferior uses. In such cases the timber owner is the unfortunate party. He receives a lower return from his resources than he otherwise would have.

5/ Op. Cit., Ohio's Forests and Wood-Using Industries, P. 32.

6/ Ibid. P. 32.

PURPOSE OF THE STUDY

The experience of many people who are acquainted with the sale of farm timber indicates that returns from this resource are not being maximized. If the sale of forest products is taking place on the basis of inadequate information concerning prices, qualities, and species, as well as being involved with selling practices which are outmoded and inefficient, farm income is probably impaired. Thus, this important segment of the states resources may be seriously misallocated in the long run.

The following objectives have been established for this study in an attempt to determine the conditions and problems which exists in the farm sale of timber in order that future sales practices might be improved.

Objectives

- 1) To determine certain characteristics of sellers including their farms.
- 2) To determine methods of selling timber products.
- 3) To determine how timber prices are established.
- 4) To determine improvements and conservation practices.
- 5) To determine home use of timber.
- 6) To describe some attitudes of woodland owners.
- 7) To describe future areas of research needed in the area of timber marketing.

METHODOLOGY

This study is being conducted by The Ohio Agricultural Experiment Station in cooperation with the Forestry Department of the Minnesota Agricultural Experiment Station. Compiled data from the cooperating states in the North Central Region will be combined in a regional publication by the School of Forestry at the University of Minnesota. The regional project is being financed with funds made available by Hatch 192 contributing to NCM-17.

Data for the study were obtained by personal interviews with farm operators. Only

The eight counties included in this study were selected in pairs. Analysis of the data on the basis of the paired counties facilitates comparisons of conditions within the hill country. Significant differences between regions will be mentioned throughout the publication. The following arrangement was used: area I - Adams, Scioto counties; area II - Vinton, Hocking counties; area III - Muskingum, Morgan counties; area IV - Monroe, Belmont counties. Sixty farmers were interviewed in each area with the exception of area III in which sixty-one were contacted.

CHARACTERISTICS OF FARMING IN THE AREA STUDIED

The average size of all farms included in the study was 172 acres. The average acreage of crop land per farm was 45 acres.

The predominate type of farming which was practiced by the people interviewed was:---

General livestock	34%	Cash grain	11%
Dairy	25	Poultry	6
Corn-hog	12	Other	11

Part time farming was practiced by 41 percent of the farmers contacted. Sixty-three percent of the people who were engaged in part time farming, spent 76 to 100 percent of their time working off the farm. The following shows the number of interviewees who were;----

Full owners	235	Tenants	2
Part owners	2	Farm managers	2

Those interviewed were in the following age groups:---

26 - 35 years of age	9%	46 - 55 years of age	29%
36 - 45	15	56 - 65	33
		over 66	14

The following indicates the tenure of the respondents on the farms which they are presently operating:---

0 - 7 years	24%	18 - 27 years	20%
8 - 17	33	over 28	23

Slightly over one half of the farmers contacted stated that the farm they were

presently operating had not been previously operated by a member of their immediate family. However, 80 percent felt that they or some member of their family would be operating the farm ten years in the future. Area IV was the only area in which a majority of the people contacted stated that there had been a member of the immediate family previously farming the farm they were presently operating.

The following shows the percent of people interviewed who received various incomes in 1957:---

Less than \$1,500	27%	\$4,500	5,999	10%
1,500 - 2,999	17	over	6,000	23
3,000 4,499	23			

The proportion of the people who received various amounts of their incomes from farming are as follows:---

3/4 or more of their income	44%
1/2 to 3/4	5
1/2 to 1/4	15
Less than 1/4	36

A total of 15,575 acres of woodland existed on the farms included in the study. The average acreage of woodland per farm was 64 acres. The average size of holding was largest in area II. Area IV had the smallest average size woodlot.

There were 15,478 acres in natural stands of timber. An additional 245 acres of the woodland were planted. The sum of planted and natural acreage exceed the total timberland. This is the result of plantings in established natural stands for forestry improvement purposes.

The following shows the number of woodlands dominated by:-----

Hardwood species	218
Softwood species	3
Mixed hardwoods and soft-woods	13

Sixty one percent of the respondents indicated that oak was the most common species appearing in their woodlots. The remaining species were mentioned as follows: poplar, 12%; maple, 8%; hickory, 7%; cherry, 3%; walnut, 2%; pine, 2%; elm, 2%; ash, 1%; basswood, 1%.

The proportion of the woodlots dominated by specified sizes of timber are shown below:

Sawtimber (10" or larger)	55%
Pulpwood	18
Timber smaller than pulpwood	27

In area III stands of small timber was more prominent than saw timber. Pulpwood rated second only to saw timber in areas I and II.

The following shows the percent of the farmers whose woodlands were primarily on:---

Steep land	75%
Moderately steep land	19
Bottom land	6

In area I, 15 percent of the woodland of the respondents was on bottom land.

CHARACTERISTICS OF FARM TIMBER SALES IN THE AREA STUDIED

The 241 farmers interviewed stated they had knowledge of 776 buyers of timber currently active in their area. Some buyers may have been mentioned by more than one farmer. The survey showed that farmers contacted in area II were aware of more timber buyers than were the farmers in the other areas. Area I was second only to area II in this respect. The percent of the interviewees who have knowledge of various numbers of buyers are as follows:-----

0 Buyers	10%	3 Buyers	21%
1	11	4	13
2	20	5 or more	25

Sixty percent of all farmers interviewed sold their timber in the form of stumpage and the remaining 40 percent sold cut products. The majority of the farmers in area I, III, and IV sold on a stumpage basis. However, in area II the majority of the farmers sold cut products.

Two of the farmers interviewed stated that there had been no sale of timber made from the farm they were presently operating since they began farming it.

Ten percent of the farmers contacted stated they had purchased and cut stumpage from land other than their own during the past 10 years. A favorable price for wood

products was the reason most often given by these farmers for the purchase of stumpage.

Twenty percent of the farmers interviewed had operated their own sawmill during the three year period 1955 to 1957. Custom sawing was practiced by 27 percent of the farmers who operated their own sawmills while 37 percent sawed lumber primarily for their own farm use. An additional 37 percent of the farmers sawed lumber which was sold to others. Farmer operated sawmills were most common among those farmers in area II.

Of the 241 farmers interviewed, 206 stated that in 1957 there was a local mill near their farm where they could have had logs sawed. In 1956 and 1955, 196 and 189 farmers respectively indicated the presence of a local sawmill which was available to them. The following shows the percent of the respondents who owned or had access to:---

Power saws	40%
Tractors which could be used in logging operations	30
Trucks which could be used to haul logs	25

ANALYSIS OF TIMBER SALES

At the time the interview was conducted, 69% of the farmers contacted stated their woodlands contained saleable products.

However, only 32 percent stated that they intended to sell wood products from their woodland or by cutting stumpage purchased from other owners within the following year. An additional 10 percent indicated a possibility of such sales.

Sales made by farmers who had sold timber products once during 1955 to 1958 represented over 80 percent of the sales made by the respondents.

Stumpage Sales

The following section will be devoted to the presentation of data concerning the sale of stumpage by those people interviewed. There were 58 stumpage sales made from 1955 to 1958 in area III, 51 in area IV, 35 in area I, and 29 sales in area II by the 241 farmers interviewed.

In 94 percent of the stumpage sales the respondents gave no indication that marketing assistance had been received from farm foresters. The following shows the number of stumpage sales in which farm foresters provided:-----

Aid in locating buyers	4 sales
Assistance in drawing up contract specification	3
Assistance in marking trees	2
Assistance in determining the volume of timber	5
Other assistance	5

Industry forestry provided assistance in only two instances. The service provided consisted of price information and volume determination. A consulting forester was called upon in one sale for price information and the location of buyers. Soil conservation agents were contacted in four sales for information pertaining to the sale of timber.

None of the people who sold stumpage had received any marketing assistance from the extension foresters or the county agent.

Twenty-one of the farmers who sold stumpage received assistance from at least one of the six sources included in the study. This represents only 12 percent of the people who made stumpage sales.

The percent of stumpage sales in which the quantity of the products sold was determined by various methods was as follows:---

The sellers ability to make a rough estimate	34%	A visual estimate by the buyer	3%
A timber cruise by the seller or his agent	4	Other means	17
A timber cruise by the buyer or his agent	8		

In 26 percent of the sales the respondents had no definite knowledge of the quantity of stumpage they sold. 1/

The farmers ability to make a rough estimate through familiarity with woodland was used in over 50 percent of the sales in area III, 34 percent in area IV, 28 percent in area II, and 14 percent in area I. The lack of any definite knowledge of the quantity of timber sold was greater in areas II and IV than in areas I and III.

1/ Board feet, tons, or cords.

The average value of all stumpage sales made by owners contacted was \$657 per sale. The total value of all stumpage sales was \$111,730. Area IV accounted for 50 percent of the value of total sales, area III for 19%, area II for 18%, and area I for 13%.

The following shows the percent of sales in which respondents received payment for their stumpage based on the volume of timber as determined by:-----

- | | |
|------------------------------------------------------------------|-----|
| 1. The buyer as the timber was loaded on the truck | 11% |
| 2. A lumber tally at the mill as measured by the buyer | 5 |
| 3. A measurement by the buyer as the product arrived at the mill | 4 |
| 4. Other methods used by buyers, sellers, and others | 13 |

In nearly two-thirds of all sales the stumpage was purchased for a lump sum and not on the basis of the quantity of timber.

The following shows the percent of the final sales agreement used in stumpage sales which were:-----

Of a verbal nature	60%	Sellers written contracts	7%
Buyers written contracts	26	Other types of contracts	7

In looking back on their sale of stumpage 40 percent of the people contacted stated the price they received was about what they had expected. A higher price had been anticipated by 31 percent of the interviewees who sold stumpage while 27 percent had expected a lower price.

The majority of the people who sold stumpage stated the condition of their woodland after cutting was about the same as they thought it would be.

Approximately 3/4 of the owners who sold stumpage stated they would consider the same buyer if they were to make a similar sale in the future. In contrast to this, 21 percent of the owners stated they would not contact the same buyer in making sales of a similar nature at a later time.

Cut Product Sales

There were 55 sales of cut products made by owners contacted in area II from 1955 to 1958. Area I accounted for 37 sales, area II had 15 sales, and there were 9 sales

made in area III.

Marketing assistance provided by the existing institutions was used in only 21 of the 116 cut product sales. Services provided by the farm foresters were used in a larger percentage of the sales than any of the five other sources (extension forester, soil conservation service, county agents, industrial foresters, and other sources.) However, the marketing services provided by the farm forester were used in only 8 percent of these sales.

The average value of cut product sales was \$1,155 per sale. The value of sales in area I, II, and IV was essentially the same. In area III the value per sale was \$409.

The percent of sales in which farmers sold cut products and delivered them to specified locations are shown below:-----

Mill	65%
Concentration yards	15
Rail road sidings	4
Roadside locations	8
Other locations	8

The average distance from the woodland to the point of delivery was 18 miles. This distance was slightly less in areas III and IV than in areas I and II.

In approximately 60 percent of the cut product sales a written or verbal contract with the buyer was made before cutting of the woodland began. In the majority of the cases the contract was of a verbal nature. Buyers provided written contracts in 40 percent of the transactions while in 3 percent of the sales the seller drew up a written contract. There was a higher percentage of verbal contracts indicated in area IV (90%) than in the other three areas.

The following shows the percent of cut product sales which had various stipulations included in the sales agreements:---

1. Price per unit	24%	4. Acceptable grades	15%
2. Place of delivery	20	5. Final delivery date	9
3. Volume of sale accepted by buyer	16		

In 3 percent of the cases farmers were unable to sell some of the products that they had cut and intended to sell to a particular buyer.

In over 1/5 of the cut product sales the farmers stated that buyers failed to pay the prices stipulated in the contract.

In looking back on their sale of cut products 60 percent of the respondents stated they had received about the same price as they had expected.

In the case of a similar sale in the future 89 percent of the farmers stated they would consider selling to the same buyer. Eight percent of these people stated they would not sell to the same buyer in the future.

The following shows the percent of the respondents that preferred to sell cut products instead of stumpage because they:---

Felt they could get a greater return	34%
Could use their spare time in this manner	12
Had the necessary equipment to cut stumpage	24
Were afraid others would damage their woodland through carelessness	3
Could not locate anyone to buy their stumpage	3

How Prices Were Established

The following percent of the total respondents stated they would determine timber prices in anticipation of sales by contacting:---

Timber buyers	62%	Friends and neighbors	5%
Timber companies	13	Public agents	3
Local mills	11	Other sources	6

It was the opinion of 92 percent of the farmers interviewed that price information and outlook information would be useful to them in deciding if, when, and where they should sell their farm woodland products.

The following shows the percent of these farmers by the type of media which they stated would be the best means of conveying such information to them:---

Local newspapers	36%	Extension releases	25%
Farm magazines	31	Radio	2
		Other	5

a) in stumpage sales

In about one-half of the stumpage sales there was less than one month between the time the sales agreement was made and payment was completed.

In over 3/4 of the cases studied, the initial contact which led to the sale of stumpage was made by the buyer contacting the seller. In twenty-three percent of these sales the seller had sold to this particular buyer previously. Buyers who made the initial contact involved in the transaction were aware that the farmer had products to sell in 87 percent of the cases.

The following shows the percent of stumpage sales in which the sellers who made initial contact were informed of the buyers by:-----

Friends and neighbors	36%
Knowledge of his current purchases of timber from a near by farmer	17
His advertisement	8
Having sold to him in the past	8
Other sources	25

No other buyers except the one involved in the sale, contacted or were contacted by 60 percent of the farmers who sold stumpage. There were an average of 1.6 buyers contacted per sale for all sales of stumpage products. The people who had contact with more than one buyer received an average of .84 offers of purchase per buyer.

Knowledge of other buyers who might have purchased their products at the time if they had been contacted existed in 35 percent of the cases where stumpage was sold.

On the average, those farmers who had knowledge of other buyers who might have purchased their products knew 3 other buyers.

The following shows the percent of stumpage sales in which the respondents determined the adequacy of prices offered for their products by contacting:-----

Other buyers in the area	21%	Public agencies	2%
Neighbors and friends	14	Others	7
Local lumber companies	2		

No other sources in addition to the buyer offering the price were contacted by 47 percent of these farmers.

The following shows the percent of stumpage sales in which the respondents sold their products for a price which was:-----

Offered by the buyer	45%	Arrived at by accepting closed bids	2%
Determined by bargaining	30	Determined by auction	1
Demanded by the seller	20	Determined by other methods	2

The highest price which was offered was accepted by the farmers in 93 percent of the stumpage sales. The people who did not sell at the highest price offered either sold to a dealer who they felt had the best reputation for fair dealing.

Up to the time the sale was made 39 percent of the farmers contacted thought prices were too low relative to what they could get for their wood products by waiting awhile. In contrast to this 48 percent of the respondents felt they had nothing to gain in the way of higher prices by refraining from selling until a later period.

In looking back on the sale, 23 percent of the interviewees who sold stumpage felt they would have been better off if they had contacted more buyers before they made the sale. Approximately 2/3 felt they would not have benefited by contacting more buyers before selling. The other 11 percent did not know if they would have benefitted or not.

b) in cut product sales

In 23 percent of the sales of cut products the initial contact for the sale was made by the buyer. The buyer who made the initial contact had previously purchased products from the farmer in 63 percent of the cases.

In contrast to this in 77 percent of the sales the seller made the initial contact. The following shows the percent of the cut product sales in which the seller who made the initial contact was informed of the buyer by:-----

Having sold to him in the past	38%
Friends or neighbors	32
Knowledge of his current purchases of timber from a nearby farmer	8

His advertisement

6

There was an average of 1.4 buyers contacted per sale for all sales of cut products. Fifty-eight percent of the stumpage sales were made with only one buyer contact.

There was an average of 1.1 offers per sale made by buyers to purchase cut products.

Nearly one-half of the interviewees, who sold cut products, indicated that they had knowledge of other buyers at the time they made the sale who might have purchased their products if they had been contacted. On the average the farmers who sold cut products knew of 1.7 buyers per sale who might have purchased their products if they had contacted them.

The following shows the percent of cut product sales in which the respondents determined the adequacy of prices offered for their products by contacting:----

Other buyers	30%	Local mills	3%
Constant contact with the market	7	Other means	5
Neighbors and friends	5		

Approximately 40 percent of these farmers contacted no other buyer in addition to the one offering the price. The following shows the percent of cut product sales in which the respondents sold their products for a price which was:----

Offered by the buyer	78%	Demanded by the seller	3%
Determined by bargaining	14	Established by auction	3

In nearly all of the cut product sales the highest price offered was the price which was accepted.

Up to the time they made the sale, 32 percent of the owners felt that prices were too low relative to what they could get from their wood products if they waited. In contrast to this 59 percent of the owners who sold cut products, did not feel they could get a higher price by waiting and selling later. Nearly 10 percent had no idea of what they might have gained by refraining from selling until a later date.

In looking back on the sale, 85 percent of the interviewees felt they would not have benefitted by contacting more buyers before selling their cut products. Those who felt they would have benefitted represented only three percent of the people who sold cut products.

HOME USE

The value which is received from timber products used on farms is a relatively unknown quantity. In some instances it could conceivably be of a appreciable consequence to the individual involved. Such values seldom, if ever, appear in terms of dollars.

The timber products which were used by the respective interviewees, were grouped into three classes. These classes were fence posts, fuel wood, and timber products used for building material and repairs on farm buildings and equipment.

Fence Posts

A total of 18,970 fence posts were cut from farm woodlands and used on those respective farms. These posts were cut and used during the period 1955 to 1957 by 115 of the farmers interviewed. Hardwood species accounted for 93 percent of the posts acquired from farm woodlands and used by the farmer. There was an average of 165 posts used per farm on the 115 farms, which were supplied from the farm woodlands over the three year period.

TABLE I
NUMBER OF FENCE POSTS CUT FROM 115 FARM WOODLANDS AND
USED ON THOSE RESPECTIVE FARMS, BY AREA,
SOUTHEASTERN OHIO, 1955 to 1957

Species	Area				Total
	I	II	III	IV	
Hardwood	3050	5410	2390	6820	17,670
Softwood	1050			150	1,200
Unknown	60		40		100
Total	4160	5410	2430	6970	18,970

Fuel Wood

A total of 5,304 cords of fuel wood were cut from 85 farm woodlands and used by the

respective farmers from 1955 to 1957. ^{1/} An additional 60 tons of fuel wood of unknown species were cut and used by the farmers interviewed in area IV. Timber of unidentified species accounted for 87 percent of the fuel wood which was used on the farms contacted and cut from their respective woodlands.

TABLE II

CORDS OF FUEL WOOD CUT FROM FARM WOODLANDS AND
USED ON THOSE RESPECTIVE FARMS, 85 FARMS,
BY AREA, SOUTHEASTERN OHIO, 1955 to 1957

Species	Area				Total
	I	II	III	IV	
Oak	75	204			279
Hickory			153	30	183
Mixed hard- wood	30	94	15		139
Mixed soft- wood	45			48	93
Unknown	<u>2031</u>	<u>114</u>	<u>1656</u>	<u>809</u>	<u>4610</u>
Total*	2181	412	1824	887	5304

* 60 tons of fuel wood of unknown species were also cut and used in area IV.

Farmers interviewed in area I were the largest user of cordwood and the least amount used by an area was 412 cords, in area II. The 85 farmers used an average of 62 cords of fuel wood per farm for the three year period. This fuel wood was cut from the respective farm woodlands.

Building Materials and Repairs

There were 227,100 board feet of farm produced timber used by 88 of the farmers .

^{1/} Cords of fuel wood reported were not standard cords. They varied in width from 18 to 24 inches as compared to the standard cord which is 48 inches wide.

from their respective woodlots. The woodlots of the farmers interviewed in area II supplied more timber products for home use, in terms of board feet, than those in the other three areas.

Farmers in area III also utilized 950 pieces of lumber of undescribed demensions which were supplied from their woodlots.

Oak accounted for approximately one half to the timber cut from woodlots and used for buildings and repairs on the farms included in the sample.

An average of 2,580 board feet of timber were used per farm on the 88 farms. This timber was cut from the woodlots of these farms during the years 1955 through 1957.

As has been noted above, 4 percent of the farmers contacted indicated that they had home uses for timber products in addition to the three uses included in this analysis. Twenty percent of the farmers interviewed did not utilize timber products for home use from their woodlots.

NUMBER OF BOARD FEET AND PIECES OF TLBER CUT FROM
FARM WOODLANDS AND USED ON THOSE RESPECTIVE FARMS,
88 FARMS, BY AREA, SOUTHEASTERN OHIO, 1955-1957

Species	Area				Total
	I	II	III	IV	
	Board Feet				
Oak	33,000	53,000	9,900	18,500	114,400
Mixed Hardwood		29,500		9,000	38,500
Mixed Softwood		8,000	5,500	16,900	30,400
Unknown	2,000	31,000	5,300	5,500	43,800
Total feet	35,000	121,500	20,700	49,900	227,100
	Pieces of undescribed dimensions				
Oak			450		
Softwoods			330		
Unknown			170		
Total			950		

IMPROVEMENTS AND CONSERVATION PRACTICES

Ohio's timber resources are of a limited nature, and an increasing timber demand is facing the state in future years. An attempt has been made in this study to determine what, if anything, is being done by the people interviewed to improve or conserve their timber resources.

The following shows the percent of the farmers who grazed their woodland:-----

None of the time	61%
Part of the time	23
All of the time	16

Grazing of woodlands was much more common in area III and IV than in areas I and II.

The following shows the percent of respondents who were planning to improve their woodlands during the next five years by:-----

Timber cutting	53%	Pruning trees	2%
Planting trees	15	Other improvements	2
Fencing against live-stock	6		

The percent of farmers who have improved their woodlands during the past five years by specified practices are indicated below:-----

Cutting timber	78%	Fencing against livestock	7%
Planting trees	11	Pruning and other improvements	2

Approximately 82 percent of the farmers interviewed felt that woodland was the best use for most of their acres which were presently in trees.

The following shows the percent of the respondents who attend to their woodlands:-----

1. When time permits	25%
2. Through specific annual plans of labor and capital expenditures	6
3. Through appropriations in their over all farm plans	4
4. Through other means of allocating labor and capital	64

Specific cutting practices were included in some of the sales agreements. These serve as some protection to both the timber owner and the woodland.

The percent of the sales agreements which had specific cutting practices included in them are shown below:-----

1. Specified trees to be cut	37%
2. Provisions for payment of damaged trees	1
3. Other stipulations	45

In 68 percent of the cases the interviewees indicated that the stipulations mentioned above had been satisfactorily met. Only partial satisfaction was received by 11 percent of the people who sold stumpage and 9 percent of these people stated the stipulations had not been satisfactorily carried out.

There were an average of 22 acres of woodland cut over per sale. Approximately 93 percent of the farmers who sold stumpage indicated that they intended to maintain the cut over area in woodland. The intentions of 74 percent of the people who sold cut products were to maintain the cut over area in the form of woodland. The cut over area was not intended to be kept for woodland in 8 percent of the cases.

ATTITUDES OF WOODLAND OWNERS

The following section deals with the attitudes of the people interviewed in regard to their woodlands, and the various returns which they realized from them.

Multiple responses were given by the respondents for the following questions. Therefore the total number of responses were greater than the 241 people who were included in the sample.

Farm Use Values

The percent of farmers who generally thought of their woodland as a source of specified farm use values are shown below:-----

Fence post	32%
Repairs and building material	29
Fire wood	28
Other home use products	4

The woodlands of 6 percent of the farmers were not thought of as generally being a source

of any product for farm use.

Monetary Values

The following shows the percent of farmers who considered the primary monetary contribution of their woodland to be:----

A source of periodic income for current expenses	50%
A source of ready cash	29
Capable of increasing the market value of the farm	12
Other monetary values	6

Four percent of the responses did not generally think of their woodland as a source of monetary value.

Indirect Values

The following shows the percent of the respondents who considered the primary indirect contribution of their woodlot to be:----

The reduction of run off and the prevention of soil erosion	29%
Food and cover for wild life	28
A recreational area	19
The appearance of the farm	17
A windbreak or shelter belt	2
Other indirect benefits	2

No indirect benefits from their woodlands were indicated by 2 percent of the respondents.

Forty-seven percent of the farmers interviewed felt monetary values were most important, 1/3 rated home use as most important, and 1/5 rated indirect values as most important.

In the sale of both stumpage and cut products over 70 percent of the farmers entered into the transaction primarily to fulfill a need for cash. This cash was used to meet general current expenses in 75 to 80 percent of the cases.

Nearly 1/3 of the people who sold stumpage to fulfill a need for cash, and over 50 percent of the people who sold cut products for the same reason felt they could have raised the necessary cash from alternative sources.

AREAS OF FUTURE RESEARCH

If the small timber owner, who is the primary owner of Ohio's timberland, is not better informed and motivated in regard to the value of his timber and timberlands this state will, by necessity, have to obtain much more of its woodland products from other areas. As a result Ohio will lose a potential source of income.

This study has primarily indicated the inadequacy of the marketing practices presently being used by some of the farmers who own or manage woodlands. However, it does not give a detailed presentation of the returns from woodlands both monetary and non-monetary, which can be realized by timberland owners.

Several institutions exist which provide marketing assistance to woodland owners but only limited use is made of them. Therefore, it appears that a conscientious effort should be put forth to inform people of values which accrue from woodland products. Only when people realize the possibility of achieving such returns will they make use of the marketing assistance which is at their disposal. Until this time little progress can be made to improve the management and marketing of timber products for greater returns. In this respect research indicating the quantitative and qualitative values received from woodland products would be beneficial.

Governmental ownership and assistance have been proposed by some people as a means of improving Ohio's woodlands for public benefit. A portion of Ohio's timberland is presently owned by municipalities, state, and federal governments. However, this is of only minor consequence as it represented approximately 5 percent of the commercial forests of Ohio in 1952. Research in this area would be a means of determining the probable consequences of this type of action.

For intelligent management decisions to be made concerning farm woodlots, data showing the expected costs and returns realized from such enterprises are necessary. Without this

information farmers do not have an adequate basis for making decisions on expenditures of labor and capital for the development and/or improvement of their woodlands.

The existance of woodlands rather than alternative enterprises should be determined economically by the relative economic advantages or disadvantages common to each. However, until the profitability of various types of woodlands are determined it will be impossible to make these decisions.

As a result future research should be directed at determining whether the income received from forestry is adequate to cover costs of production.

An investigation of the marketing practices of timber buyers would also be essential for evaluating the effectiveness of timber marketing. An examination of the timber industry from woodland owner to ultimate consumer with emphasis on returns and costs would increase general understanding.