Historic, archived document

Do not assume content reflects current
scientific knowledge, policies, or practices.

8
4

83 0270

United States
Department of
Agriculture

Forest Service

US

Northeastern Forest
Experiment Station,

Resource
Bulletin NE-74

1982

The Forest-Land Owners of Ohio—1979

Thomas W. Birch

PCW FOREST AND RANGE
EXPERIMENT STATION
JUL 12 1983
STATION LIBRARY COPY

The Author

Thomas W. Birch, research forester, received a B.S. degree from Michigan State University in 1969, and an M.S. degree from Michigan state in March 1974. He joined the Northeastern Forest Experiment Station in June 1974, as a resource analyst with the station's Forest Inventory and Analysis unit, located in Broomall, Pa.

Manuscript received for publication
8 August 1982

Abstract

Information about the attitudes and objectives of the private forest-land owners is essential to understanding Ohio's forest resources. Ninety-four percent of Ohio's 6.9 million acres of commercial forest land is in 332,600 private ownerships. Ninety-two percent of these ownerships are individual and joint ownerships. A majority, 66 percent of these owners, live within a mile of the nearest tract and 80 percent own only one tract. Benefits other than timber production are most important to Ohio's landowners, but 43 percent of the ownerships have harvested timber from their land. Harvesting firewood is common among owners that own fewer than 50 acres of forest land. Only 29 percent of the ownership units permit some form of recreational use of their land by the public, these units have 36 percent of the private forest land.

COVER PHOTO: An aerial view of Geauga County, Ohio

Contents

Introduction	1
The Forest-land Ownership Units	2
Corporate and Other Owners	3
Characteristics of the Individual Forest-land Owners	3
Indicators of Management Potential	4
Owner Objectives	5
Who Harvests Timber and Why	6
Why Many Owners Have Not Harvested	6
How Much Timber Is Available	7
Forest Management on Private Lands	8
Harvesting Practices	8
Products Harvested	8
Forestry Assistance	9
Recreation	9
Conclusion	11
Literature Cited	12
Appendix	12
Study Method	12
Data Accuracy and Reliability	13
Definition of Terms	13
Questionnaire	15
Index to Tables	27

Highlights

Ninety-four percent of Ohio's 6.9 million acres of commercial forest land is in 332,600 private ownerships.

Forty-five percent of the ownerships hold more than 10 acres each; they account for 91 percent of the private forest land.

Ninety-two percent of the ownership units are individual and joint ownerships.

Only 29 percent of the private ownership units, holding 36 percent of the forest land, permit some form of recreational use of their land by the public.

Forest industries own 186,300 acres of forest land.

Benefits other than timber production are most important to Ohio's landowners, but 43 percent of the ownership units have harvested timber from their land.

Introduction

Our forest resources are vital to the social and economic well-being of our society. Good decisionmaking about these resources requires a thorough knowledge of the resource base and the factors affecting it. This paper gives estimates of the number and characteristics of the private forest-land ownerships in Ohio. The attitudes of typical forest-land owners, their reasons for owning forest land, and their views about timber harvesting, forest management, and recreational uses of their land are described. Results of this study, used with the recent Ohio forest resource data (Dennis and Birch 1981, Dennis 1982), will provide information of use to a number of user groups.

Ownership information will be useful to public agencies in planning and evaluating forestry-related programs, to forest industry in procuring timber, and to others interested in learning more about Ohio's diverse forest-land owners. Ownership of a resource such as forest land is the essential connecting link between people and the land. Landowners have legal rights and responsibilities relating to forest land. Rights include those to purchase or sell land, to determine land use, and to decide the type and level of investment. These rights all function within limits allowed or imposed by society. Land ownership fixes responsibility for decisionmaking, establishes a claim on income accruing to land, and determines how wealth in land is distributed (Lewis 1980, Wunderlich 1978).

Who or what is an ownership unit?¹ Owners may be persons, combinations of persons, or legal entities; such as corporations, partnerships, clubs, and trusts. An ownership unit has the control of a parcel or group of parcels of land. Our sampling frame is drawn from the land itself (parcel by parcel), and the owner of record (the apparent owner), is determined. A questionnaire is mailed, and finally an individual responds who has some control of an amount of land (not exclusively the parcel sampled). Therefore, we are measuring ownership units and not individual owners.

The results presented here have been statistically expanded from a sample to estimate the total population of private forest-land ownership units and the acreage they own. Users of this report are advised to read the definitions of terms and the discussion of the study design and sampling errors included in the Appendix. Tables supporting conclusions in the text are also in the Appendix.

¹This term and others are defined in the appendix.

Figure 1.--Distribution of private ownerships, by size class of ownership.

The Forest-Land Ownership Units

An estimated 332,600 private ownership units hold 6,504,900 acres of commercial forest land in Ohio. Fifty-five percent of these ownership units hold less than 10 acres each and collectively control only 9 percent of the private forest land. Another 300 ownership units, holding 500 or more acres each, own 11 percent of the privately owned commercial forest land (Table 2, Fig. 1).

The average private forest land ownership is 20 acres. If ownerships of less than ten acres are excluded, the average rises to 40 acres. The average size of holding varies among the geographic units, from 14 acres in the Northeastern Unit to 34 acres in the Southeastern Unit. The distribution of ownership units and forest land also varies between geographic units (Fig. 2).

Another way of dividing the ownership units into categories is: Forest industry, Farmer-owned, and Miscellaneous private (includes Individual, Corporate, and Other). An estimated 200 Forest industry ownerships have 186,300 acres of forest land. The Farmer-owned category has an estimated 145,900 ownership units with 2,888,900 acres of forest land. The Miscellaneous private category has an estimated 186,500 ownership units with 3,429,700 acres of forest land (Table 2).

Form of ownership is another classification that has been shown to predict intention to harvest timber when combined with size class of ownership. Ninety-two percent of the private ownership units are individuals and joint ownerships (excluding partnerships, undivided estates, corporations, etc.) collectively

holding 79 percent (5,159,400 acres) of the privately owned commercial forest land. One percent of the ownership units are corporations and they hold 764,500 acres, 12 percent of the private forest land. The remaining 9 percent of the commercial forest land (581,000 acres) is held by partnerships, undivided estates, clubs, and associations (Table 3).

Figure 2.--Distribution of private ownerships, in Ohio by geographic unit.

The distribution by size class of ownership for the individual and joint ownerships differs from that of all owners, with a larger percentage of the area in the smaller size classes. The largest difference is in the 500+ acreage class, where the individual owners hold only 3 percent of the forest land as compared to 11 percent for all owners (Table 4).

Corporate and Other Owners

An estimated 27,400 corporate and other ownership units own 1,345,500 acres of forest land. The 4,500 corporate ownership units have 764,500 acres of forest land; 6,000 partnerships have 243,200 forest acres; and 16,900 undivided estates, clubs, associations, and trusts have 337,800 acres of forest land.

The average corporate owner has 170 acres of forest land. The largest concentrations of corporate lands are in the Southeastern and East-Central units. Over half the corporate forest lands in Ohio are located in these two units.

Corporations engaged in timber-based industries hold 151,200 acres (Table 5). There is an additional 35,100 acres of unincorporated forest industry land. Forest industry lands represent only 3 percent of Ohio's privately owned commercial forest land. Almost all the forest industry ownership is in the three hill country units (South-Central, Southeastern, and East-Central).

An estimated 1,200 nonforest industries collectively hold 40 percent of the corporate forest land. Many of these companies are primarily interested in subsurface materials (coal, oil, natural gas). The remaining corporate acreage is held by real estate firms, nonindustrial businesses, corporate farms, sport and recreation clubs, public utilities, and other corporations.

Characteristics of the Individual Forest-Land Owners

Why study the characteristics of individual owners? Many studies have attempted to predict ownership response from owner characteristics. Occupation, age, residence, date of acquisition, number of tracts, education, and income have all been explored as predictors of harvesting intention (Kingsley 1976, Kingsley and Birch 1977). These characteristics also suggest that individual forest-land owners have a great diversity of backgrounds and abilities. The above characteristics were included for the individual who completed the questionnaire for the individual and joint ownership units.

Twenty-two percent of Ohio's individually owned forest land (1,145,500 acres) is held by professionals, executives (including business owners) and white collar workers (Table 6, Fig. 3). This group owned an average of 19 acres per ownership unit.

Figure 3.--Distribution of individual ownerships, by owner occupation.

The largest number of individual owners are retired; they hold 20 percent of the individually owned forest land. Over half the individual owners with incomes under \$10,000 per year are 65 years old or older.

We estimated that 2,888,900 acres of forest land was "farmer owned". Some of this land was in corporate farms and 917,100 acres was owned by an estimated 41,800 individuals whose primary occupation is farming. Therefore, nearly 2 million acres of forest land are owned by part-time farmers, corporate farms and other farm ownerships such as partnership farms. As a group, farmers are important because they have the highest percentage of owners that intend to cut timber in the next 10 years of any occupation group (Table 7).

Skilled and unskilled laborers, housewives, and other occupations collectively represent 17 percent of the individual owners and hold 19 percent of the individually owned forest land. Owners that did not answer the occupation question make up the remaining 29 percent of the individual owners; they hold 21 percent of the individually owned forest land.

Other information provides us with a general description of Ohio's individual forest-land owners (Tables 8-11). Sixty percent of the owners are over 45 years old and nearly half of these are over 65. Twenty-five percent of the owners are educated beyond high school, while 20 percent have 8 years or less of formal education. Forty-two percent of the owners did not indicate an income class for our survey. Of those that indicated an income class, 56 percent had gross incomes of less than \$15,000 per year. Only 10 percent reported spending their first 12 years in a city with a population greater than 10,000. Fifty-five percent spent their first 12 years in a rural area or on a farm.

Indicators of Management Potential

Because of the long time it takes to grow trees, tenure of ownership is important. Most of the corporate (including forest industry) lands were acquired before 1950. This is not the case with other ownerships: forty-five percent of the farmer owned forest land was acquired before 1960, as was 38 percent of the miscellaneous individual forest land (Table 12). Twenty-two percent of the forest land owned by individuals was acquired in the 70's, 22 percent in the 60's, 19 percent in the 50's, 23 percent before 1950, and 14 percent at dates unknown (Table 13, Fig. 4).

Where an owner resides in relation to the forest property and how many scattered tracts an owner has are important to people who deliver various types of forestry assistance. An estimated 66 percent of the ownership units have owners who live on the tract or have business headquarters within 1 mile of their nearest tract. These units hold 59 percent of the forest land (Table 14). Eighty percent of the ownership units own single tracts; they make up 55 percent of the forest land. Many of the corporate ownerships are included in the 5 percent of the ownership units that have three or more tracts and 26 percent of the forest land (Table 15).

An indication of dispersion is obtained when you combine data on number of tracts with distance from nearest and farthest tract (Table 16). For example: of the 66,400 ownership units with more than one tract, 1,500 units have owners living more than 50 miles from their nearest tract and 5,100 units have owners living more than 50 miles from their farthest tract.

Figure 4.--Distribution of individual ownerships, by year owner first acquired woodland.

Owners Objectives

Forest land offers multiple goods and services, it is not surprising that landowners express diverse reasons for owning. The owners sampled in this study were asked their primary reasons for owning forest land, which benefits were most important in the last 5 years, and which were expected to be most important in the next 5 years.

About 2 percent of the private forest-land ownership units in Ohio (including forest industry) gave timber production as their primary reason for owning woodland (Tables 17-20, Fig. 5). An additional 3 percent gave timber as their second reason. Together these two groups own 701,400 acres of forest land (11 percent).

Among the benefits received in the last 5 years and expected in the next 5 years, income from the sale of timber was ranked most important by 2 percent of the ownership units. These owners own about 500,000 acres of commercial forest land in Ohio (Table 21-23). It is not surprising that there are fewer acres owned by people receiving income from the sale of timber than owned primarily for timber production because income from the sale of timber occurs only during the period when the stand of timber is mature.

Nearly half the ownership units gave "residence" or "part of the farm" as their primary reason for owning forest land. These people own 2,226,000 acres or 34 percent of the private forest land in Ohio. They own an average of 14 acres of forest land, and one can see why many of these owners would want any harvesting done to be esthetically pleasing.

An estimated 25,000 ownership units (7 percent) gave esthetic enjoyment as their primary reason for owning forest land. An additional 5 percent of the ownership units own their forest land for recreational use. Together these two groups own 15 percent of the private forest land. Esthetic enjoyment was the most frequently mentioned benefit that owners derived over the past 5 years and expect in the next 5 years.

Statewide, 28 percent of the ownership units holding 23 percent of the private forest land listed this benefit as the most important they had received. In the next 5 years, 27 percent of the ownership units with 20 percent of the forest land expect esthetic enjoyment to be most important. Recreational use was important to 6 percent of the ownership units and 7 percent expect it to be their most important benefit in the next 5 years.

An estimated 38,700 ownership units (12 percent) gave farm or domestic use as their primary reason for owning forest land. A large portion of the 760,300 acres (also 12 percent) in this group are thought of as farm woodlots. These forest lands provide fence posts, firewood, and a substantial portion of the commercial roundwood harvest.

Farm or domestic use as a benefit received in the last 5 years ranked second among ownership units (19 percent) followed by increase in land value (16 percent). In area owned by benefit received, land value increase was second (21 percent) with farm and domestic use third (16 percent).

Figure 5.--Distribution of private ownerships, by primary reason for owning forest land.

An estimated 21,900 ownership units (6 percent) with 569,500 acres of forest land (9 percent) gave land investment as their primary reason for owning forest land. Land values have increased throughout the country. Land investment is often thought of as a hedge against inflation. This helps to explain why more than twice as many ownership units felt that land value increase was their most important benefit as gave it as their reason for owning forest land. It also explains why even more ownership units expect it to be their most important benefit in the next 5 years.

The remaining ownership units gave other reasons for owning forest land or did not answer. Many of the ownership units that gave other reasons were interested in mineral production -- primarily coal, oil, and natural gas.

Who Harvests Timber and Why

An estimated 141,700 ownership units (43 percent) have harvested in the past; they own 3,614,000 acres, 56 percent of the private forest land. The owners who have harvested own an average of 25 acres, as compared to the 15-acre average of the owners who have not harvested in the past. However, the size of ownership unit does influence what products are harvested.

What motivated these owners to cut? An estimated 34,300 ownership units (24 percent) who have harvested in the past did so because they felt that their timber was mature. These ownership units have 1,051,100 acres of forest land, 29 percent of the forest land owned by harvesters (Tables 24 and 25, Fig. 6).

Nineteen percent of the harvesters indicated that they cut trees for their own or company

use. Of the 600,100 acres owned by these ownership units, 167,900 acres is owned by forest industries. The remaining owners own an average of 16 acres. Many of these owners are cutting firewood for their own use.

Fourteen percent of the ownership units indicated that they harvested because they needed the money or were offered a good price. Individuals that harvested because they were offered a good price hold an average of 75 acres per owner. Those who harvested because they needed the money own an average of 31 acres of forest land.

The remaining harvesters did so for land clearing, timber salvage, cultural treatment, or for other reasons. Only 1 percent of the ownership units harvested for the purpose of cultural treatment.

Why Many Owners Have Not Harvested

Fifty-seven percent of the private forest-land ownership units in Ohio have never harvested timber. These ownership units hold 2,890,900 acres, 44 percent of the privately owned commercial forest land. Over half the owners who have not harvested in the past hold more than half of this acreage; they indicate that they may harvest some time in the future (Tables 28-34).

Twenty-nine percent of the forest land held by nonharvesters (836,900 acres) was not harvested because the owners believed the timber was immature (Tables 26-27, Fig. 7). Twenty-two percent of all private forest land in the state is held by owners who say they will never harvest timber. Current rates of tenure suggest that some of these will sell their land before the timber matures.

Figure 6.--Distribution of private ownerships who have harvested timber, by reason for harvesting.

Figure 7.--Distribution of private ownerships who have not harvested timber, by reason for not harvesting.

The next most frequently cited reason for not harvesting was that timber harvesting would ruin the scenery. The ownership units that gave this reason hold 12 percent of the forest land held by nonharvesters, and average 11 acres of forest land per ownership.

Owners who have stands of poor quality timber or low volumes per acre are not likely to find commercial markets for their trees. Ownership units with 10 percent of the forest land owned by nonharvesters felt that their forest land was in this situation.

Lack of a market or low prices were reasons given by landowners holding 5 percent of the nonharvested acreage. Many of these ownerships intend to harvest in the future, perhaps when prices or market conditions improve.

Distrust of loggers, opposition to timber harvesting, or the belief that harvesting would destroy hunting values were reasons given by 11 percent of the nonharvesters. Overall, very few Ohio owners are philosophically opposed to cutting, and the ones that are control a very small percentage of the resource.

How Much Timber Is Available

The answer to the question: "How much timber is available for harvesting from private forest land?" is influenced by how one defines availability and the assumptions from which the estimate is developed. Changes in industrial technology, market conditions, and the general social atmosphere limit the credibility of a long-range estimate.

Two specific questions were asked of sample owners to aid in estimating timber availability:

when they plan to harvest timber and what percentage of their woodland they believed they would never harvest timber from. We assumed that as many ownership units will harvest in the next 10 years as said they would. We divided the ownership units into four groups: forest industry, nonindustrial private forest ownerships (NIPF's) over 500 acres, NIPF's with 50-499 acres, and NIPF's with fewer than 50 acres of forest land.

An estimated 200 forest industry landowners hold 186,300 acres of forest land in Ohio. These owners indicate that 98 percent or 182,600 acres are available for timber harvesting. Current average annual growth for Ohio's forest land is estimated to be 40.28 ft³ per acre per year (Dennis and Birch 1981). Assuming that this growth is available for harvesting, 7,355,100 ft³ of wood will be available for timber products each year from forest industry lands.

Two-thirds of the NIPF's holding more than 500 acres of commercial forest land plan to harvest timber in the next 10 years. These ownership units hold 407,700 acres of forest land and indicate that 92 percent or 376,000 acres are available for timber harvesting. Again, assuming that these owners will on the average harvest annual growth from their forest land, 15,145,300 ft³ of wood would be available for timber products each year.

We estimate that 5,800 NIPF's holding between 50 and 499 acres plan to harvest during the next 10 years. These owners indicate that 565,300 acres or 89 percent of their forest land is available for timber harvesting. Using the same assumption of growth, 22,770,300 ft³ of wood would be available for timber products each year.

The remaining 37,200 ownership units that intend to harvest in the next 10 years own fewer than 50 acres of forest land. These ownerships indicate that 372,500 acres or 82 percent of their forest land is available for timber harvesting. That would give an estimate of 15,004,300 ft³ of wood available for timber products each year.

In total, 60,275,000 ft³ of timber should be made available each year by private owners who plan to harvest timber during the next 10 years. In 1978, forest industries used 64,873,000 ft³ of timber from growing stock in Ohio's forest (Nevel and Redett 1980). Adding the volume that will be made available from public forest land suggests that an adequate volume of timber will be available to Ohio's forest industry if growth remains the same or increases, and if harvesting activities do not increase. This view is reinforced by the 150,400 ownership units holding 3,091,100 acres of commercial forest land who indicate that they may harvest at some time in the future. These ownerships say 84 percent of their land is available, which means that these owners are producing 104,588,000 ft³ of available timber each year.

Forest Management on Private Lands

Harvesting Practices

Half of the landowners who harvested timber chose the area or trees to be harvested (Table 36). These owners control 1,319,800 acres, 37 percent of the privately owned forest land held by harvesters. An additional 9 percent of the owners who harvested chose the trees for harvest with the assistance of a forester or buyer. The average holding for owners who chose the timber themselves was 19 acres. Owners who chose the timber along with the buyer own an average of 33 acres. The average forest ownership for owners who selected the trees with the help of a forester was 112 acres.

An estimated 6,700 ownerships involved a forester in choosing the area or trees to be harvested. These owners hold 17 percent of the land held by harvesters. Where the forester alone selected the timber for harvest, the average holding was 86 acres of forest land.

Seventeen percent of the harvesters allowed the buyer to select the timber to be harvested from their land. These owners own an average of 29 acres of forest land. When the buyer selects the timber to be cut, there may be conflict between the buyer's objective -- obtaining maximum merchantable timber -- and the landowner's objectives. In some cases the buyer's and seller's goals are the same -- maximum current value. However, many landowners goals have been compromised because they allowed

someone else to plan the harvest from their land. A professional forester may also compromise the landowner's objectives by emphasizing silvicultural integrity of the harvest, but foresters do strive to understand the landowner's goals and seek their realization.

Diameter-limit cutting, where only trees above a certain diameter are removed, was the method of selection used by 23,200 owners with 920,500 acres of forest land. This method was frequently used when the buyer was involved in the timber selection. This harvest method is easy to administer and allows the landowner to check what was cut without marking individual trees before the harvest.

Selection, where only preselected marked trees are removed, was used by 35,100 ownership units with 764,200 acres. This method is frequently used on small ownerships where the landowner chooses the trees to be harvested. It may be assumed that this method was favored by the many small owners who harvested firewood. When a forester chooses the timber by selection he or she is most likely to be operating on an ownership of fewer than 50 acres of forest land.

Clearcutting was used on 3,800 ownerships with 336,700 acres of forest land. Some large ownerships that employ foresters used this method. The average holding is 562 acres of forest land.

An estimated 53,300 landowners did not know what harvesting method was used or did not answer the question. The remaining owners used a combination of methods or other selection procedures.

Products Harvested

Sawlogs account for more than half of the volume harvested as industrial roundwood in Ohio (Nevel and Redett 1980). As expected, the product that owners most frequently harvest was sawlogs (Table 37). Size of ownership seems a direct influence on what products are harvested. The forest industry ownerships had all harvested sawlogs. Among the nonindustrial private land owners, those with more than 500 acres of forest land were most likely to have harvested sawlogs, followed by the 50 to 499-acre owners, and lastly the owners of fewer than 50 acres of forest land.

Pulpwood is the second most important industrial roundwood product in Ohio. Only 5 percent of the owners who harvested timber have harvested pulpwood. The larger nonindustrial owners and the forest industry owners were most likely to have harvested pulpwood. They were also most likely to have harvested veneer logs.

An estimated 55,800 ownership units harvested firewood from their 522,900 acres of forest land. Ninety-seven percent of these owners own fewer than 50 acres of forest land; the average firewood harvester has only 9 acres. Fuelwood is not considered an industrial product. The estimated fuelwood harvest was 13,576,000 ft³ in 1978, but most of this harvest came from non-growing-stock sources. Many of the fuelwood harvesters harvested firewood in conjunction with the harvest of a commercial product.

Nearly one-third of the owners who have harvested, holding 41 percent of the acreage held by harvesters, cut more than one product from their forest land. Other products that were harvested from private forest land in Ohio included posts, poles, piling, cooperage logs, mine timbers, and Christmas trees.

Forestry Assistance

When asked whom they would contact for forestry assistance, 43 percent of the ownership units said they did not know and another 36 percent did not respond to the question. Together these owners hold 66 percent of the privately owned forest land (Table 38). The larger owners (more than 50 acres of forest land) have made the effort to find out where to obtain information about their forest land and forest management, because a larger percentage know whom to contact.

Eleven percent of the landowners have sought some form of forestry assistance. These owners hold 25 percent of the private forest land (Table 39). Owners who harvested timber were more likely to have sought assistance than those who have not.

An estimated 37,700 ownership units, 11 percent of units with 1,180,900 acres, said they would contact the Ohio Department of Natural Resources, Division of Forestry, for forestry assistance. Of these, 15,700 have sought assistance in the past, (Table 40), these owners have 739,600 acres of forest land. Most of the other owners who have sought assistance in the past would contact the Extension Service, Agricultural Stabilization and Conservation Service, or the Soil Conservation Service.

Of the owners who have sought assistance, 13,500 owners holding 618,100 acres received general forest management assistance (Table 41). Other owners received assistance in timber marking, timber stand improvement, tree planting, timber sales administration, timber evaluation, and other forestry services. It is important to note that these data include services received from all sources including forest industries that employ their own foresters.

Recreation

Two thirds of the private forest-land owners, holding 74 percent of the forest land, permit or participate in some form of recreational use of their land (Table 42). Within this recreational base there are three distinct use categories (Figure 8): (1) The owner, the owner's family or immediate circle of friends use the land for recreation and exclude the general public; (2) The owner, the owner's family, or immediate circle of friends recreate and permit the public to recreate; and (3) The owner, the owner's family or immediate circle of friends do not use the land for recreation but do permit the public to use the land for recreation.

Figure 8.--Distribution of acreage in private ownerships, by availability for recreation.

Recreational use by the owner and the owner's family or immediate circle of friends occurs on the land of 206,200 ownership units with 4,493,700 acres of forest land (Table 43). Hunting is the most frequent form of recreational use on 40 percent of the ownerships with 53 percent of the forest land. Hiking is important on an estimated 108,800 ownerships with 2,602,700 acres of forest land. Picnicking, camping, fishing, and snowmobiling were other recreational uses. Fewer than 20 percent of the owners, their families, or immediate circles of friends use the forest land for these purposes.

An estimated 95,900 ownership units (29 percent) with 2,294,600 acres (35 percent) allow public use of their forest land for recreation (Table 44). Hunting is the most frequent recreational use, permitted by 24 percent of the owners' with 31 percent of the forest land. Hiking is permitted by 10 percent of the landowners holding 17 percent of the forest land. The remaining recreational uses were permitted by fewer than 10 percent of the landowners. Many landowners are apprehensive about permitting picnicking and camping because of possible site degradation..

The amount of forest land available for recreation varies considerably between the different regions in Ohio (Table 45). In general, the more heavily forested Hill Country region has a higher percentage of the forest land available than the more sparsely forested Glaciated region. The forest-land ownerships with more than 500 acres of forest land permit the public to use their land for recreation most frequently (Table 46). Most of the land in these larger ownerships is in the Hill Country region; this is partially responsible for the greater availability of recreation there.

Since hunting was the most frequent recreational use of forest land by the owner, and the use most frequently permitted the public, hunting was allowed by 47 percent of the owners with 59 percent of the forest land (Figure 9). An additional 20 percent of the owners with 17 percent of the land did not respond to the questions. Having forest land unavailable for hunting limits the Ohio Department of Natural Resources, Division of Wildlife, in its management of the wildlife resource.

An estimated 48 percent of the ownership units do not permit public use on their 2,928,900 acres. Only 46 percent of the ownership units that do not allow public use post their land (Table 48). Conversely, the owners of 584,200 acres of forest land post their land but allow some form of public use. The percentage of ownerships that post their land varies considerably from forest survey unit to survey unit but the percentage of forest land posted is fairly uniform between units (Table 49). Ohio law requires written permission for recreational use of private lands, therefore, posting is not required to limit access.

Why do landowners post their land? Many owners post their land to limit or control public access, but that does not necessarily mean that the land is unavailable, as evidenced by the 3,500 ownerships who post and allow some public use of their lands.

An estimated 17,400 ownership units post their land to control hunting. These owners control 405,700 acres of forest land. Other owners post their land to prevent abuse of their property, for safety reasons, or to protect themselves against liability. Landowners that post to protect themselves against liability own larger acreages than owners who post for other reasons.

Figure 9.--Distribution of acreage in private ownerships, by availability for hunting.

The group of owners who seem to post heavily are the owners of 50 to 500 acres of forest land (Table 50). Owners of fewer than 50 acres are probably able to control their land without posting. Many owners with more than 500 acres may find controlling access difficult even with posting.

Conclusion

The nonindustrial private forest-land owners usually hold forest lands for reasons other than timber production. Many are turning to their forest land as a source of income and fuelwood. The harvesting of fuelwood may possibly impinge on the supplies of timber available to the forest industries, but this concern is minimized because much more timber is being produced on land controlled by owners who have expressed an interest in timber harvesting than the industry is using.

Forest owners need information on how to achieve their primary objectives for owning forest land. Proper management will optimize production of the products needed by society. The existing delivery system is supplying many owners with the information they need to achieve the spectrum of benefits that forestry has to offer, but many forest-land owners are not seeking or are not being reached by professional foresters.

Literature Cited

- Barnard, Joseph E. FINSYS - a tool for the processing of integrated resource inventory data. In: Integrated inventories of renewable natural resources: Proceedings of the workshop. 1978. USDA For. Serv. Gen. Tech. Rep. RM-55. p. 332-335.
- Dennis, Donald F.; Birch, Thomas W. Forest statistics for Ohio - 1979. Resour. Bull. NE-68. Broomall, PA: U.S. Department of Agriculture, Forest Service, Northeastern Forest Experiment Station; 1981. 79 p.
- Dennis, Donald F. The forest resources of Ohio. Resour. Bull. NE-75. Broomall, PA: U.S. Department of Agriculture, Forest Service, Northeastern Forest Experiment Station; 1983. (in press).
- Kingsley, Neal P. The forest-land owners of Southern New England. Resour. Bull. NE-41. Broomall, PA: U.S. Department of Agriculture, Forest Service, Northeastern Forest Experiment Station; 1976. 27 p.
- Kingsley, Neal P.; Birch, Thomas W. The forest-land owners of New Hampshire and Vermont. Resour. Bull. NE-51. Broomall, PA: U.S. Department of Agriculture, Forest Service, Northeastern Forest Experiment Station; 1977. 47 p.
- Lewis, J. A. Land ownership in the United States, 1978. Agric. Inf. Bull. 435. Washington, DC: U.S. Department of Agriculture; 1980. 98 p.
- Nevel, Robert L., Jr.; Redett, Robert B. Ohio timber industries - a periodic assessment of timber output. Resour. Bull. NE-64. Broomall; PA: U.S. Department of Agriculture, Forest Service, Northeastern Forest Experiment Station; 1980. 33 p.
- Wunderlich, Gene. Facts about U.S. land ownership. Agric. Inf. Bull. 422. Washington, DC: U.S. Department of Agriculture, Economics, Statistics, and Cooperative Service; 1978. 29 p.
- plots. A total 1,374 questionnaires were sent to owners of commercial forest land in Ohio; 1,054 (77 percent) were returned with usable information.

The questionnaire was developed from several earlier ownership studies and has been revised as the study has progressed through the Northeastern States. The mailing consisted of the questionnaire and a cover letter that explained the purpose of the survey. Approximately 2 weeks after the first mailing, a postcard was sent to each addressee to remind those who had not responded to return the questionnaire, and to thank those who had returned theirs.

One week later, nonrespondents were mailed a second copy of the questionnaire and the cover letter plus a second letter urging their cooperation. Approximately 1 month later, 706 owners had responded. Then a 100-percent field canvass of nonrespondents was undertaken by personnel of the Ohio Department of Natural Resources, Division of Forestry. This produced an additional 348 usable questionnaires. The 1,054 questionnaires represent 1,125 of the privately owned forested field plots or 73 percent.

The probability that a forest-land owner will be sampled depends on the rate of sampling and the acreage of commercial forest land he owns. Each unit in Ohio had a different rate of sampling. There were also different rates of success in persuading nonrespondents to reply. Both the survey rate of sampling and the success rate of the follow-up affect the probability that an owner will be included in the final tabulation.

The total acreage of commercial forest land in private ownerships was obtained from the forest survey. To calculate the area represented by each plot, the total area of privately owned commercial forest land in each unit was divided by the number of field plots represented by the valid questionnaires.

Since the sampling scheme is essentially the one used for the forest survey, there is a low probability of inclusion for owners of small parcels of forest land. To estimate the total number of persons who own commercial forest land in Ohio, it was necessary to weight the number of owners obtained in the samples. This procedure can be stated as:

$$N = \frac{CFLp}{Nr} \sum \frac{1}{A_1}$$

N = estimated number of private owners in the sampling strata.

CFLp = the acres of commercial forest land in the sampling strata.

Nr = number of respondents in the sampling strata.

A₁ = acres owned by the individual respondents.

Appendix

Study Method

The sampling scheme used in this study was derived from the sampling design used in the forest survey by the Northeastern Station. Resources Evaluation field crews attempted to obtain the correct name and mailing address of the owner of each of the 1,551 privately owned forested field plots in the state. These plots are uniformly distributed within each survey unit. The field crews obtained usable addresses of owners for more than 90 percent of the field

The ΣN then equals the estimated number of private owners in the state. This is an unbiased estimate of the total number of persons who own commercial forest land in Ohio.

The data were edited, processed and compiled by computer using FINSYS-2, a generalized computer system (Barnard 1978).

This study encompasses six sampling units. The following tabulation shows the pertinent data for each unit.

Unit	<u>No. of</u> <u>usable</u> <u>question-</u> <u>naires</u>	<u>No. of</u> <u>survey</u> <u>plots</u>	<u>Average</u> <u>acreage</u> <u>per plot</u>
South-Central	226	244	6,830
Southeastern	199	225	5,008
East-Central	239	265	6,047
Northeastern	207	207	5,805
Southwestern	73	73	6,373
Northwestern	110	111	6,181
All units	1,054	1,125	5,782

Data Accuracy and Reliability

It is important to know the variation associated with estimates contained in this report. Since not every acre and every owner in the state was sampled, the data are estimates. When judging the effectiveness of the estimating procedures we are concerned with two important criteria: first, how accurate is the estimate; and second, how precise or reliable is the estimate. Accuracy is the correspondence between the sample result and the result from a complete count or census using essentially the same definitions and procedure. Reliability is the precision of the statistical estimates. We are chiefly interested in the accuracy of the sample but in most instances we can only measure reliability.

To check the accuracy of the data we had this report reviewed by outside experts. The response level obtained in the study is an attempt to assure accuracy by minimizing nonresponse bias. Beyond the search for accuracy, the reliability of the estimate is given by its sampling error. Sampling errors were calculated for the estimated number of forest-land owners in each cell of the tables. Sampling errors appear in the tables for the most important categories. The sampling error for the number of acres of commercial forest land in private ownership was calculated as part of the forest survey.

Sampling errors provide a means of evaluating survey results; the smaller the sampling error the greater the reliability of the estimate. A

statistic with a sampling error of 10 percent is more reliable than one with a sampling error of 20 percent. If an item has a sampling error of 10 percent, chances are 2 out of 3 that an interval constructed to represent a range of 90 to 110 percent of the survey value would contain the true proportion value.

Since the ownership survey was conducted using a land area sample, the estimates of area have smaller sampling errors than the estimates of numbers of owners. Estimates for the state as a whole are more reliable (have the smallest sampling errors); followed by the survey unit estimates.

The inclusion of small forest parcels (fewer than 10 acres) in the study population substantially increases the sampling error for the estimated number of owners.

The sampling errors (in percent) are:

<u>Unit</u>	<u>Private</u> <u>commercial</u> <u>forest</u> <u>land</u>	<u>Owners</u> <u>of private</u> <u>commercial</u> <u>forest land</u>	<u>Owners</u> <u>holding</u> <u>10 or more</u> <u>acres</u>
South-Central	1.5	16.9	7.9
Southeastern	2.2	19.0	7.8
East-Central	2.1	14.5	7.2
Northeastern	2.9	13.5	6.6
Southwestern	5.6	14.0	11.3
Northwestern	4.7	10.0	7.8
Total	1.1	6.5	3.2

Definition of Terms

Average annual net growth of growing stock. The change (resulting from natural causes) in volume of sound wood in sawtimber and poletimber trees during the period between surveys, divided by the length of the period. Components of annual net growth of growing stock include the increment in net volume of trees present at the beginning of the period minus cull increment (the net volume of trees that became rough or rotten during the period).

Board foot. A unit of lumber measurement 1 foot long, 1 foot wide, and 1 inch thick or its equivalent. By Forest Inventory and Analysis convention, softwoods less than 9.0 inches in dbh and hardwoods less than 11.0 inches in dbh do not contain board-foot volume.

Clearcutting. The method of regenerating timber in which the area is cut clear in the literal sense of the word; virtually all the trees, large and small, are removed. The term is often erroneously applied to any type of cutting in which all the merchantable timber is removed.

Commercial forest land. Forest land that is producing or capable of producing crops of industrial wood (more than 20 ft³/acre/year) and that is not withdrawn from timber utilization. (Industrial wood is all roundwood products except fuelwood.)

Diameter limit. The method of regenerating timber in which all trees above a specified diameter are removed.

Forest industries. Companies or individuals operating wood-using plants.

Forest land. Land that is at least 16.7 percent stocked (contains at least 7.5 ft² per acre of basal area) by forest trees of any size, or that formerly had such tree cover and is not currently developed for nonforest use. (Forest trees are woody plants that have a well-developed stem and usually are more than 12 feet in height at maturity.) The minimum area for classification of forest land is 1 acre.

Growing-stock trees. Live trees of commercial species that are classified as sawtimber, poletimber, saplings, and seedlings; that is, all live trees of commercial species except rough and rotten trees.

Growing-stock volume. Net volume, in ft³, of growing-stock trees that are 5.0 inches in dbh or larger, from a 1-foot stump to a minimum 4.0-inch top diameter outside bark of the central stem.

Hardwoods. Dicotyledonous trees, usually broad-leaved and deciduous.

Private commercial forest land. All commercial forest land other than that owned by federal, state, or local governments or their agencies.

Pulpwood. Any log from which woodpulp is to be made; usually measured in bolts of 4, 5, or 8 feet, and somewhat smaller in diameter than sawlogs or veneer logs.

Sawtimber trees. Live trees of commercial species that are (a) at least 9.0 inches in dbh for softwoods or 11.0 inches for hardwoods, and (b) that contain at least one 12-foot or two noncontiguous 8-foot merchantable sawlogs, and that meet regional specifications for freedom from defect.

Sawtimber volume. Net volume in board feet, International 1/4-inch rule, of merchantable sawlogs in live sawtimber trees. Net volume equals gross volume less deductions for rot, sweep, and other defects that affect use for lumber.

Selection system. The method of regenerating timber in which trees of all sizes are harvested. However, in practice, frequently only the oldest or largest trees in a stand are harvested. Trees are taken singly or in small groups, but the entire stand is never cleared completely in a single operation.

Softwoods. Coniferous trees, usually evergreen, with needles or scalelike leaves.

Stand. A growth of trees on forest land.

Timber removals. The volume of growing-stock or sawtimber trees harvested or killed in logging or in cultural operations such as timber stand improvement, land clearing, or changes in land use.

Timber salvage. Removals of down, damaged, or diseased trees.

Veneer log. Any log from which veneer is to be made, by peeling (rotary cutting) or slicing.

NORTHEASTERN WOODLAND OWNERSHIP STUDY

State _____

County _____

Plot _____

Please complete the following question to the best of your knowledge. Where actual data are not available please use your best estimate. Please be assured your answers will be held strictly confidential. If you do not now own woodland, please answer questions 1 and 2 and return the questionnaire.

1. How much land do you now own? (Include woodlands, pasture, cropland, etc., but exclude individual house lots.) Acres _____

2. Of all of the land you own how much is woodland? Acres _____ or percent _____.

3. Is all of the woodland you own in one state?

Yes _____ What state ? _____

No _____ My woodlands are in more than one state as follows:

_____ acres in _____
(state)

_____ acres in _____
(state)

_____ acres in _____
(state)

_____ acres in _____
(state)

4. How many individual tracts or parcels of woodland do you own? Number _____

5. In what year did you first acquire woodland? Year _____

6. How did you acquire the major portion of the woodland you now own?

Purchase 1. _____

Inheritance 2. _____

Other 3. _____

7. In which one of the following ownership categories does the major portion of your woodland holdings fall? (Please check only one.)

Check one

Individual (include husband and wife)	1. _____
Joint ownership	2. _____
Undivided estate	3. _____
Partnership	4. _____
Corporation	5. _____
Club or association	6. _____
Other	7. _____

8. If the ownership is a partnership, corporation, club, or association, what is the nature of the business or organization? Or, if woodland is part of an active farm, write in the word "farm" in the space below.

Please indicate the title of the person completing this questionnaire.

9. What is the approximate road mileage from your home to your nearest and furthest tract of woodland? (For businesses or organizations consider "home" to mean place of business, or location of headquarters of the organization.)

Miles to the nearest tract (enter zero if you live on the tract). _____

Miles to the furthest tract. _____

10. How many times have you or your representative visited your nearest and furthest tract of woodland in the last 12 months?

Number of visits to the nearest tract _____

Number of visits to the furthest tract _____

11. Have you ever harvested timber or cleared trees from your land?

Yes 1. _____ No. 2. _____

NOTE: IF YOU HAVE NEVER HARVESTED TIMBER OR CLEARED TREES FROM YOUR
WOODLAND SKIP TO QUESTION 19 PAGE 5

12. In what year did the most recent timber harvest take place? _____

13. What percent of your woodland was involved in the most recent
timber harvest? _____

14. What products were harvested? (Check as many as apply.)

Check

Sawlogs	1. _____	Mine timbers	6. _____
Veneer logs or bolts	2. _____	Christmas Trees	7. _____
Pulpwood	3. _____	Other (please specify) _____	8. _____
Turnery bolts	4. _____	Don't know what products	
Posts, poles, or piling	5. _____	were harvested	9. _____

15. Please indicate amounts of products harvested.

<u>Product</u>	<u>Amount</u>	<u>Unit of measure</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

16. Who selected the area or trees to be harvested?

Check one

1. Landowner	_____
2. Forester	_____
3. Friend or neighbor	_____
4. Timber buyer or logger	_____
5. Combination of _____ and _____	_____

17. How were your trees selected for harvesting?

Check one

Selection (only preselected marked trees were removed). 1. _____

Diameter limit (only trees over a minimum diameter were removed). 2. _____

Please indicate minimum diameter _____

Clearcutting (most or all of the trees on a given area were removed). 3. _____

Land clearing (trees were harvested incidental to clearing the land for a use other than woodland). 4. _____

Other (please specify) _____ 5. _____

Combination of _____ and _____ 6. _____

Don't know method used. 7. _____

18. Why did you harvest timber at the time that you did?
(Check only the one reason you consider most important.)

Check one

Felt timber was mature 1. _____

Offered a good price 2. _____

Land clearing 3. _____

Needed money 4. _____

Needed timber for own use 5. _____

Timber harvest for company use 6. _____

(industry only) 7. _____

Timber salvage 8. _____

Cultural treatment 9. _____

Other _____

19. If you have never harvested timber or trees from your land, why not? (Please check only the reason you consider most important).

	<u>Check one</u>
Woodland immature - timber too small	1. _____
No market for timber	2. _____
Price offered or prevailing market price too low	3. _____
Value of land for hunting would be destroyed	4. _____
Selling or plan to sell the land	5. _____
Scenery would be destroyed	6. _____
Land tied up in estate	7. _____
Distrust of loggers	8. _____
Opposed to timber harvesting	9. _____
Poor quality timber	10. _____
Not enough volume	11. _____
Logging would create a fire hazard	12. _____
Insufficient area to harvest	13. _____
Other (please specify) _____	14. _____

20. Do you plan to harvest timber from your woodland in:

	<u>Check one</u>
Next 5 years	1. _____
5 to 10 years	2. _____
Possibly at some future date	3. _____
Never plan to harvest	4. _____

21. What percent, if any, of your woodland do you feel you would never harvest timber from? _____ %

22. Have you ever sought the assistance of a forester for advice or help in managing you woodland?

Yes _____ Please indicate the nature of assistance _____

No. _____

23. What office, agency, or individual would you contact for forestry assistance? (If you don't know, please write in "don't know.")

24. Why do you own woodland? (Please rank in order of importance those items that are applicable, with number 1 the most important.)

Rank

Land investment (hope to sell all or part of my woodland at a profit).

Recreation (hunting, camping, fishing, etc.).

Timber production (growing timber or other forest products for sale).

Farm or domestic use (source of forest products for own use, i.e., firewood, fence posts, etc.).

Esthetic enjoyment (the desire to have woodland and "green space" around my home).

Part of the farm (the woodland is part of the farm but serves no useful function in the farm operation).

Part of my residence.

Other (please specify) _____

25. Which of the following do you feel were the most important benefits you derived from your woodland in the last 5 years? (Please rank in order of importance those items that are applicable, with number 1 the most important.)

Rank

Increase in land value (investment).

Recreation (hunting, fishing, camping, etc.).

Income from the sale of timber.

Esthetic enjoyment (just enjoy woodland, wildlife, and the general satisfaction of owning "green space").

Farm and domestic use.

Other (please specify) _____

26. Which of the following do you feel will be the most important benefits you expect to derive from your woodland in the next 5 years? (Please rank in order of importance those items that are applicable, with number 1 the most important.)

Rank

Increase in land value (investment).

Recreation (hunting, camping, etc.).

Income from sale of timber.

Esthetic enjoyment (just enjoy woodland, wildlife, and the general satisfaction of owning "green space").

Farm or domestic use.

Other (please specify) _____

27. Do you, your family, or immediate circle of friends use your woodland for any of the following?

	<u>Check</u>
Hiking	1. _____
Picnicking	2. _____
Camping	3. _____
Fishing (check only if fishing is available)	4. _____
Hunting	5. _____
Snowmobiling	6. _____
Other (please specify) _____	7. _____

28. Is the general public, other than your family and immediate circle of friends, permitted to use your woodland for any of the following?

	<u>Check</u>
Public use not permitted	1. _____
Public use permitted:	
Hiking	2. _____
Picnicking	3. _____
Camping	4. _____
Fishing (check only if fishing is available)	5. _____
Hunting	6. _____
Snowmobiling	7. _____
Other (please specify) _____	8. _____

29. Is your land posted?

No _____, go to next question.

Yes _____, why is it posted? _____

30. Have you been approached to sell all or part of your woodland in the last five years?

Timber only	1. Yes _____	2. No. _____
Land only	3. Yes _____	4. No. _____
Land and timber	5. Yes _____	6. No. _____

The following questions are asked to classify responses on the basis of information about the owner personally. Again, we would remind you that the answers to these questions, and to any other questions on this questionnaire are strictly confidential. All answers will be compiled in such a manner that it will be impossible to identify any individual reply.

These questions do not pertain to and should not be answered by corporations and organizations.

31. Are you an active member of any of the following organizations?
(Please check those you are a member of.)

Check

1. ☐ American Forestry Association
2. ☐ Ohio Forestry Association
3. ☐ Pennsylvania Forestry Association
4. ☐ New York Forest Owners Association
5. ☐ Adirondack Mountain Club
6. ☐ Isaak Walton League
7. ☐ Audubon Society
8. ☐ Natural History Society
9. ☐ National Wildlife Federation
10. ☐ A Sportsman's Club: _____
11. ☐ A Garden Club: _____
12. ☐ National Farmer's Organization
13. ☐ The Grange
14. ☐ The American Tree Farm Program
15. ☐ The Sierra Club
16. ☐ League of Ohio Sportsmen
17. ☐ Nature Conservancy
18. ☐ Ohio Conservation Congress
19. ☐ National Rifle Association
20. ☐ Soil Conservation District
21. ☐ Any other organizations similar to those listed above
(Please specify) _____
22. ☐ No, I don't hold membership in any of the above.

32. Do you or any member of your household subscribe to any of the following magazines? (Please check those that apply.)

Check

1. ☐ Tree Farm News
2. ☐ American Forests
3. ☐ National Wildlife
4. ☐ Forest Farmer
5. ☐ Ohio Woodlands
6. ☐ Pennsylvania Forests
7. ☐ Pennsylvania Game News
8. ☐ Audubon Magazine
9. ☐ National Parks and Recreation
10. ☐ Field and Stream
11. ☐ Sports Afield
12. ☐ Outdoor Life
13. ☐ Agway Cooperator
14. ☐ Ranger Rick Nature Magazine
15. ☐ Our Heritage
16. ☐ Forests and People
17. ☐ Ohio Farmer
18. ☐ Adirondac
19. ☐ The Conservationist
20. ☐ Progressive Farmer
21. ☐ Any other magazine similar to those listed above
(Please specify) _____
22. ☐ No, I don't subscribe to any of the above magazines.

33. Please indicate, by circling the letter, whether you agree or disagree with each of the following statements made by other forest landowners. If you feel you don't know or have no opinion on the statement, please circle letter "E", the "don't know" column.

	<div style="display: flex; justify-content: space-between; padding: 0 10px;"> <div>Very Strongly Agree</div> <div>Strongly Agree</div> <div>Agree</div> <div>Slightly Agree</div> <div>Don't Know or Neutral</div> <div>Slightly Disagree</div> <div>Disagree</div> <div>Strongly Disagree</div> <div>Very Strongly Disagree</div> </div>									
A	B	C	D	E	F	G	H	I		
									a. Conservation means that natural resources should be used wisely.	
									b. Like any crop the forest needs to be given attention. It needs to be cut when ready and to be given care when needed.	
									c. Just thinking about our woodland and having it there is nice.	
									d. Holding on to our forests will become more and more difficult with each succeeding generation.	
									e. I like the beauty of the forest land the most; we must preserve, not damage it.	
									f. I can't afford to buy forest land just for hunting and recreation purposes. I need to get more out of it than that.	
									g. I purchased my forest land primarily for investment to leave it alone and sell later.	
									h. I suppose I should harvest mature trees; I'd prefer to get the bad ones out, and perhaps cut some posts and firewood.	
									i. I'd only sell timber if it would definitely improve the forest for wildlife.	
									j. The country is being denuded; one must do something to preserve the forest land.	
									k. The biggest management problem is too much conservation.	
									l. I'm not interested in the least in management for wood production.	
									m. It is reassuring to know that there is money in my forest in the form of trees in case of emergency.	
									n. Wildlife isn't really a major factor in the increase or decrease of land value.	
									o. This forest land is more of a liability; it's not worth keeping in it's present state.	
									p. Taking out trees destroys the beauty of the forest land.	

If the woodland is owned by more than one person, the following questions should be answered for the person to whom the questionnaire is addressed

34. During the first 12 years of the owner's life where did he live most of the time?

Check one

In a city with a population of 100,000 or more	1. _____
In a city with a population of 10,000 to 99,999	2. _____
In a town or city with a population of less than 10,000	3. _____
In a rural area	4. _____
On a farm	5. _____

35. What is the sex of the owner?

Male _____ Female _____

36. What is the age of the owner?

Check one

Under 25	1. _____
25-44	2. _____
45-64	3. _____
65 and over	4. _____

37. How many years of formal education has the owner completed?

	<u>Check one</u>
Grades 1 - 8	1. _____
Grades 9 - 12	2. _____
Has some schooling beyond high school (business technical school, or some college)	3. _____
Has a bachelor's degree or equivalent	4. _____
Has some graduate work	5. _____
Holds a master's degree	6. _____
Holds a doctoral degree	7. _____

38. What is the primary occupation of the owner? _____

39. In which category would the owner's personal gross income from all sources fall?

	<u>Check one</u>
Less than \$10,000	1. _____
\$10,000 to \$14,999	2. _____
\$15,000 to \$19,999	3. _____
\$20,000 to \$24,999	4. _____
\$25,000 to \$29,999	5. _____
\$30,000 or more	6. _____

40. Comments?

Index to Tables

<u>Table No.</u>	<u>Page</u>
1. Estimated number of private ownership units and acres of commercial forest land owned by size class and geographic unit, Ohio, 1979	30
2. Estimated number of private ownership units and acres of commercial forest land owned, by expected time of future harvest, Ohio, 1979.....	31
3. Estimated number of private ownership units and acres of commercial forest land owned, by form of ownership, percent of harvesters, percent of acres owned by harvesters, and geographic unit, Ohio, 1979.	32
4. Estimated number of private ownership units and acres of commercial forest land owned, by size class and form of ownership, Ohio, 1979.....	33
5. Estimated number of business ownership units and acres of commercial forest land owned, by incorporated and unincorporated businesses, Ohio, 1979.....	34
6. Estimated number of individual owners and acres of commercial forest land owned by occupation and geographic unit, Ohio, 1979..	35
7. Estimated number of private ownership units and acres of commercial forest land owned, by expected time of future harvest, and occupation, Ohio 1979.....	37
8. Estimated number of individual owners and acres of commercial forest land owned, by age class and geographic unit, Ohio, 1979.....	38
9. Estimated number of individual owners and acres of commercial forest land owned, by years of formal education, Ohio, 1979.....	39
10. Estimated number of individual owners and acres of commercial forest land owned, by annual income class and geographic unit, Ohio, 1979.....	39
11. Estimated number of individual owners and acres of commercial forest land owned, by early life environment, and geographic unit, Ohio, 1979.....	41
12. Estimated number of private ownership units and acres of commercial forest land owned, by date of acquisition and form of ownership, Ohio, 1979.....	42
13. Estimated number of private ownership units and acres of commercial forest land owned, by date of acquisition and geographic unit, Ohio, 1979.....	43

<u>Table No.</u>	<u>Page</u>
14. Estimated number of private ownership units and acres of commercial forest land owned, by distance from residence to nearest tract and geographic unit, Ohio, 1979.....	45
15. Estimated number of private ownership units and acres of commercial forest land owned, by number of tracts and geographic unit, Ohio, 1979.....	47
16. Estimated number of private ownership units and acres of commercial forest land owned, by distance from tracts, Ohio, 1979...	48
17. Estimated number of private ownership units and acres of commercial forest land owned, by primary reason for owning, for harvesters and nonharvesters, Ohio, 1979.....	49
18. Estimated number of private ownership units and acres of commercial forest land owned, by primary and secondary reason for owning, Ohio, 1979.....	50
19. Estimated number of private ownership units and acres of commercial forest land owned, by primary reason for owning and expected time of future harvest, Ohio, 1979..	51
20. Estimated number of private ownership units and acres of commercial forest land owned, by primary reason for owning and geographic unit, Ohio, 1979.....	52
21. Estimated number of private ownership units and acres of commercial forest land owned, by primary benefit derived in the last 5 years and primary benefit expected in the next 5 years, for harvesters and nonharvesters, Ohio, 1979.....	54
22. Estimated number of private ownership units and acres of commercial forest land owned by primary benefit expected in the next 5 years and expected time of future harvest, Ohio, 1979.....	55
23. Estimated number of private ownership units and acres of commercial forest land owned by primary benefit expected in the next 5 years and geographic unit, Ohio, 1979.....	56
24. Estimated number of private ownership units who have harvested timber and acres of commercial forest land owned, by reason for harvesting and form of ownership, Ohio, 1979.....	58
25. Estimated number of private ownership units who have harvested timber and acres of commercial forest land owned, by reason for harvesting and geographic unit, Ohio, 1979.....	59

<u>Table No.</u>	<u>Page</u>
26. Estimated number of private ownership units who have not harvested timber and acres of commercial forest land owned, by reason for not harvesting and form of ownership, Ohio, 1979.....	61
27. Estimated number of private ownership units who have not harvested timber and acres of commercial forest land owned, by reason for not harvesting and geographic unit, Ohio, 1979.....	62
28. Estimated number of private ownership units and acres of commercial forest land owned, by expected time of future harvest and by harvesters and nonharvesters, Ohio, 1979.....	64
29. Estimated number of private ownership units and acres of commercial forest land owned, by expected time of future harvest and by harvesters and nonharvesters, South-Central Unit, Ohio, 1979.....	65
30. Estimated number of private ownership units and acres of commercial forest land owned, by expected time of future harvest and by harvesters and nonharvesters, Southeastern Unit, Ohio, 1979.....	66
31. Estimated number of private ownership units and acres of commercial forest land owned, by expected time of future harvest and by harvesters and nonharvesters, East-Central Unit, Ohio, 1979.....	67
32. Estimated number of private ownership units and acres of commercial forest land owned, by expected time of future harvest and by harvesters and nonharvesters, Northeastern Unit, Ohio, 1979.....	68
33. Estimated number of private ownership units and acres of commercial forest land owned, by expected time of future harvest and by harvesters and nonharvesters, Southwestern Unit, Ohio, 1979.....	69
34. Estimated number of private ownership units and acres of commercial forest land owned, by expected time of future harvest and by harvesters and nonharvesters, Northwestern Unit, Ohio, 1979.....	70
35. Estimated number of private ownership units and acres of commercial forest land owned, by size class and expected time of future harvest, Ohio, 1979.....	71
36. Estimated number of private ownership units who have harvested timber and acres of commercial forest land owned, by method of selecting timber and individual selecting timber, Ohio, 1979.....	72

<u>Table No.</u>	<u>Page</u>
37. Estimated number of private ownership units and acres of commercial forest land owned, by timber product harvested, forest industry, and private land owners (size class ownership), Ohio, 1979.....	73
38. Estimated number of private ownership units and acres of commercial forest land owned, by agency that owners would contact for forestry assistance, and size class of ownership, Ohio, 1979.....	74
39. Estimated number of private ownership units and acres of commercial forest land owned, by harvesters and nonharvesters, and decision to seek assistance, Ohio, 1979.....	75
40. Estimated number of private ownership units and acres of commercial forest land owned, by agency that owners would contact for forestry assistance, and decision to seek assistance, Ohio, 1979.....	76
41. Estimated number of private ownership units who have received forestry assistance and acres of commercial forest land owned, by type of assistance, Ohio, 1979.....	77
42. Estimated number of private ownership units and acres of commercial forest land owned, by availability for recreation, Ohio, 1979.....	77
43. Estimated number of private ownership units and acres of commercial forest land owned, by type of recreational use, by the owner, the owner's family, or immediate circle of friends, Ohio, 1979.....	78
44. Estimated number of private ownership units and acres of commercial forest land owned, by type of public use permitted, Ohio, 1979.....	78
45. Estimated number of private ownership units and acres of commercial forest land owned, by availability for recreational use and geographic unit, Ohio, 1979.....	79
46. Estimated number of private ownership units and acres of commercial forest land owned, by availability for recreational use and size class, Ohio, 1979.....	81
47. Estimated number of private ownership units and acres of commercial forest land owned, by availability for hunting, Ohio, 1979.....	81
48. Estimated number of private ownership units and acres of commercial forest land owned, by reason for posting and use permitted, Ohio, 1979.....	82

<u>Table No.</u>	<u>Page</u>
49. Estimated number of private ownership units and acres of commercial forest land owned, by whether land is posted and geographic unit, Ohio, 1979.....	83
50. Estimated number of private ownership units and acres of commercial forest land owned, by size class and whether land is posted, Ohio, 1979.....	84

Table 1.-Estimated number of private ownership units and acres of commercial forest land owned by size class and geographic unit, Ohio, 1979

Size class	South-Central		Southeastern		East-Central		Northeastern	
Acres	Number	Percent	Number	Percent	Number	Percent	Number	Percent
OWNERS								
1-9	55,300	69	15,600	47	25,200	44	55,100	62
10-19	8,400	10	3,700	11	11,600	20	14,700	17
20-49	9,600	12	8,700	26	12,500	22	14,200	16
50-99	3,800	5	3,200	10	6,000	10	3,100	4
100-199	2,200	3	1,500	5	1,600	3	1,000	1
200-499	500	1	400	1	700	1	200	W
500+	100	W	100	W	100	W	W	W
Total	79,900	100	33,200	100	57,700	100	88,300	100
ACRES OWNED								
1-9	129,000	9	51,700	5	89,600	6	188,400	16
10-19	111,400	8	46,600	4	140,800	9	188,400	16
20-49	287,200	20	274,100	24	390,300	24	405,700	34
50-99	252,000	18	212,000	19	364,800	23	194,300	16
100-199	275,500	19	201,700	18	211,200	13	125,700	10
200-499	140,600	10	118,900	10	172,800	11	51,600	4
500+	226,900	16	221,800	20	233,000	14	47,500	4
Total	1,422,600	100	1,126,800	100	1,602,500	100	1,201,600	100

Table 1.-continued

Size class	Southwestern		Northwestern		Total		Sampling error
Acres	Number	Percent	Number	Percent	Number	Percent	Percent
OWNERS							
1-9	16,200	52	16,500	39	183,900	55	12
10-19	8,300	26	13,300	32	60,000	18	8
20-49	5,100	16	10,500	25	60,600	18	5
50-99	1,400	5	1,500	4	19,000	6	6
100-199	400	1	100	W	6,800	2	8
200-499	100	W	100	W	2,000	1	10
500+	-	-	W	W	300	W	14
Total	31,500	100	42,000	100	332,600	100	6.5
ACRES OWNED							
1-9	70,100	15	81,100	12	609,900	9	
10-19	95,600	21	156,000	23	738,800	11	
20-49	140,200	30	305,600	44	1,803,100	28	
50-99	89,300	19	93,500	13	1,205,900	19	
100-199	51,000	11	18,700	3	883,800	14	
200-499	19,100	4	18,700	3	521,700	8	
500+	-	-	12,500	2	741,700	11	
Total	465,300	100	686,100	100	6,504,900	100	

W-Fewer than 50 owners or less than 0.5 percent.

Table 2.-Estimated number of private ownership units and acres of commercial forest land owned, by expected time of future harvest, Ohio, 1979

Ownership class	1 - 10 years	Indefinite	Never	No answer	Total
OWNERS					
Forest industry	100	100	-	-	200
Farmer	28,700	56,700	49,300	11,200	145,900
Miscellaneous:					
Individual	12,600	88,700	67,800	3,900	173,000
Corporate	1,600	900	1,000	200	3,700
Other	400	4,000	5,000	400	9,800
Total private	43,400	150,400	123,100	15,700	332,600
ACRES OWNED					
Forest industry	167,900	18,400	-	-	186,300
Farmer	641,200	1,518,500	596,900	132,300	2,888,900
Miscellaneous:					
Individual	451,800	1,354,600	706,400	97,600	2,610,400
Corporate	342,600	113,300	62,100	11,400	529,400
Other	62,600	104,700	90,200	32,400	289,900
Total private	1,666,100	3,109,500	1,455,600	273,700	6,504,900

Table 3.-Estimated number of private ownership units and acres of commercial forest land owned, by form of ownership, percent of harvesters, percent of acres owned by harvesters, and geographic unit, Ohio, 1979

Form of ownership	All private owners		Acres owned		Harvesters	Acres owned by harvesters
	Number	Percent	Number	Percent	Percent	Percent
SOUTH CENTRAL						
Individual	76,000	95	1,138,600	80	35	45
Corporation	500	1	168,500	12	W	11
Other	3,400	4	115,500	8	1	5
Total	79,900	100	1,422,600	100	36	61
SOUTHEASTERN						
Individual	24,600	74	817,100	73	26	36
Corporation	500	2	183,700	16	1	14
Other	8,100	24	126,000	11	24	8
Total	33,200	100	1,126,800	100	51	58
EAST-CENTRAL						
Individual	54,600	95	1,235,100	77	39	40
Corporation	700	1	239,400	15	1	14
Other	2,400	4	128,000	8	1	2
Total	57,700	100	1,602,500	100	41	56
NORTHEASTERN						
Individual	81,000	92	942,800	78	42	37
Corporation	1,100	1	116,100	10	W	6
Other	6,200	7	142,700	12	1	5
Total	88,300	100	1,201,600	100	43	48
SOUTHWESTERN						
Individual	29,400	93	420,700	90	38	47
Corporation	1,400	5	31,900	7	4	5
Other	700	2	12,700	3	-	-
Total	31,500	100	465,300	100	42	52
NORTHWESTERN						
Individual	39,600	94	605,100	88	48	50
Corporation	300	1	24,900	4	1	2
Other	2,100	5	56,100	8	3	3
Total	42,000	100	686,100	100	52	55
TOTAL						
Individual	305,200	92	5,159,400	79	38	41
Corporation	4,500	1	764,500	12	1	10
Other	22,900	7	581,000	9	4	5
Total	332,600	100	6,504,900	100	43	56

W-Fewer than 50 owners or less than 0.5 percent.

Table 4.-Estimated number of private ownership units and acres of commercial forest land owned, by size class and form of ownership, Ohio, 1979

Size class (acres)	Individual		Other		Total	
	Number	Percent	Number	Percent	Number	Percent
OWNERS						
1-9	169,800	56	14,100	51	183,900	55
10-19	57,100	19	2,900	11	60,000	18
20-49	54,800	18	5,800	21	60,600	18
50-99	16,400	5	2,600	9	19,000	6
100-199	5,500	2	1,300	5	6,800	2
200-499	1,500	W	500	2	2,000	1
500+	100	W	200	1	300	W
Total	305,200	100	27,400	100	332,600	100
ACRES OWNED						
1-9	558,800	11	51,100	4	609,900	9
10-19	702,300	14	36,500	3	738,800	11
20-49	1,626,600	31	176,500	13	1,803,100	28
50-99	1,044,600	20	161,300	12	1,205,900	19
100-199	708,900	14	174,900	13	883,800	14
200-499	379,000	7	142,700	10	521,700	8
500+	139,200	3	602,500	45	741,700	11
Total	5,159,400	100	1,345,500	100	6,504,900	100

W-Fewer than 50 owners or less than 0.5 percent.

Table 5.-Estimated number of business ownership units and acres of commercial forest land owned, by incorporated and unincorporated businesses, Ohio, 1979

Nature of business	Incorporated			Unincorporated		
	Number	Percent	Acres	Number	Percent	Acres
Real estate	1,400	31	69,400	400	W	29,600
Forest industry	W	W	151,200	200	W	35,100
Other industry	1,200	27	308,900	100	W	26,800
Nonindustrial business	400	9	54,800	100	W	5,700
Farm	800	18	83,900	145,100	44	2,805,000
Sport/recreation club	100	2	5,700	W	W	23,100
Public utility	W	W	85,000	-	-	-
Other	600	13	5,600	182,200	56	2,815,100
Total	4,500	100	764,500	328,100	100	5,740,400

W-Fewer than 50 owners or less than 0.5 percent.

Table 6.--Estimated number of individual owners and acres of commercial forest land owned by occupation and geographic unit, Ohio, 1979

Occupation	South-Central		Southeastern		East-Central		Northeastern	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
OWNERS								
Professional	5,000	7	700	3	3,300	6	4,500	5
Executive	900	1	1,700	7	9,000	16	2,900	4
Retired	27,100	36	8,200	33	8,600	16	10,500	13
White collar	6,800	9	900	4	2,900	5	4,200	5
Skilled laborer	4,500	6	1,200	5	2,100	4	5,900	7
Unskilled laborer	1,800	2	3,800	15	6,900	13	4,800	6
Housewife	1,400	2	400	2	500	1	7,300	9
Farmer	6,500	8	2,000	8	3,900	7	15,100	19
Other	100	W	200	1	-		-	
No Answer	21,900	29	5,500	22	17,400	32	25,800	32
Total	76,000	100	24,600	100	54,600	100	81,000	100
ACRES OWNED								
Professional	117,000	10	62,000	7	114,900	9	62,600	7
Executive	66,000	6	46,400	6	89,400	7	74,000	8
Retired	280,700	25	201,300	24	229,900	19	142,300	15
White collar	99,400	9	41,300	5	63,900	5	56,900	6
Skilled laborer	81,900	7	67,100	8	63,900	5	62,600	7
Unskilled laborer	70,200	6	103,200	13	140,500	11	62,600	7
Housewife	46,800	4	31,000	4	38,300	3	45,500	4
Farmer	233,900	20	82,600	10	166,000	14	170,800	18
Other	5,800	1	5,200	1	-		-	
No Answer	136,900	12	177,000	22	328,300	27	265,500	28
Total	1,138,600	100	817,100	100	1,235,100	100	942,800	100

W-Fewer than 50 owners or less than 0.5 percent.

Table 6.--continued

Occupation	Southwestern		Northwestern		Total		Sampling error
	Number	Percent	Number	Percent	Number	Percent	Percent
OWNERS							
Professional	2,900	10	2,200	6	18,600	6	20
Executive	3,800	13	4,800	12	23,100	7	31
Retired	1,700	6	7,200	18	63,300	21	19
White collar	900	3	1,600	4	17,300	6	20
Skilled laborer	1,500	5	2,500	6	17,700	6	25
Unskilled laborer	900	3	2,800	7	21,000	7	21
Housewife	800	3	2,400	6	12,800	4	48
Farmer	4,500	15	9,800	25	41,800	14	17
Other	-	-	-	-	300	W	74
No Answer	12,400	42	6,300	16	89,300	29	15
Total	29,400	100	39,600	100	305,200	100	7
ACRES OWNED							
Professional	44,500	11	37,400	6	438,400	8	
Executive	57,300	14	68,500	11	401,600	8	
Retired	63,600	15	130,800	22	1,048,600	20	
White collar	19,100	4	24,900	4	305,500	6	
Skilled laborer	12,700	3	43,600	7	331,800	7	
Unskilled laborer	12,700	3	31,200	5	420,400	8	
Housewife	19,100	4	18,700	3	199,400	4	
Farmer	108,100	26	155,700	26	917,100	18	
Other	-	-	-	-	11,000	W	
No Answer	83,600	20	94,300	16	1,085,600	21	
Total	420,700	100	605,100	100	5,159,400	100	

W-Fewer than 50 owners or less than 0.5 percent.

Table 7.-Estimated number of private ownership units and acres of commercial forest land owned, by expected time of future harvest, and occupation, Ohio 1979

Occupation	1 - 10 years	Indefinite	Never	No answer	Total
OWNERS					
Professional	2,900	7,400	7,800	500	18,600
Executive	3,200	7,900	10,500	1,500	23,100
Retired	6,800	32,600	22,200	1,700	63,300
White collar	500	11,600	5,000	200	17,300
Skilled laborer	2,200	8,200	6,900	400	17,700
Unskilled laborer	2,500	7,600	10,100	800	21,000
Housewife	300	2,600	9,700	200	12,800
Farmer	13,400	20,400	6,700	1,300	41,800
Other	-	300	-	-	300
No Answer	8,000	43,700	34,600	3,000	89,300
All individuals	39,800	142,300	113,500	9,600	305,200
All others	3,600	8,100	9,600	6,100	27,400
Total	43,400	150,400	123,100	15,700	332,600
ACRES OWNED					
Professional	106,000	231,200	89,100	12,100	438,400
Executive	118,900	192,700	71,700	18,300	401,600
Retired	164,200	553,600	276,500	54,300	1,048,600
White collar	27,700	195,400	76,700	5,700	305,500
Skilled laborer	47,100	189,600	83,000	12,100	331,800
Unskilled laborer	82,400	215,600	110,300	12,100	420,400
Housewife	22,400	107,300	57,900	11,800	199,400
Farmer	286,700	478,500	114,100	37,800	917,100
Other	-	11,000	-	-	11,000
No Answer	152,700	514,700	364,700	53,500	1,085,600
All individuals	1,008,100	2,689,600	1,244,000	217,700	5,159,400
All others	658,000	419,900	211,600	56,000	1,345,500
Total	1,666,100	3,109,500	1,455,600	273,700	6,504,900

Table 8.-Estimated number of individual owners and acres of commercial forest land owned, by age class and geographic unit, Ohio, 1979

Age class (years)	Individual owners		Sampling error	Acres owned	
	Number	Percent	Percent	Number	Percent
SOUTH-CENTRAL					
Under 45	13,400	18	29	269,000	23
45 - 64	14,500	19	41	416,900	37
65+	31,700	42	30	350,900	31
No answer	16,400	21	45	101,800	9
Total	76,000	100	18	1,138,600	100
SOUTHEASTERN					
Under 45	4,800	20	37	123,800	15
45 - 64	7,400	30	21	340,700	42
65+	9,200	37	33	232,200	28
No answer	3,200	13	29	120,400	15
Total	24,600	100	15	817,100	100
EAST-CENTRAL					
Under 45	7,600	14	30	166,000	14
45 - 64	23,400	43	30	523,600	42
65+	13,400	24	31	306,500	25
No answer	10,200	19	30	239,000	19
Total	54,600	100	15	1,235,100	100
NORTHEASTERN					
Under 45	8,300	10	32	130,900	14
45 - 64	25,000	31	17	381,400	40
65+	17,800	22	46	176,500	19
No answer	29,900	37	29	254,000	27
Total	81,000	100	15	942,800	100
SOUTHWESTERN					
Under 45	4,800	16	32	82,700	20
45 - 64	9,300	32	25	159,000	38
65+	6,300	21	38	114,500	27
No answer	9,000	31	43	64,500	15
Total	29,400	100	15	420,700	100
NORTHWESTERN					
Under 45	11,300	29	29	118,300	20
45 - 64	15,500	39	20	249,100	41
65+	10,000	25	26	174,400	29
No answer	2,800	7	38	63,300	10
Total	39,600	100	11	605,100	100
TOTAL					
Under 45	50,200	17	13	890,700	17
45 - 64	95,100	31	12	2,070,700	40
65+	88,400	29	16	1,355,000	26
No answer	71,500	23	18	843,000	17
Total	305,200	100	7	5,159,400	100

Table 9.-Estimated number of individual owners and acres of commercial forest land owned, by years of formal education, Ohio, 1979

Education level	Individual owners		Sampling error	Acres owned	
	Number	Percent	Percent	Number	Percent
0-8 years	60,300	20	19	735,900	14
9-12 years	90,000	29	13	1,694,900	33
1-4 years of college	63,800	21	13	1,341,100	26
More than 4 years of college	11,700	4	22	425,500	8
No answer	79,400	26	16	962,000	19
Total	305,200	100	7	5,159,400	100

Table 10.-Estimated number of individual owners and acres of commercial forest land owned, by annual income class and geographic unit, Ohio, 1979

Income class	Individual owners		Sampling error	Acres owned	
	Number	Percent	Percent	Number	Percent
SOUTH-CENTRAL					
Under \$10,000	23,600	31	31	315,800	28
\$10,000-\$14,999	5,000	7	34	111,100	10
\$15,000-\$19,999	3,100	4	50	99,400	9
\$20,000-\$24,999	5,700	7	54	117,000	10
\$25,000-\$29,999	2,000	3	33	76,000	6
\$30,000+	2,200	3	38	124,500	11
No answer	34,400	45	33	294,800	26
Total	76,000	100	18	1,138,600	100
SOUTHEASTERN					
Under \$10,000	10,900	44	30	206,500	25
\$10,000-\$14,999	2,700	11	31	129,000	16
\$15,000-\$19,999	2,700	11	50	103,200	13
\$20,000-\$24,999	1,900	8	69	36,100	4
\$25,000-\$29,999	600	3	45	41,300	5
\$30,000+	800	3	38	67,100	8
No answer	5,000	20	20	233,900	29
Total	24,600	100	15	817,100	100
EAST-CENTRAL					
Under \$10,000	8,900	16	25	255,400	21
\$10,000-\$14,999	7,000	13	30	146,900	12
\$15,000-\$19,999	3,400	6	31	115,000	9
\$20,000-\$24,999	2,100	4	28	102,100	9
\$25,000-\$29,999	2,300	4	44	63,900	5
\$30,000+	1,600	3	31	115,000	9
No answer	29,300	54	28	436,800	35
Total	54,600	100	15	1,235,100	100

Table 10.-continued

Income class	Individual owners		Sampling error	Acres owned	
	Number	Percent	Percent	Number	Percent
NORTHEASTERN					
Under \$10,000	20,300	25	41	165,100	17
\$10,000-\$14,999	6,300	8	36	108,200	11
\$15,000-\$19,999	6,400	8	32	119,500	13
\$20,000-\$24,999	3,400	4	58	62,600	7
\$25,000-\$29,999	2,800	3	70	28,500	3
\$30,000+	11,400	14	51	130,900	14
No answer	30,400	38	22	328,000	35
Total	81,000	100	15	942,800	100
SOUTHWESTERN					
Under \$10,000	2,300	8	51	44,500	10
\$10,000-\$14,999	2,500	9	38	63,600	15
\$15,000-\$19,999	1,600	5	59	31,800	8
\$20,000-\$24,999	4,200	14	38	57,300	14
\$25,000-\$29,999	700	2	79	12,700	3
\$30,000+	3,800	13	34	76,300	18
No answer	14,300	49	32	134,500	32
Total	29,400	100	15	420,700	100
NORTHWESTERN					
Under \$10,000	6,100	15	40	74,700	12
\$10,000-\$14,999	3,500	9	34	74,700	12
\$15,000-\$19,999	3,500	9	41	68,500	12
\$20,000-\$24,999	7,500	19	30	87,200	15
\$25,000-\$29,999	2,100	5	39	56,000	9
\$30,000+	3,000	8	41	68,500	11
No answer	13,900	35	26	175,500	29
Total	39,600	100	11	605,100	100
TOTAL					
Under \$10,000	72,100	24	17	1,062,000	21
\$10,000-\$14,999	27,000	9	14	633,500	12
\$15,000-\$19,999	20,700	7	17	537,400	11
\$20,000-\$24,999	24,800	8	19	462,300	9
\$25,000-\$29,999	10,500	3	24	278,400	5
\$30,000+	22,800	7	27	582,300	11
No answer	127,300	42	13	1,603,500	31
Total	305,200	100	7	5,159,400	100

Table 11.-Estimated number of individual owners and acres of commercial forest land owned, by early life environment^a, and geographic unit, Ohio, 1979

Early life environment	Individual owners		Sampling error	Acres owned	
	Number	Percent		Percent	Number
SOUTH-CENTRAL					
City over 100,000	2,900	4	43	58,500	5
City 10,000-99,999	1,300	2	37	76,100	7
Town or city under 10,000	3,200	4	48	93,600	8
Rural area	24,500	32	38	200,500	18
On a farm	26,300	35	27	561,400	49
No answer	17,800	23	42	148,500	13
Total	76,000	100	18	1,138,600	100
SOUTHEASTERN					
City over 100,000	800	3	43	51,600	6
City 10,000-99,999	1,100	4	34	67,100	8
Town or city under 10,000	1,400	6	35	87,700	11
Rural area	5,300	22	37	129,000	16
On a farm	11,400	46	26	351,000	43
No answer	4,600	19	34	130,700	16
Total	24,600	100	15	817,100	100
EAST-CENTRAL					
City over 100,000	2,000	4	57	38,300	3
City 10,000-99,999	2,500	5	45	108,600	9
Town or city under 10,000	11,200	20	63	121,300	10
Rural area	7,600	14	21	204,300	17
On a farm	19,800	36	19	498,000	40
No answer	11,500	21	28	264,600	21
Total	54,600	100	15	1,235,100	100
NORTHEASTERN					
City over 100,000	4,800	6	29	113,900	12
City 10,000-99,999	10,600	13	56	85,400	9
Town or city under 10,000	2,500	3	55	45,600	5
Rural area	8,500	11	35	113,800	12
On a farm	24,700	30	27	307,400	33
No answer	29,900	37	29	276,700	29
Total	81,000	100	15	942,800	100
SOUTHWESTERN					
City over 100,000	1,600	5	54	31,800	7
City 10,000-99,999	600	2	58	25,400	6
Town or city under 10,000	3,500	12	50	44,500	11
Rural area	3,500	12	33	76,400	18
On a farm	9,000	31	22	171,800	41
No answer	11,200	38	39	70,800	17
Total	29,400	100	15	420,700	100

Table 11.-continued

Early life environment	Individual owners		Sampling error	Acres owned	
	Number	Percent	Percent	Number	Percent
NORTHWESTERN					
City over 100,000	200	1	99	6,200	1
City 10,000-99,999	1,200	3	53	31,100	5
Town or city under 10,000	3,300	8	45	62,300	10
Rural area	7,100	18	37	87,200	14
On a farm	21,700	55	16	317,600	53
No answer	6,100	15	39	100,700	17
Total	39,600	100	11	605,100	100
TOTAL					
City over 100,000	12,300	4	19	300,300	6
City 10,000-99,999	17,300	6	36	393,700	7
Town or city under 10,000	25,100	8	31	455,000	9
Rural area	56,500	18	19	811,200	16
On a farm	112,900	37	10	2,207,200	43
No answer	81,100	27	16	992,000	19
Total	305,200	100	7	5,159,400	100

^aFirst 12 years.

Table 12.-Estimated number of private ownership units and acres of commercial forest land owned, by date of acquisition and form of ownership, Ohio 1979

Date of acquisition	Corporate ^a	Farmer ^b	Misc. Individual	Misc. Other	Total	Sampling error(%)
OWNERS						
1970-1979	1,600	29,300	35,800	1,700	68,400	11
1960-1969	700	21,900	34,500	3,200	60,300	17
1950-1959	W	32,100	29,100	700	61,900	17
1940-1949	200	17,800	28,700	200	46,900	20
Prior to 1940	300	15,700	4,900	2,800	23,700	28
No answer	1,100	29,100	40,000	1,200	71,400	18
Total	3,900	145,900	173,000	9,800	332,600	6
ACRES OWNED						
1970-1979	66,400	534,600	632,200	56,000	1,289,200	
1960-1969	88,000	615,500	602,600	61,500	1,367,600	
1950-1959	46,200	582,500	436,700	55,100	1,120,500	
1940-1949	145,000	438,300	371,100	17,900	972,300	
Prior to 1940	304,900	284,300	169,200	41,200	799,600	
No answer	65,200	433,700	398,600	58,200	955,700	
Total	715,700	2,888,900	2,610,400	289,900	6,504,900	

^aIncludes all forest industry ownerships.^bIncludes corporate farms.

Table 13.-Estimated number of private ownership units and acres of commercial forest land owned, by date of acquisition and geographic unit, Ohio, 1979

Date of acquisition	Individual owners			Acres owned		All other owners			Acres owned	
	Number	Percent	Sampling error(%)	Number	Percent	Number	Percent	Sampling error(%)	Number	Percent
SOUTH-CENTRAL										
1970-1979	14,600	19	27	269,000	24	600	15	53	45,100	16
1960-1969	19,000	25	45	286,600	25	500	13	71	29,200	10
1950-1959	15,000	20	48	182,900	16	2,100	54	91	41,800	15
1940-1949	6,700	9	36	157,900	14	100	2	98	10,100	4
Prior to 1940	3,900	5	45	122,800	11	300	8	61	133,700	47
No answer	16,800	22	44	119,400	10	300	8	92	24,100	8
Total	76,000	100	18	1,138,600	100	3,900	100	51	284,000	100
SOUTHEASTERN										
1970-1979	4,000	16	32	154,800	19	200	2	59	15,500	5
1960-1969	5,000	20	29	216,800	27	1,300	15	55	51,600	17
1950-1959	3,900	16	27	175,500	21	5,500	64	93	51,600	17
1940-1949	4,200	17	37	123,900	15	100	1	98	47,700	15
Prior to 1940	1,000	4	42	56,800	7	1,200	14	87	105,800	34
No answer	6,500	27	46	89,300	11	300	4	62	37,500	12
Total	24,600	100	15	817,100	100	8,600	100	62	309,700	100
EAST-CENTRAL										
1970-1979	12,100	22	29	229,900	19	300	10	59	25,600	7
1960-1969	13,500	25	29	293,700	24	400	13	42	63,900	17
1950-1959	4,600	9	29	223,500	18	600	19	80	19,200	5
1940-1949	6,700	12	24	185,200	15	500	16	52	117,500	32
Prior to 1940	1,700	3	37	89,400	7	500	16	64	76,600	21
No answer	16,000	29	43	213,400	17	800	26	81	64,600	18
Total	54,600	100	15	1,235,100	100	3,100	100	30	367,400	100

Table 13.-continued

Date of acquisition	Individual owners			Acres owned		All other owners			Acres owned	
	Number	Percent	Sampling error(%)	Number	Percent	Number	Percent	Sampling error(%)	Number	Percent
NORTHEASTERN										
1970-1979	12,100	15	27	170,800	18	1,800	23	58	45,500	18
1960-1969	8,300	10	24	199,200	21	2,000	28	71	45,500	18
1950-1959	14,500	18	28	170,800	18	800	11	58	22,800	9
1940-1949	18,200	22	45	136,600	15	100	1	72	11,400	4
Prior to 1940	8,800	11	66	68,300	7	1,200	18	88	64,300	25
No answer	19,100	24	33	197,100	21	1,400	19	42	69,300	26
Total	81,000	100	15	942,800	100	7,300	100	30	258,800	100
SOUTHWESTERN										
1970-1979	8,400	29	26	127,200	30	1,100	52	94	12,700	28
1960-1969	3,000	10	48	57,300	14	700	33	94	12,700	28
1950-1959	5,600	19	41	95,400	23	-	-	-	-	-
1940-1949	5,500	19	49	57,300	14	100	5	75	12,700	28
Prior to 1940	1,300	4	50	31,800	7	200	10	99	6,500	16
No answer	5,600	19	54	51,700	12	-	-	-	-	-
Total	29,400	100	15	420,700	100	2,100	100	60	44,600	100
NORTHWESTERN										
1970-1979	12,000	30	22	168,200	28	1,200	50	70	24,900	31
1960-1969	6,500	17	32	99,600	16	100	4	73	12,500	15
1950-1959	9,200	23	30	130,800	22	100	4	99	6,200	8
1940-1949	4,400	11	28	105,800	18	300	13	99	6,200	8
Prior to 1940	3,600	9	62	43,600	7	-	-	-	-	-
No answer	3,900	10	56	57,100	9	700	29	56	31,200	38
Total	39,600	100	11	605,100	100	2,400	100	40	81,000	100
TOTAL										
1970-1979	63,200	21	11	1,119,900	22	5,200	19	33	169,300	13
1960-1969	55,300	18	18	1,153,200	22	5,000	18	36	215,400	16
1950-1959	52,800	17	17	978,900	19	9,100	33	61	141,600	10
1940-1949	45,700	15	20	766,700	15	1,200	4	35	205,600	15
Prior to 1940	20,300	7	32	412,700	8	3,400	13	47	386,900	29
No answer	67,900	22	19	728,000	14	3,500	13	29	226,700	17
Total	305,200	100	7	5,159,400	100	27,400	100	23	1,345,500	100

Table 14.-Estimated number of private ownership units and acres of commercial forest land owned, by distance from residence to nearest tract and geographic unit, Ohio, 1979

Distance from residence (miles)	South-Central			Southeastern			East-Central			Northeastern		
	Number	Percent	Sampling error(%)	Number	Percent	Sampling error(%)	Number	Percent	Sampling error(%)	Number	Percent	Sampling error(%)
OWNERS												
0-1	56,800	71	21	21,300	64	27	35,500	61	16	57,900	65	18
2-5	11,100	14	58	1,100	4	40	8,800	15	73	1,900	2	59
6-15	1,300	1	35	4,100	13	64	1,800	3	34	3,300	4	49
16-25	800	1	44	800	2	37	1,600	3	49	700	1	99
26-50	600	1	58	800	2	45	500	1	72	1,500	2	31
Over 50	4,800	6	62	2,400	7	28	1,500	3	32	2,800	3	69
No answer	4,500	6	50	2,700	8	38	8,000	14	25	20,200	23	31
Total	79,900	100	17	33,200	100	19	57,700	100	15	88,300	100	14
ACRES OWNED												
0-1	947,500	67		599,500	53		868,500	54		718,900	60	
2-5	74,400	5		113,800	10		199,000	12		51,200	4	
6-15	93,500	6		78,100	7		104,800	7		56,900	5	
16-25	46,800	3		59,600	5		56,400	4		5,700	W	
26-50	23,400	2		36,100	3		19,200	1		85,300	7	
Over 50	128,700	9		144,500	13		102,200	6		45,500	4	
No answer	108,300	8		95,200	9		252,400	16		238,100	20	
Total	1,422,600	100		1,126,800	100		1,602,500	100		1,201,600	100	

W-Fewer than 50 owners or less than 0.5 percent.

Table 14.-continued

Distance from residence (miles)	Southwestern			Northwestern			Total	
	Number	Percent	Sampling error(%)	Number	Percent	Sampling error(%)	Number	Percent Sampling error(%)
OWNERS								
0-1	22,100	70	17	26,700	64	14	220,300	66
2-5	700	2	52	6,600	16	36	30,200	9
6-15	1,600	5	67	1,400	3	51	13,500	4
16-25	-	-	-	600	1	99	4,500	2
26-50	-	-	-	100	W	79	3,500	1
Over 50	800	3	81	800	2	52	13,100	4
No answer	6,300	20	49	5,800	14	41	47,500	14
Total	31,500	100	14	42,000	100	10	332,600	100
ACRES OWNED								
0-1	311,700	67		429,700	62		3,875,800	59
2-5	38,200	8		87,200	13		563,800	9
6-15	38,200	8		37,400	5		408,900	6
16-25	-	-		6,200	1		174,700	3
26-50	-	-		12,500	2		176,500	3
Over 50	19,100	4		24,900	4		464,900	7
No answer	58,100	13		88,200	13		840,300	13
Total	465,300	100		686,100	100		6,504,900	100

W-Fewer than 50 owners or less than 0.5 percent.

Table 15.-Estimated number of private ownership units and acres of commercial forest land owned, by number of tracts and geographic unit, Ohio, 1979

Number of tracts	Private owners		Sampling error	Acres owned	
	Number	Percent	Percent	Number	Percent
SOUTH-CENTRAL					
1	69,900	87	20	749,500	53
2	6,000	8	22	273,200	19
3 or more	4,000	5	26	399,900	28
Total	79,900	100	17	1,422,600	100
SOUTHEASTERN					
1	24,500	74	25	531,600	47
2	6,200	19	30	211,600	19
3 or more	2,500	7	20	383,600	34
Total	33,200	100	19	1,126,800	100
EAST-CENTRAL					
1	42,100	73	18	753,500	47
2	11,700	20	34	281,000	18
3 or more	3,900	7	16	568,000	35
Total	57,700	100	15	1,602,500	100
NORTHEASTERN					
1	69,300	78	15	796,900	66
2	17,400	20	37	244,800	21
3 or more	1,600	2	29	159,900	13
Total	88,300	100	14	1,201,600	100
SOUTHWESTERN					
1	26,300	84	17	311,700	67
2	4,100	13	35	108,100	23
3 or more	1,100	3	60	45,500	10
Total	31,500	100	14	465,300	100
NORTHWESTERN					
1	34,100	81	13	429,700	63
2	5,700	14	24	143,200	21
3 or more	2,200	5	29	113,200	16
Total	42,000	100	10	686,100	100
TOTAL					
1	266,200	80	8	3,572,900	55
2	51,100	15	16	1,261,900	19
3 or more	15,300	5	11	1,670,100	26
Total	332,600	100	6	6,504,900	100

Table 16.-Estimated number of private ownership units and acres of commercial forest land owned, by distance from tracts, Ohio, 1979

Distance (miles)	Owners of 1 tract	Owners of more than 1 tract	
		Distance to:	
		Nearest tract	Farthest tract
OWNERS			
0-1	165,600	54,700	40,600
2-5	27,800	2,400	10,000
6-15	9,400	4,100	5,000
16-25	3,800	700	1,500
26-50	2,900	600	900
Over 50	11,600	1,500	5,100
No answer	45,100	2,400	3,300
Total	266,200	66,400	66,400
ACRES OWNED			
0-1	2,042,500	1,833,300	867,300
2-5	232,800	331,000	533,000
6-15	190,200	218,700	288,400
16-25	109,200	65,500	144,600
26-50	123,200	53,300	175,400
Over 50	297,800	167,100	605,700
No answer	577,200	263,100	317,600
Total	3,572,900	2,932,000	2,932,000

Table 17.-Estimated number of private ownership units and acres of commercial forest land owned, by primary reason for owning, for harvesters and nonharvesters, Ohio, 1979

Primary reason for owning	Private owners		Sampling error	Acres owned	
	Number	Percent	Percent	Number	Percent
HARVESTERS					
Land investment	11,300	3	58	274,700	4
Recreational use	4,700	1	22	224,400	3
Timber production	2,600	1	24	416,200	7
Farm and domestic use	21,500	7	17	506,300	8
Esthetic enjoyment	6,500	2	23	215,700	3
Part of farm	38,800	12	24	763,300	12
Part of residence	30,000	9	24	372,600	6
Other	3,200	1	33	406,200	6
No answer	23,100	7	30	434,600	7
Total	141,700	43	11	3,614,000	56
NONHARVESTERS					
Land investment	10,600	3	24	294,800	5
Recreational use	10,800	4	33	248,300	4
Timber production	3,200	1	65	46,200	W
Farm and domestic use	17,200	5	27	254,000	4
Esthetic enjoyment	18,500	5	22	322,600	5
Part of farm	49,700	15	20	681,500	10
Part of residence	41,900	13	27	408,600	6
Other	7,300	2	32	154,400	3
No answer	31,700	9	19	480,500	7
Total	190,900	57	9	2,890,900	44
ALL PRIVATE OWNERS					
Land investment	21,900	6	32	569,500	9
Recreational use	15,500	5	24	472,700	7
Timber production	5,800	2	37	462,400	7
Farm and domestic use	38,700	12	15	760,300	12
Esthetic enjoyment	25,000	7	17	538,300	8
Part of farm	88,500	27	15	1,444,800	22
Part of residence	71,900	22	18	781,200	12
Other	10,500	3	25	560,600	9
No answer	54,800	16	17	915,100	14
Total	332,600	100	6	6,504,900	100

W-Fewer than 50 owners or less than 0.5 percent.

Table 18.-Estimated number of private ownership units and acres of commercial forest land owned, by primary and secondary reason for owning, Ohio, 1979

Reason for owning	Primary reason		Secondary reason	
	Number	Percent	Number	Percent
OWNERS				
Land investment	21,900	6	6,100	2
Recreational use	15,500	5	13,900	4
Timber production	5,800	2	8,100	3
Farm and domestic use	38,700	12	30,600	9
Esthetic enjoyment	25,000	7	35,000	11
Part of farm	88,500	27	16,800	5
Part of residence	71,900	22	13,900	4
Other	10,500	3	2,500	1
No secondary reason given	-	-	150,900	45
No answer	54,800	16	54,800	16
Total	332,600	100	332,600	100
ACRES OWNED				
Land investment	569,500	9	375,400	6
Recreational use	472,700	7	493,700	8
Timber production	462,400	7	239,000	4
Farm and domestic use	760,300	12	637,900	10
Esthetic enjoyment	538,300	8	526,700	8
Part of farm	1,444,800	22	355,200	5
Part of residence	781,200	12	293,100	4
Other	560,600	9	44,100	1
No secondary reason given	-	-	2,624,700	40
No answer	915,100	14	915,100	14
Total	6,504,900	100	6,504,900	100

Table 20.-Estimated number of private ownership units and acres of commercial forest land owned,
by primary reason for owning and geographic unit, Ohio, 1979

Primary reason for owning	South-Central			Southeastern			East-Central			Northeastern		
	Number	Percent	Sampling error(%)	Number	Percent	Sampling error(%)	Number	Percent	Sampling error(%)	Number	Percent	Sampling error(%)
OWNERS												
Land investment	4,600	6	40	1,900	6	26	9,000	15	71	2,900	3	39
Recreational use	2,200	3	32	4,900	15	55	3,400	6	50	3,000	3	50
Timber production	2,300	3	84	500	1	41	1,200	2	41	1,300	1	48
Farm and domestic use	13,300	17	34	3,000	9	26	6,300	11	23	6,900	8	29
Esthetic enjoyment	2,800	3	54	2,900	9	50	5,000	9	39	8,600	10	33
Part of farm	30,300	38	35	2,500	8	27	8,700	15	21	23,000	26	29
Part of residence	14,200	18	46	11,400	34	48	11,500	20	35	21,200	24	40
Other	1,900	2	61	1,500	4	52	700	1	37	3,200	4	51
No answer	8,300	10	51	4,600	14	34	11,900	21	29	18,200	21	34
Total	79,900	100	17	33,200	100	19	57,700	100	15	88,300	100	14
ACRES OWNED												
Land investment	136,200	10		123,900	11		166,000	10		74,000	6	
Recreational use	81,800	6		134,200	12		121,300	8		85,400	7	
Timber production	163,000	11		145,900	13		83,000	5		45,600	4	
Farm and domestic use	157,900	11		123,900	11		204,300	13		142,300	12	
Esthetic enjoyment	99,400	7		77,400	7		108,600	7		108,200	9	
Part of farm	391,800	27		134,200	12		281,000	17		267,500	22	
Part of residence	198,900	14		129,000	11		172,400	11		142,300	12	
Other	79,500	6		106,300	9		219,700	14		98,500	8	
No answer	114,100	8		152,000	14		246,200	15		237,800	20	
Total	1,422,600	100		1,126,800	100		1,602,500	100		1,201,600	100	

Table 20.--continued

Primary reason for owning	Southwestern			Northwestern			Total	
	Number	Percent	Sampling error(%)	Number	Percent	Sampling error(%)	Number	Percent
OWNERS								
Land investment	2,400	8	61	1,100	3	65	21,900	6
Recreational use	W	W	99	2,000	5	44	15,500	5
Timber production	-	-	-	500	1	53	5,800	2
Farm and domestic use	3,900	12	37	5,300	13	43	38,700	12
Esthetic enjoyment	2,300	7	37	3,400	8	36	25,000	7
Part of farm	7,100	23	34	16,900	40	21	88,500	27
Part of residence	7,200	23	38	6,400	15	42	71,900	22
Other	1,700	5	66	1,500	3	57	10,500	3
No answer	6,900	22	48	4,900	12	27	54,800	16
Total	31,500	100	14	42,000	100	10	332,600	100
ACRES OWNED								
Land investment	44,500	10		24,900	4		569,500	9
Recreational use	6,400	1		43,600	6		472,700	7
Timber production	-	-		24,900	4		462,400	7
Farm and domestic use	50,900	11		81,000	12		760,300	12
Esthetic enjoyment	70,000	15		74,700	11		538,300	8
Part of farm	133,600	29		236,700	34		1,444,800	22
Part of residence	76,300	16		62,300	9		781,200	12
Other	25,500	6		31,100	5		560,600	9
No answer	58,100	12		106,900	15		915,100	14
Total	465,300	100		686,100	100		6,504,900	100

W-Fewer than 50 owners or less than 0.5 percent.

Table 21.-Estimated number of private ownership units and acres of commercial forest land owned, by primary benefit derived in the last 5 years and primary benefit expected in the next 5 years, for harvesters and nonharvesters, Ohio, 1979

Primary benefit	Derived in last 5 years				Expected in next 5 years			
	Private owners		Acres owned		Private owners		Acres owned	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
HARVESTERS								
Recreational use	7,400	2	232,700	4	11,100	3	279,100	4
Sale of timber	8,100	2	437,000	7	3,200	1	450,900	7
Land value increase	19,500	6	791,700	12	28,000	9	754,100	11
Esthetic enjoyment	34,900	11	726,500	11	27,400	8	560,000	9
Farm and domestic use	35,400	11	616,100	9	39,000	12	698,300	11
Other	3,500	1	309,200	5	3,400	1	297,600	5
No answer	32,900	10	500,800	8	29,600	9	574,000	9
Total	141,700	43	3,614,000	56	141,700	43	3,614,000	56
NONHARVESTERS								
Recreational use	13,000	4	278,200	4	13,400	4	282,200	5
Sale of timber	-	-	-	-	4,700	1	100,000	1
Land value increase	32,100	10	589,600	9	36,800	11	692,200	11
Esthetic enjoyment	59,500	17	800,900	12	61,400	19	726,300	11
Farm and domestic use	28,500	8	446,800	7	30,900	9	423,400	6
Other	1,800	1	52,800	1	2,500	1	81,000	1
No answer	56,000	17	722,600	11	41,200	12	585,800	9
Total	190,900	57	2,890,900	44	190,900	57	2,890,900	44
ALL PRIVATE OWNERS								
Recreational use	20,400	6	510,900	8	24,500	7	561,300	9
Sale of timber	8,100	2	437,000	7	7,900	2	550,900	8
Land value increase	51,600	16	1,381,300	21	64,800	20	1,446,300	22
Esthetic enjoyment	94,400	28	1,527,400	23	88,800	27	1,286,300	20
Farm and domestic use	63,900	19	1,062,900	16	69,900	21	1,121,700	17
Other	5,300	2	362,000	6	5,900	2	378,600	6
No answer	88,900	27	1,223,400	19	70,800	21	1,159,800	18
Total	332,600	100	6,504,900	100	332,600	100	6,504,900	100

Table 22.-Estimated number of private ownership units and acres of commercial forest land owned by primary benefit expected in the next 5 years and expected time of future harvest, Ohio, 1979

Primary benefit	Expected time of future harvest							
	Next 10 years		Indefinite		Never		No answer	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
OWNERS								
Recreational use	3,200	7	16,300	11	4,500	4	500	3
Sale of timber	3,400	8	4,300	3	-	-	200	1
Land value increase	7,800	18	33,400	22	21,500	18	2,100	13
Esthetic enjoyment	8,400	19	36,200	24	38,400	31	5,800	37
Farm and domestic use	14,100	33	30,200	20	22,700	18	2,900	18
Other	900	2	3,000	2	2,000	2	-	-
No answer	5,600	13	27,000	18	34,000	27	4,200	28
Total	43,400	100	150,400	100	123,100	100	15,700	100
ACRES OWNED								
Recreational use	133,600	8	291,800	9	111,700	8	24,200	9
Sale of timber	448,500	27	96,200	3	-	-	6,200	2
Land value increase	387,700	23	743,300	24	260,800	18	54,500	20
Esthetic enjoyment	151,000	9	704,100	23	390,900	27	40,300	15
Farm and domestic use	193,000	12	665,700	21	202,400	14	60,600	22
Other	209,100	13	123,600	4	45,900	3	-	-
No answer	143,200	8	484,800	16	443,900	30	87,900	32
Total	1,666,100	100	3,109,500	100	1,455,600	100	273,700	100
Total								
							6,504,900	100

Table 23.-Estimated number of private ownership units and acres of commercial forest land owned by primary benefit expected in the next 5 years and geographic unit, Ohio, 1979

Primary benefit	South-Central			Southeastern			East-Central			Northeastern		
	Number	Percent	Sampling error(%)	Number	Percent	Sampling error(%)	Number	Percent	Sampling error(%)	Number	Percent	Sampling error(%)
OWNERS												
Recreational use	4,900	6	61	6,200	19	47	6,900	12	36	3,800	4	43
Sale of timber	2,900	4	66	1,100	3	29	2,100	4	42	800	1	50
Land value increase	19,600	24	43	3,700	11	24	17,400	30	41	14,500	16	42
Esthetic enjoyment	23,300	29	33	11,800	36	47	7,400	13	30	23,900	27	29
Farm and domestic use	16,700	21	39	5,000	15	27	7,400	13	23	20,700	24	32
Other	500	1	58	600	2	70	100	W	65	2,300	3	34
No answer	12,000	15	40	4,800	14	33	16,400	28	23	22,300	25	29
Total	79,900	100	17	33,200	100	19	57,700	100	15	88,300	100	14
ACRES OWNED												
Recreational use	87,700	6		154,900	14		172,400	11		102,500	8	
Sale of timber	208,100	15		144,800	13		114,900	7		45,500	4	
Land value increase	365,200	26		245,000	21		466,200	29		193,500	16	
Esthetic enjoyment	286,600	20		180,600	16		204,300	13		250,500	21	
Farm and domestic use	263,200	18		154,900	14		223,500	14		216,300	18	
Other	56,900	4		69,000	6		92,000	6		104,200	9	
No answer	154,900	11		177,600	16		329,200	20		289,100	24	
Total	1,422,600	100		1,126,800	100		1,602,500	100		1,201,600	100	

Table 23.-continued

Primary benefit	Southwestern			Northwestern			Total		
	Number	Percent	Sampling error(%)	Number	Percent	Sampling error(%)	Number	Percent	Sampling error(%)
OWNERS									
Recreational use	1,100	4	96	1,600	4	52	24,500	7	22
Sale of timber	100	W	71	900	2	71	7,900	2	29
Land value increase	5,800	18	33	3,800	9	40	64,800	20	20
Esthetic enjoyment	8,100	26	31	14,300	34	22	88,800	27	14
Farm and domestic use	8,200	26	33	11,900	28	28	69,900	21	15
Other	900	3	58	1,500	4	47	5,900	2	22
No answer	7,300	23	46	8,000	19	27	70,800	21	14
Total	31,500	100	14	42,000	100	10	332,600	100	6
ACRES OWNED									
Recreational use	12,700	3		31,100	4		561,300	9	
Sale of timber	12,700	3		24,900	4		550,900	8	
Land value increase	95,400	21		81,000	12		1,446,300	22	
Esthetic enjoyment	146,300	31		218,000	32		1,286,300	20	
Farm and domestic use	108,100	23		155,700	23		1,121,700	17	
Other	25,400	5		31,100	4		378,600	6	
No answer	64,700	14		144,300	21		1,159,800	18	
Total	465,300	100		686,100	100		6,504,900	100	

W-Fewer than 50 owners or less than 0.5 percent.

Table 24.-Estimated number of private ownership units who have harvested timber and acres of commercial forest owned, by reason for harvesting and form of ownership, Ohio, 1979

Reason for harvesting	Forest Industry	Miscellaneous ownership			Total	Sampling error(%)
		Individual	Corporate	Other		
OWNERS						
Timber mature	100	30,200	900	3,100	34,300	20
Good price	-	2,700	100	500	3,300	20
Land clearing	-	13,600	300	300	14,200	27
Needed money	-	15,500	W	600	16,100	22
Own use or company use	100	21,100	100	6,000	27,300	24
Timber salvage	-	12,400	100	200	12,700	48
Cultural treatment	-	700	-	100	800	43
Other	-	8,600	W	200	8,800	72
No answer	W	22,400	1,100	700	24,200	28
Total	200	127,200	2,600	11,700	141,700	11
ACRES OWNED						
Timber mature	12,600	779,300	171,300	87,900	1,051,100	
Good price	-	163,600	54,600	29,300	247,500	
Land clearing	-	223,900	39,500	34,300	297,700	
Needed money	-	436,700	26,300	34,100	497,100	
Own use or company use	167,900	408,000	6,400	17,800	600,100	
Timber salvage	-	171,400	91,400	5,700	268,500	
Cultural treatment	-	53,800	-	5,200	59,000	
Other	-	66,900	6,800	6,200	79,900	
No answer	5,800	359,800	88,300	59,200	513,100	
Total	186,300	2,663,400	484,600	279,700	3,614,000	

Table 25.-Estimated number of private ownership units who have harvested timber and acres of commercial forest land owned, by reason for harvesting and geographic unit, Ohio, 1979

Reason for harvesting	South-Central			Southeastern			East-Central			Northeastern		
	Number	Percent	Sampling error(%)	Number	Percent	Sampling error(%)	Number	Percent	Sampling error(%)	Number	Percent	Sampling error(%)
HARVESTERS												
Timber mature	2,800	10	29	4,000	24	33	5,500	23	22	11,400	30	52
Good price	1,200	4	29	500	3	44	400	2	51	100	W	99
Land clearing	5,700	20	58	200	1	51	1,200	5	41	4,000	11	37
Needed money	4,500	16	46	3,800	22	37	1,600	7	29	3,900	10	62
Own use or company use	3,600	12	32	6,400	38	81	4,900	21	41	2,700	7	30
Timber salvage	6,800	24	86	W	W	67	500	2	52	3,100	8	50
Cultural treatment	100	W	99	100	1	69	600	2	52	W	W	99
Other	100	W	99	W	W	99	7,200	31	89	900	3	70
No answer	4,100	14	73	1,900	11	43	1,600	7	36	11,500	31	51
Total	28,900	100	26	16,900	100	32	23,500	100	29	37,600	100	23
ACRES OWNED												
Timber mature	204,700	24		185,800	29		287,400	32		178,200	31	
Good price	105,300	12		41,300	6		57,400	7		5,700	1	
Land clearing	62,600	7		25,800	4		72,900	8		79,700	13	
Needed money	159,500	18		150,200	23		102,200	11		28,500	5	
Own use or company use	186,300	22		124,800	19		102,200	11		74,000	13	
Timber salvage	62,700	7		47,700	7		63,800	7		56,900	10	
Cultural treatment	5,900	1		15,500	2		31,900	4		5,700	1	
Other	12,600	1		5,100	1		31,900	4		11,400	2	
No answer	66,200	8		57,100	9		143,700	16		138,800	24	
Total	865,800	100		653,300	100		893,400	100		578,900	100	

Table 25.-continued

Reason for harvesting	Southwestern			Northwestern			Total	
	Number	Percent	Sampling error(%)	Number	Percent	Sampling error(%)	Number	Percent
HARVESTERS								
Timber mature	4,700	36	50	5,900	27	34	34,300	24
Good price	600	5	62	500	2	60	3,300	3
Land clearing	2,100	16	48	1,000	5	52	14,200	10
Needed money	900	7	58	1,400	6	55	16,100	11
Own use or company use	3,200	24	56	6,500	30	38	27,300	19
Timber salvage	-	-	-	2,300	11	46	12,700	9
Cultural treatment	-	-	-	-	-	-	800	1
Other	100	1	99	500	2	70	8,800	6
No answer	1,500	11	71	3,600	17	40	24,200	17
Total	13,100	100	23	21,700	100	15	141,700	100
ACRES OWNED								
Timber mature	95,400	39		99,600	26		1,051,100	29
Good price	19,100	8		18,700	5		247,500	7
Land clearing	31,800	13		24,900	7		297,700	8
Needed money	31,800	13		24,900	7		497,100	14
Own use or company use	31,800	13		81,000	21		600,100	17
Timber salvage	-	-		37,400	10		268,500	7
Cultural treatment	-	-		-	-		59,000	2
Other	6,400	3		12,500	3		79,900	2
No answer	25,900	11		81,400	21		513,100	14
Total	242,200	100		380,400	100		3,614,000	100

Table 26.-Estimated number of private ownership units who have not harvested timber and acres of commercial land owned, by reason for not harvesting and form of ownership, Ohio, 1979

Reason for not harvesting	Individual	Corporate	Other	Total	Sampling error(%)
NONHARVESTERS					
Timber immature	46,500	300	1,700	48,500	16
No market	1,400	-	W	1,400	57
Price too low	5,100	-	100	5,200	33
Destroy hunting	6,300	-	W	6,300	37
Selling the land	1,900	W	1,200	3,100	47
Ruin scenery	27,900	W	600	28,500	29
Land in estate	300	-	200	500	68
Distrust loggers	3,700	-	100	3,800	58
Opposed to harvest	12,100	-	-	12,100	54
Poor quality	2,300	-	W	2,300	37
Low volume	24,500	W	3,200	27,700	34
Fire hazard	300	-	-	300	74
Insufficient area	6,300	-	-	6,300	40
Other	6,600	500	400	7,500	23
No answer	32,600	1,200	3,600	37,400	18
Total	177,800	2,000	11,100	190,900	9
ACRES OWNED					
Timber immature	734,000	54,100	48,800	836,900	
No market	24,800	-	5,200	30,000	
Price too low	112,700	-	5,200	117,900	
Destroy hunting	149,900	-	6,400	156,300	
Selling the land	47,000	5,700	17,800	70,500	
Ruin scenery	281,500	12,100	39,300	332,900	
Land in estate	11,500	-	5,700	17,200	
Distrust loggers	80,000	-	12,200	92,200	
Opposed to harvest	65,700	-	-	65,700	
Poor quality	71,800	-	5,900	77,700	
Low volume	179,600	5,700	17,300	202,600	
Fire hazard	11,400	-	-	11,400	
Insufficient area	63,900	-	-	63,900	
Other	194,100	48,300	6,400	248,800	
No answer	431,200	33,800	101,900	566,900	
Total	2,459,100	159,700	272,100	2,890,900	

Table 27.-Estimated number of private ownership units who have not harvested timber and acres of commercial forest land owned, by reason for not harvesting and geographic unit, Ohio, 1979

Reason for not harvesting	South-Central			Southeastern			East-Central			Northeastern		
	Number	Percent	Sampling error(%)	Number	Percent	Sampling error(%)	Number	Percent	Sampling error(%)	Number	Percent	Sampling error(%)
NONHARVESTERS												
Timber immature	7,000	14	30	2,600	16	52	9,400	27	25	15,700	31	40
No market	-	-	-	W	W	99	300	1	70	600	1	99
Price too low	600	1	54	500	3	66	700	2	66	2,500	5	58
Destroy hunting	2,500	5	80	1,200	7	50	1,100	3	64	100	W	99
Selling the land	1,300	3	76	100	1	99	200	1	62	1,500	3	68
Ruin scenery	10,000	20	65	1,900	12	67	5,800	17	62	6,500	13	40
Land in estate	-	-	-	300	2	99	W	W	99	200	W	99
Distrust loggers	400	1	53	300	2	57	200	1	74	200	W	74
Opposed to harvest	7,300	14	82	200	1	73	1,700	5	67	700	2	99
Poor quality	700	1	58	100	1	99	400	1	79	100	W	99
Low volume	8,200	16	75	3,600	22	72	4,200	12	59	8,600	17	68
Fire hazard	-	-	-	100	1	99	-	-	-	-	-	-
Insufficient area	3,500	7	60	700	4	96	-	-	-	1,000	2	86
Other	1,700	3	55	2,700	16	46	1,400	4	40	1,000	2	40
No answer	7,800	15	53	2,000	12	36	8,800	26	32	12,000	24	27
Total	51,000	100	23	16,300	100	22	34,200	100	16	50,700	100	18
ACRES OWNED												
Timber immature	175,400	32	-	85,500	18	-	228,800	32	-	170,800	27	-
No market	-	-	-	5,100	1	-	12,800	2	-	5,700	1	-
Price too low	23,400	4	4	15,500	3	4	31,900	4	4	28,400	4	4
Destroy hunting	40,900	8	8	46,500	10	4	31,900	4	4	5,700	1	1
Selling the land	23,400	4	4	5,100	1	3	19,200	3	4	22,800	4	4
Ruin scenery	58,500	11	11	56,800	12	6	44,700	6	15	91,100	15	15
Land in estate	-	-	-	5,100	1	1	6,400	1	1	5,700	1	1
Distrust loggers	23,400	4	4	25,800	6	3	19,200	3	2	11,300	2	2
Opposed to harvest	11,700	2	2	10,300	2	4	25,500	4	1	5,700	1	1
Poor quality	35,100	6	6	5,100	1	2	12,800	2	1	5,700	1	1
Low volume	29,200	5	5	41,400	9	4	25,500	4	10	62,700	10	10
Fire hazard	-	-	-	5,100	1	-	-	-	-	-	-	-
Insufficient area	23,400	4	4	10,300	2	-	-	-	-	11,300	2	2
Other	35,100	6	6	72,300	15	10	70,200	10	6	39,800	6	6
No answer	77,300	14	14	83,600	18	25	180,200	25	25	156,000	25	25
Total	556,800	100	-	473,500	100	-	709,100	100	-	622,700	100	-

Table 27.-continued

Reason for not harvesting	Southwestern			Northwestern			Total	
	Number	Percent	Sampling error(%)	Number	Percent	Sampling error(%)	Number	Percent
NONHARVESTERS								
Timber immature	7,800	42	36	6,000	30	36	48,500	25
No market	500	3	99	-	-	-	1,400	1
Price too low	-	-	-	900	4	77	5,200	3
Destroy hunting	300	1	99	1,100	5	63	6,300	3
Selling the land	-	-	-	-	-	-	3,100	2
Ruin scenery	3,300	18	46	1,000	5	45	28,500	15
Land in estate	-	-	-	-	-	-	500	W
Distrust loggers	-	-	-	2,700	13	81	3,800	2
Opposed to harvest	-	-	-	2,200	11	92	12,100	6
Poor quality	500	3	88	500	3	99	2,300	1
Low volume	800	5	73	2,300	11	49	27,700	15
Fire hazard	-	-	-	200	1	99	300	W
Insufficient area	100	W	99	1,000	5	87	6,300	3
Other	500	3	93	200	1	66	7,500	4
No answer	4,600	25	65	2,200	11	39	37,400	20
Total	18,400	100	22	20,300	100	19	190,900	100
ACRES OWNED								
Timber immature	95,400	41	-	81,000	27	-	836,900	29
No market	6,400	3	-	-	-	-	30,000	1
Price too low	-	-	-	18,700	6	-	117,900	4
Destroy hunting	6,400	3	-	24,900	8	-	156,300	5
Selling the land	-	-	-	-	-	-	70,500	2
Ruin scenery	44,500	20	-	37,300	12	-	332,900	12
Land in estate	-	-	-	-	-	-	17,200	1
Distrust loggers	-	-	-	12,500	4	-	92,200	3
Opposed to harvest	-	-	-	12,500	4	-	65,700	2
Poor quality	12,700	6	-	6,300	2	-	77,700	3
Low volume	12,700	6	-	31,100	10	-	202,600	7
Fire hazard	-	-	-	6,300	2	-	11,400	W
Insufficient area	6,400	3	-	12,500	4	-	63,900	2
Other	12,700	6	-	18,700	6	-	248,800	9
No answer	25,900	12	-	43,900	15	-	566,900	20
Total	223,100	100	-	305,700	100	-	2,890,900	100

Table 28.-Estimated number of private ownership units and acres of commercial forest land owned, by expected time of future harvest and by harvesters and nonharvesters, Ohio, 1979

Expected time of future harvest	Private owners		Acres owned	
	Number	Percent	Number	Percent
HARVESTERS				
Next 5 years	22,600	7	995,600	16
5-10 years	6,400	2	294,700	5
Indefinite	67,000	20	1,693,400	26
Never	33,400	10	411,800	6
No answer	12,300	4	218,500	3
Total	141,700	43	3,614,000	56
NONHARVESTERS				
Next 5 years	6,400	2	233,200	3
5-10 years	8,000	2	142,600	2
Indefinite	83,400	25	1,416,100	22
Never	89,700	27	1,043,800	16
No answer	3,400	1	55,200	1
Total	190,900	57	2,890,900	44
ALL PRIVATE OWNERS				
Next 5 years	29,000	9	1,228,800	19
5-10 years	14,400	4	437,300	7
Indefinite	150,400	45	3,109,500	48
Never	123,100	37	1,455,600	22
No answer	15,700	5	273,700	4
Total	332,600	100	6,504,900	100

Table 29.-Estimated number of private ownership units and acres of commercial forest land owned, by expected time of future harvest and by harvesters and nonharvesters, South-Central Unit, Ohio, 1979

Expected time of future harvest	Private owners			Acres owned	
	Number	Percent	Sampling error(%)	Number	Percent
HARVESTERS					
Next 5 years	4,100	5	31	296,800	21
5-10 years	600	1	41	52,700	4
Indefinite	17,700	22	39	403,600	28
Never	5,800	7	57	81,900	6
No answer	700	1	48	30,800	2
Total	28,900	36	26	865,800	61
NONHARVESTERS					
Next 5 years	1,600	2	55	46,700	3
5-10 years	3,200	4	90	23,300	1
Indefinite	23,600	30	38	263,100	19
Never	22,500	28	33	216,400	15
No answer	100	W	99	7,300	1
Total	51,000	64	23	556,800	39
ALL PRIVATE OWNERS					
Next 5 years	5,700	7	27	343,500	24
5-10 years	3,800	5	77	76,000	5
Indefinite	41,300	52	27	666,700	47
Never	28,300	35	28	298,300	21
No answer	800	1	45	38,100	3
Total	79,900	100	17	1,422,600	100

Table 30.-Estimated number of private ownership units and acres of commercial forest land owned, by expected time of future harvest and by harvesters and nonharvesters, Southeastern Unit, Ohio, 1979

Expected time of future harvest	Private owners			Acres owned	
	Number	Percent	Sampling error(%)	Number	Percent
HARVESTERS					
Next 5 years	1,000	3	33	218,100	19
5-10 years	700	2	34	92,800	8
Indefinite	8,400	25	23	268,000	24
Never	1,500	5	44	51,500	5
No answer	5,300	16	98	22,900	2
Total	16,900	51	32	653,300	58
NONHARVESTERS					
Next 5 years	1,400	5	44	57,100	5
5-10 years	200	1	59	15,600	2
Indefinite	9,100	27	32	258,400	23
Never	5,600	16	37	142,400	12
No answer	-	-		-	-
Total	16,300	49	22	473,500	42
ALL PRIVATE OWNERS					
Next 5 years	2,400	8	28	275,200	24
5-10 years	900	3	29	108,400	10
Indefinite	17,500	52	20	526,400	47
Never	7,100	21	30	193,900	17
No answer	5,300	16	98	22,900	2
Total	33,200	100	19	1,126,800	100

Table 31.-Estimated number of private ownership units and acres of commercial forest land owned, by expected time of future harvest and by harvesters and nonharvesters, East-Central Unit, Ohio, 1979

Expected time of future harvest	Private owners			Acres owned	
	Number	Percent	Sampling error(%)	Number	Percent
HARVESTERS					
Next 5 years	1,600	3	32	252,800	16
5-10 years	1,300	2	48	70,300	5
Indefinite	9,500	17	16	434,300	26
Never	9,800	17	67	70,300	5
No answer	1,300	2	40	65,700	4
Total	23,500	41	29	893,400	56
NONHARVESTERS					
Next 5 years	1,300	2	61	83,000	5
5-10 years	400	1	59	31,900	1
Indefinite	15,100	26	20	376,700	24
Never	15,000	26	30	196,700	13
No answer	2,400	4	91	20,800	1
Total	34,200	59	16	709,100	44
ALL PRIVATE OWNERS					
Next 5 years	2,900	5	33	335,800	21
5-10 years	1,700	3	39	102,200	6
Indefinite	24,600	43	13	811,000	50
Never	24,800	43	32	267,000	18
No answer	3,700	6	60	86,500	5
Total	57,700	100	15	1,602,500	100

Table 32.-Estimated number of private ownership units and acres of commercial forest land owned, by expected time of future harvest and by harvesters and nonharvesters, Northeastern Unit, Ohio, 1979

Expected time of future harvest	Private owners			Acres owned	
	Number	Percent	Sampling error(%)	Number	Percent
HARVESTERS					
Next 5 years	8,000	9	72	108,300	9
5-10 years	2,100	2	72	22,800	2
Indefinite	17,400	20	36	292,200	24
Never	8,500	10	27	114,000	9
No answer	1,600	2	43	41,600	4
Total	37,600	43	23	578,900	48
NONHARVESTERS					
Next 5 years	2,000	2	73	34,000	3
5-10 years	1,300	2	63	34,000	3
Indefinite	21,600	24	30	273,000	23
Never	25,100	28	28	261,700	22
No answer	700	1	58	20,000	1
Total	50,700	57	18	622,700	52
ALL PRIVATE OWNERS					
Next 5 years	10,000	11	59	142,300	12
5-10 years	3,400	4	50	56,800	5
Indefinite	39,000	44	23	565,200	47
Never	33,600	38	21	375,700	31
No answer	2,300	3	34	61,600	5
Total	88,300	100	14	1,201,600	100

Table 33.-Estimated number of private ownership units and acres of commercial forest land owned, by expected time of future harvest and by harvesters and nonharvesters, Southwestern Unit, Ohio, 1979

Expected time of future harvest	Private owners			Acres owned	
	Number	Percent	Sampling error(%)	Number	Percent
HARVESTERS					
Next 5 years	4,300	14	48	57,300	12
5-10 years	100	1	99	6,400	1
Indefinite	3,800	12	26	121,100	26
Never	4,100	13	58	38,200	8
No answer	800	2	65	19,200	5
Total	13,100	42	23	242,200	52
NONHARVESTERS					
Next 5 years	-	-	-	-	-
5-10 years	1,300	3	86	12,700	3
Indefinite	5,700	18	34	95,200	21
Never	11,200	36	34	108,100	23
No answer	200	1	99	7,100	1
Total	18,400	58	22	223,100	48
ALL PRIVATE OWNERS					
Next 5 years	4,300	14	48	57,300	12
5-10 years	1,400	4	79	19,100	4
Indefinite	9,500	30	21	216,300	47
Never	15,300	49	28	146,300	31
No answer	1,000	3	54	26,300	6
Total	31,500	100	14	465,300	100

Table 34.-Estimated number of private ownership units and acres of commercial forest land owned, by expected time of future harvest and by harvesters and nonharvesters, Northwestern Unit, Ohio, 1979

Expected time of future harvest	Private owners			Acres owned	
	Number	Percent	Sampling error(%)	Number	Percent
HARVESTERS					
Next 5 years	3,600	9	39	62,300	9
5-10 years	1,600	4	44	49,700	7
Indefinite	10,200	24	22	174,200	25
Never	3,700	9	58	55,900	8
No answer	2,600	6	53	38,300	6
Total	21,700	52	15	380,400	55
NONHARVESTERS					
Next 5 years	100	W	92	12,400	2
5-10 years	1,600	4	57	25,100	4
Indefinite	8,300	20	26	149,700	22
Never	10,300	24	32	118,500	17
No answer	-	-	-	-	-
Total	20,300	48	19	305,700	45
ALL PRIVATE OWNERS					
Next 5 years	3,700	9	38	74,700	11
5-10 years	3,200	8	35	74,800	11
Indefinite	18,500	44	16	323,900	47
Never	14,000	33	28	174,400	25
No answer	2,600	6	53	38,300	6
Total	42,000	100	10	686,100	100

W-Fewer than 50 owners or less than 0.5 percent.

Table 35.--Estimated number of private ownership units and acres of commercial forest land owned, by size class and expected time of future harvest, Ohio, 1979

Size class (acres)	Expected time of future harvest							
	Next 10 years		Indefinite		Never		No answer	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
OWNERS								
1-9	19,800	46	73,400	49	82,200	67	8,500	54
10-19	9,000	21	28,100	19	20,700	17	2,200	14
20-49	8,600	20	32,200	21	16,100	13	3,700	23
50-99	3,100	7	12,100	8	2,900	2	900	6
100-199	2,100	5	3,400	2	1,000	1	300	2
200-499	600	1	1,100	1	200	W	100	1
500+	200	W	100	W	W	W	-	-
Total	43,400	100	150,400	100	123,100	100	15,700	100
ACRES OWNED								
1-9	78,100	5	226,800	7	285,600	20	19,400	7
10-19	108,000	7	350,100	11	248,400	17	32,300	12
20-49	268,200	16	943,700	31	477,700	33	113,500	41
50-99	206,300	12	747,300	24	195,200	13	57,100	21
100-199	273,300	16	438,600	14	138,700	9	33,200	12
200-499	167,800	10	277,900	9	57,800	4	18,200	7
500+	564,400	34	125,100	4	52,200	4	-	-
Total	1,666,100	100	3,109,500	100	1,455,600	100	273,700	100
							6,504,900	100

Table 36.-Estimated number of private ownership units who have harvested timber and acres of commercial forest land owned, by method of selecting timber and individual selecting timber, Ohio, 1979

Method of selecting timber	Landowner	Forester	Buyer	Landowner and forester	Landowner and buyer	Other	No answer	Total	Sampling error(%)
HARVESTERS									
Selection	21,900	4,200	3,800	400	4,000	400	400	35,100	22
Diameter limit	7,600	200	9,700	300	5,200	100	100	23,200	17
Clearcutting	2,300	300	900	W	W	300	-	3,800	26
Land clearing	4,800	-	1,400	-	800	-	900	7,900	24
Other	10,600	-	1,300	W	200	300	-	12,400	50
Combination of methods	3,400	600	500	200	600	700	W	6,000	23
Don't know	10,800	W	5,800	-	500	6,600	200	23,900	36
No answer	9,200	-	400	-	900	100	18,800	29,400	24
Total	70,600	5,300	23,800	900	12,200	8,500	20,400	141,700	11
ACRES OWNED									
Selection	328,300	128,400	121,000	47,400	91,400	29,700	18,000	764,200	
Diameter limit	333,100	42,700	283,200	17,300	196,300	42,200	5,700	920,500	
Clearcutting	79,300	168,600	53,400	5,800	18,600	11,000	-	336,700	
Land clearing	115,800	-	30,400	-	24,700	-	23,500	194,400	
Other	111,900	-	35,100	6,400	5,700	11,600	-	170,700	
Combination of methods	138,300	109,500	18,400	24,300	30,500	33,900	5,200	360,100	
Don't know	76,000	6,700	121,800	-	18,300	12,200	31,000	266,000	
No answer	137,100	-	23,300	-	19,000	5,800	416,200	601,400	
Total	1,319,800	455,900	686,600	101,200	404,500	146,400	499,600	3,614,000	

Table 37.-Estimated number of private ownership units and acres of commercial forest land owned, by timber product harvested, forest industry, and private land owners (size class ownership), Ohio 1979

Timber product	Nonindustrial Private Landowners										Sampling error
	Forest Industry		1 - 49 acres		50 - 499 acres		500+ acres		Total		
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	
OWNERS											
Sawlogs	200	100	57,600	46	11,000	71	200	100	69,100	49	12
Veneer	W	W	14,400	11	3,000	19	W	W	17,500	12	19
Pulpwood	W	W	4,600	4	2,500	16	100	50	7,200	5	16
Firewood	W	W	54,000	43	1,800	12	W	W	55,800	39	24
Posts, poles, pilings	-	-	13,600	11	1,700	11	W	W	15,300	11	21
Mine timbers	-	-	1,700	1	200	1	W	W	2,000	1	80
Christmas trees	-	-	700	1	500	3	W	W	1,200	1	40
Other	-	-	800	1	100	1	W	W	900	1	67
Don't know	-	-	3,100	2	100	1	W	W	3,200	2	53
No answer	-	-	18,200	14	2,000	13	W	W	20,200	14	31
Totals	200	100	125,800	100	15,500	100	200	100	141,700	100	11
ACRES OWNED											
Sawlogs	186,300	100	855,300	58	1,058,400	72	345,700	71	2,445,600	68	
Veneer	146,600	79	215,400	15	292,000	20	167,200	34	821,000	23	
Pulpwood	161,500	87	140,000	9	244,200	17	225,500	46	771,200	21	
Firewood	5,800	3	361,900	25	148,800	10	12,200	3	522,900	14	
Posts, poles, pilings	-	-	213,600	15	168,000	11	37,100	8	418,600	12	
Mine timbers	-	-	12,700	1	21,700	1	23,600	5	58,100	2	
Christmas trees	-	-	17,600	1	58,100	4	6,400	1	82,100	2	
Other	-	-	18,500	1	17,300	1	-	-	35,800	1	
Don't know	-	-	27,900	2	18,400	1	5,200	1	51,500	1	
No answer	-	-	199,500	14	175,600	12	110,800	23	485,900	13	
Totals	186,300	100	1,471,500	100	1,471,100	100	485,100	100	3,614,000	100	

^aItems do not add to totals because some owners harvested more than one product.
W-Fewer than 50 owners or less than 0.5 percent.

Table 38.--Estimated number of private ownership units and acres of commercial forest land owned, by agency that owners would contact for forestry assistance, and size class of ownership, Ohio, 1979

Agency	1 - 49 acres		50 - 499 acres		500 + acres		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
OWNERS								
State forestry	32,000	10	5,600	20	100	34	37,700	11
Soil Conservation Service	5,900	2	900	3	W	W	6,800	2
Forest Service	1,700	1	600	2	W	W	2,300	1
Agricultural Stabilization and Conservation Service	5,200	2	1,600	6	-	-	6,800	2
Consultant or industry forester	-	-	200	1	W	W	200	W
Extension service	10,600	3	1,000	3	W	W	11,600	3
Other	5,200	2	300	1	-	-	5,500	2
Don't know	131,000	43	10,700	39	100	33	141,800	43
No answer	112,900	37	6,900	25	100	33	119,900	36
Total	304,500	100	27,800	100	300	100	332,600	100
ACRES OWNED								
State forestry	423,300	13	613,900	23	143,700	19	1,180,900	18
Soil Conservation Service	83,600	3	89,100	3	5,800	1	178,500	3
Forest Service	35,900	1	66,300	3	168,700	23	270,900	4
Agricultural Stabilization and Conservation Service	90,200	3	136,100	5	-	-	226,300	3
Consultant or industry forester	-	-	22,000	1	108,400	15	130,400	2
Extension service	89,000	3	76,000	3	17,800	2	182,800	3
Other	51,400	2	28,200	1	-	-	79,600	1
Don't know	1,468,500	46	954,700	37	95,000	13	2,518,200	39
No answer	909,900	29	625,100	24	202,300	27	1,737,300	27
Total	3,151,800	100	2,611,400	100	741,700	100	6,504,900	100

W-Fewer than 50 owners or less than 0.5 percent.

Table 39.-Estimated number of private ownership units and acres of commercial forest land owned, by harvesters and nonharvesters, and decision to seek assistance, Ohio, 1979

Assistance	Private owners			Acres owned	
	Number	Percent	Sampling error(%)	Number	Percent
HARVESTERS					
Sought assistance	25,600	8	25	1,177,700	18
No assistance	86,100	26	14	1,867,600	29
No answer	30,000	9	25	568,700	9
Total	141,700	43	11	3,614,000	56
NONHARVESTERS					
Sought assistance	10,300	3	18	436,900	7
No assistance	146,400	44	11	1,917,900	29
No answer	34,200	10	18	536,100	8
Total	190,900	57	9	2,890,900	44
TOTAL					
Sought assistance	35,900	11	19	1,614,600	25
No assistance	232,500	70	9	3,785,500	58
No answer	64,200	19	15	1,104,800	17
Total	332,600	100	6	6,504,900	100

Table 40.-Estimated number of private ownership units and acres of commercial forest land owned, by agency that owners would contact for forestry assistance, and decision to seek assistance, Ohio, 1979

Agency	Sought assistance		No assistance		No answer		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
OWNERS								
State forestry	15,700	44	21,400	9	600	1	37,700	11
Soil Conservation Service	1,100	3	5,500	2	200	W	6,800	2
Forest Service	700	2	1,600	1	-		2,300	1
Agricultural Stabilization and Conservation Service	3,500	10	3,300	2	-		6,800	2
Consultant or industry forester	100	W	100	W	-		200	W
Extension service	6,200	17	5,400	2	-		11,600	3
Other	500	2	3,100	1	1,900	3	5,500	2
Don't know	5,100	14	132,500	57	4,200	7	141,800	43
No answer	3,000	8	59,600	26	57,300	89	119,900	36
Total	35,900	100	232,500	100	64,200	100	332,600	100
ACRES OWNED								
State forestry	739,600	46	417,700	11	23,600	2	1,180,900	18
Soil Conservation Service	60,800	4	106,100	3	11,600	1	178,500	3
Forest Service	190,600	12	80,300	2	-		270,900	4
Agricultural Stabilization and Conservation Service	106,500	7	119,800	3	-		226,300	3
Consultant or industry forester	124,600	8	5,800	W	-		130,400	2
Extension service	57,400	3	125,400	3	-		182,800	3
Other	22,900	1	51,000	1	5,700	1	79,600	1
Don't know	144,800	9	2,292,800	61	80,600	7	2,518,200	39
No answer	167,400	10	586,600	16	983,300	89	1,737,300	27
Total	1,614,600	100	3,785,500	100	1,104,800	100	6,504,900	100

W-Fewer than 50 owners or less than 0.5 percent.

Table 41.-Estimated number of private ownership units who have received forestry assistance and acres of commercial forest land owned, by type of assistance, Ohio, 1979

Type of assistance	Owners assisted		Acres owned	
	Number	Percent	Number	Percent
Timber marking	5,400	2	386,700	6
Timber stand improvement	3,200	1	317,600	5
Tree planting	2,300	1	129,700	2
Timber sales administration	1,000	W	118,700	2
Insect and disease control	100	W	19,200	W
Timber evaluation	2,700	1	230,800	4
Surveying	W	W	11,500	W
General forest management	13,500	4	618,100	10
Other	3,200	1	157,000	2
Service not specified	6,600	2	233,000	4
Total ^a	35,900	11	1,614,600	35

^aIndividual items do not add to total because some owners have received more than one type of assistance.

W-Fewer than 50 owners or less than 0.05 percent.

Table 42.-Estimated number of private ownership units and acres of commercial forest land owned, by availability for recreation, Ohio, 1979

Recreation availability	Private owners			Acres owned	
	Number	Percent	Sampling error(%)	Number	Percent
Owner permits recreation and does not recreate	19,000	6	34	284,600	5
Owner recreates and permits recreation	77,000	23	14	2,010,000	31
Owner recreates and excludes others recreation	129,200	39	11	2,483,700	38
Subtotal recreation	225,200	68	8	4,778,300	74
Recreation not permitted	44,200	13	22	664,300	10
No answer	63,200	19	16	1,062,300	16
Total	332,600	100	6	6,504,900	100

Table 43.-Estimated number of private ownership units and acres of commercial forest land owned, by type of recreational use, by the owner, the owner's family, or immediate circle of friends, Ohio, 1979

Recreation by owner family and friends	Private owners			Acres owned	
	Number	Percent	Sampling error(%)	Number	Percent
Hiking	108,800	33	11	2,602,700	40
Picnicking	57,800	17	16	1,464,900	23
Camping	32,000	10	13	1,238,400	19
Fishing	24,600	7	14	1,165,300	18
Hunting	133,000	40	10	3,435,200	53
Snowmobiling	12,200	4	24	256,000	4
Other	22,600	7	30	375,500	6
Any recreation ^a	206,200	62	8	4,493,700	69
No answer	126,400	38	12	2,011,200	31
Total	332,600	100	6	6,504,900	100

^aColumns do not add to total because some owners permit more than one type of use.

Table 44.-Estimated number of private ownership units and acres of commercial forest land owned, by type of public use permitted, Ohio, 1979

Type of public use	Private owners			Acres owned	
	Number	Percent	Sampling error(%)	Number	Percent
Hiking	32,000	10	16	1,117,200	17
Picnicking	14,200	4	21	728,000	11
Camping	11,900	4	21	663,000	10
Fishing	10,200	3	24	727,600	11
Hunting	78,900	24	15	1,986,000	31
Snowmobiling	9,500	3	26	359,500	6
Other	3,300	1	47	132,500	2
All types ^a	95,900	29	13	2,294,600	35
Public use not permitted	159,600	48	10	2,928,900	45
No answer	77,100	23	14	1,281,400	20
Total	332,600	100	6	6,504,900	100

^aColumns do not add to total because some owners permit more than one type of use.

Table 45.-Estimated number of private ownership units and acres of commercial forest land owned,
by availability for recreational use and geographic unit, Ohio, 1979

Recreational use	South-Central		Southeastern		East-Central		Northeastern	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
OWNERS								
Public use:								
Hiking	10,200	13	4,500	14	5,100	9	3,500	4
Hunting	20,200	25	4,700	15	17,100	30	19,700	22
All types ^a	24,400	30	7,700	23	18,700	32	23,800	27
Pub.use not permitted	40,600	51	20,900	63	22,800	40	41,400	47
No answer	14,900	19	4,600	14	16,200	28	23,100	26
Total	79,900	100	33,200	100	57,700	100	88,300	100
Owner recreation:								
Hiking	22,000	28	12,600	39	16,500	29	30,500	35
Hunting	43,100	54	16,100	50	25,300	44	23,800	27
All types ^a	54,000	68	26,800	81	36,200	63	43,900	50
No answer	25,900	32	6,400	19	21,500	37	44,400	50
Total	79,900	100	33,200	100	57,700	100	88,300	100
ACRES OWNED								
Public use:								
Hiking	313,400	22	317,500	28	223,400	14	130,900	11
Hunting	500,500	35	423,100	38	445,900	28	290,300	24
All types ^a	529,800	37	501,000	44	522,500	33	358,600	30
Pub.use not permitted	685,100	48	469,700	42	660,300	41	553,900	46
No answer	207,700	15	156,100	14	419,700	26	289,100	24
Total	1,422,600	100	1,126,800	100	1,602,500	100	1,201,600	100
Owner recreation:								
Hiking	601,600	42	542,800	48	536,400	33	444,000	37
Hunting	921,600	65	743,600	66	797,000	50	483,900	40
All types ^a	1,073,600	75	908,800	81	1,020,600	64	705,900	59
No answer	349,000	25	218,000	19	581,900	36	495,700	41
Total	1,422,600	100	1,126,800	100	1,602,500	100	1,201,600	100

^aColumns do not add to total because some owners permit more than one type of use.

Table 45.- continued

Recreational use	Southwestern		Northwestern		Total	
	Number	Percent	Number	Percent	Number	Percent
OWNERS						
Public use:						
Hiking	3,300	10	5,400	13	32,000	10
Hunting	4,400	14	12,800	30	78,900	24
All types ^a	5,600	18	15,700	37	95,900	29
Pub.use not permitted	17,900	57	16,000	38	159,600	48
No answer	8,000	25	10,300	25	77,100	23
Total	31,500	100	42,000	100	332,600	100
Owner recreation:						
Hiking	12,700	40	14,500	35	108,800	33
Hunting	6,100	20	18,600	44	133,000	40
All types ^a	16,300	52	29,000	69	206,200	62
No answer	15,200	48	13,000	31	126,400	38
Total	31,500	100	42,000	100	332,600	100
ACRES OWNED						
Public use:						
Hiking	57,300	12	74,700	11	1,117,200	17
Hunting	114,500	25	211,700	31	1,986,000	31
All types ^a	133,600	29	249,100	36	2,294,600	35
Pub.use not permitted	267,200	57	292,700	43	2,928,900	45
No answer	64,500	14	144,300	21	1,281,400	20
Total	465,300	100	686,100	100	6,504,900	100
Owner recreation:						
Hiking	216,300	46	261,600	38	2,602,700	40
Hunting	159,000	34	330,100	48	3,435,200	53
All types ^a	305,300	66	479,500	70	4,493,700	69
No answer	160,000	34	206,600	30	2,011,200	31
Total	465,300	100	686,100	100	6,504,900	100

^aColumns do not add to total because some owners permit more than one type of use.

Table 46.--Estimated number of private ownership units and acres of commercial forest land owned, by availability for recreational use and size class, Ohio, 1979

Size of ownership	Public permitted		Not permitted		No answer		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
OWNERS								
1 - 49 acres	86,900	26	145,100	43	72,500	22	304,500	91
50 - 499 acres	8,800	3	14,400	5	4,600	1	27,800	9
500+ acres	200	W	100	W	W	W	300	W
Total	95,900	29	159,600	48	77,100	23	332,600	100
ACRES OWNED								
1 - 49 acres	980,600	15	1,465,100	22	706,100	11	3,151,800	48
50 - 499 acres	832,800	13	1,319,900	21	458,700	7	2,611,400	41
500+ acres	481,200	7	143,900	2	116,600	2	741,700	11
Total	2,294,600	35	2,928,900	45	1,281,400	20	6,504,900	100

W-Fewer than 50 owners or less than 0.5 percent.

Table 47.--Estimated number of private ownership units and acres of commercial forest land owned, by availability for hunting, Ohio, 1979

Hunting availability	Private owners			Acres owned		
	Number	Percent	Sampling error(%)	Number	Percent	Percent
Owner permits hunting and does not hunt	22,000	7	29	415,900		6
Owner hunts and permits hunting	56,900	17	18	1,570,100		24
Owner hunts and excludes others hunting	76,100	23	12	1,865,100		29
Subtotal hunting	155,000	47	10	3,851,100		59
Hunting not permitted	109,700	33	14	1,548,500		24
No answer	67,900	20	15	1,105,300		17
Total	332,600	100	6	6,504,900		100

Table 48.-Estimated number of private ownership units and acres of commercial forest land owned, by reason for posting and use permitted, Ohio, 1979

Reason for posting	Public permitted		Not permitted		No answer		Total		Sampling error(%)
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	
OWNERS									
Abuse of property	1,300	1	14,700	9	100	W	16,100	5	38
Safety	100	W	3,100	2	-	-	3,200	1	46
Liability	1,300	1	700	W	-	-	2,000	1	36
Control access	3,500	4	36,400	23	2,100	3	42,000	12	25
Control hunting	2,800	3	12,100	8	2,500	3	17,400	5	25
Reason not specified	3,600	4	6,100	4	2,500	3	12,200	4	28
All reasons	12,600	13	73,100	46	7,200	9	92,900	28	14
Land not posted	82,400	86	79,900	50	22,000	29	184,300	55	9
No answer	900	1	6,600	4	47,900	62	55,400	17	16
Total	95,900	100	159,600	100	77,100	100	332,600	100	6
ACRES OWNED									
Abuse of property	68,900	3	358,600	12	12,100	1	439,600	7	
Safety	22,200	1	64,400	2	-	-	86,600	1	
Liability	58,300	2	101,500	4	-	-	159,800	3	
Control access	243,700	11	501,800	17	18,100	1	763,600	12	
Control hunting	108,700	5	278,600	10	18,400	2	405,700	6	
Reason not specified	82,400	3	182,400	6	25,000	2	289,800	4	
All reasons	584,200	25	1,487,300	51	73,600	6	2,145,100	33	
Land not posted	1,673,700	73	1,342,700	46	373,300	29	3,389,700	52	
No answer	36,700	2	98,900	3	834,500	65	970,100	15	
Total	2,294,600	100	2,928,900	100	1,281,400	100	6,504,900	100	

W-Fewer than 50 owners or less than 0.5 percent.

Table 49.-Estimated number of private ownership units and acres of commercial forest land owned, by whether land is posted and geographic unit, Ohio, 1979

	South-Central		Southeastern		East-Central		Northeastern	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
OWNERS								
Land posted	13,600	17	14,500	44	13,300	23	33,300	38
Land not posted	58,200	73	13,700	41	32,400	56	33,900	38
No answer	8,100	10	5,000	15	12,000	21	21,100	24
Total	79,900	100	33,200	100	57,700	100	88,300	100
ACRES OWNED								
Land posted	395,300	28	399,100	35	583,600	36	440,000	36
Land not posted	942,400	66	597,400	53	688,600	43	489,500	41
No answer	84,900	6	130,300	12	330,300	21	272,100	23
Total	1,422,600	100	1,126,800	100	1,602,500	100	1,201,600	100

Table 49.-continued

	Southwestern		Northwestern		Total	
	Number	Percent	Number	Percent	Number	Percent
OWNERS						
Land posted	9,800	31	8,400	20	92,900	28
Land not posted	16,600	53	29,500	70	184,300	55
No answer	5,100	16	4,100	10	55,400	17
Total	31,500	100	42,000	100	332,600	100
ACRES OWNED						
Land posted	152,700	33	174,400	25	2,145,100	33
Land not posted	260,800	56	411,000	60	3,389,700	52
No answer	51,800	11	100,700	15	970,100	15
Total	465,300	100	686,100	100	6,504,900	100

Table 50.-Estimated number of private ownership units and acres of commercial forest land owned, by size class and whether land is posted, Ohio, 1979

Size of ownership	Land posted		Land not posted		No answer		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
OWNERS								
1 - 9 acres	51,400	16	99,200	29	33,300	10	183,900	55
10 - 49 acres	31,300	9	70,500	21	18,800	6	120,600	36
50 - 499 acres	10,100	3	14,400	5	3,300	1	27,800	9
500+ acres	100	W	200	W	W	W	300	W
Total	92,900	28	184,300	55	55,400	17	332,600	100
ACRES OWNED								
1 - 9 acres	146,200	2	332,300	5	131,400	2	609,900	9
10 - 49 acres	734,200	11	1,411,400	22	396,300	6	2,541,900	39
50 - 499 acres	990,300	16	1,289,400	20	331,700	5	2,611,400	41
500+ acres	274,400	4	356,600	5	110,700	2	741,700	11
Total	2,145,100	33	3,389,700	52	970,100	15	6,504,900	100

W-Fewer than 50 owners or less than 0.5 percent.

Birch, Thomas W. The forest-land owners of Ohio -- 1979.
Resour. Bull. NE-74. Broomall, PA: U.S. Department
of Agriculture, Forest Service, Northeastern Forest
Experiment Station; 1982. 84 p.

A statistical analytical report on a mail canvass of
private commercial forest-land owners in Ohio. The study
was conducted in conjunction with the third forest survey
of Ohio by the USDA Forest Service. It discusses
landowner characteristics, attitudes, and intentions of
owners regarding reasons for owning, recreational use,
timber management, and harvesting.

ODC 923.9(771)

Keywords: Available timber, harvesting, forestry
assistance, recreation, forest land ownership.

Headquarters of the Northeastern Forest Experiment Station are in Broomall, Pa. Field laboratories are maintained at:

- **Amherst, Massachusetts, in cooperation with the University of Massachusetts.**
 - **Berea, Kentucky, in cooperation with Berea College.**
 - **Burlington, Vermont, in cooperation with the University of Vermont.**
 - **Delaware, Ohio.**
 - **Durham, New Hampshire, in cooperation with the University of New Hampshire.**
 - **Hamden, Connecticut, in cooperation with Yale University.**
 - **Morgantown, West Virginia, in cooperation with West Virginia University, Morgantown.**
 - **Orono, Maine, in cooperation with the University of Maine, Orono.**
 - **Parsons, West Virginia.**
 - **Princeton, West Virginia.**
 - **Syracuse, New York, in cooperation with the State University of New York College of Environmental Sciences and Forestry at Syracuse University, Syracuse.**
 - **University Park, Pennsylvania, in cooperation with the Pennsylvania State University.**
 - **Warren, Pennsylvania.**
-

NATIONAL AGRICULTURAL LIBRARY

1022964912