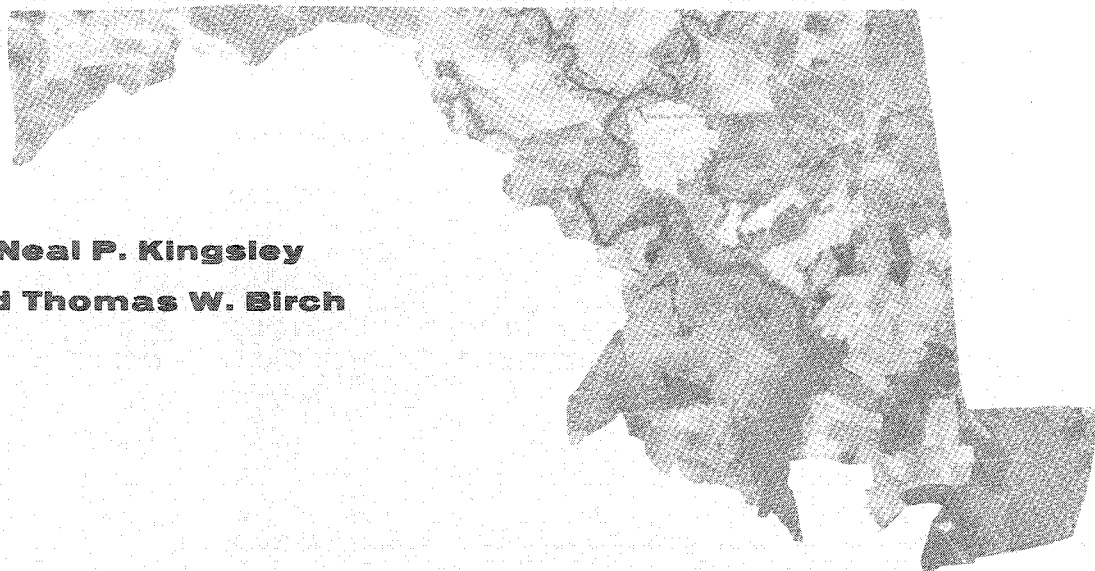


THE FOREST-LAND OWNERS OF MARYLAND

**by Neal P. Kingsley
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**FOREST SERVICE RESOURCE BULLETIN NE-63
1980**

**FOREST SERVICE, U.S. DEPARTMENT OF AGRICULTURE
NORTHEASTERN FOREST EXPERIMENT STATION
370 REED ROAD, BROOMALL, PA 19008**

Abstract

Ninety percent of the commercial forest land in Maryland—2,280,000 acres—is in the hands of some 95,800 owners. Eighty-seven percent of these owners are individuals. The average individual owner is middle aged, well educated, relatively affluent, and from a rural or farm background. Twenty-two percent of the private owners have harvested timber from their land. These owners own 53 percent of the private woodland. Forty-seven percent of the owners intend to harvest timber from their land at some future date. They control 69 percent of the private woodland. Most owners show little interest in forestry practices. In fact, 12 percent of the owners have received some type of forestry assistance, but a majority of the owners do not know who to contact for forestry assistance. Twenty-six percent of the owners permit the public to use their woodland for recreation.

MANUSCRIPT RECEIVED FOR PUBLICATION 4 JANUARY 1980

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HIGHLIGHTS

- ★ Ninety percent of the commercial forest land in Maryland—2,280,000 acres—is in the hands of some 95,800 owners.
- ★ The average size of private woodland ownerships is 23.8 acres. Fifty-five percent of the owners—52,600—own fewer than 10 acres but these owners control only 7 percent (169,800 acres) of the private commercial forest land.
- ★ Eighty-seven percent of the private owners are individuals.
- ★ The average individual owner is middle aged, well educated, relatively affluent, and from a rural or farm background.
- ★ Twenty-two percent of the private owners have harvested timber from their land and they own 53 percent of the private woodland.
- ★ Forty-seven percent of the owners intend to harvest timber from their land at some future date. They control 69 percent of the private woodland.
- ★ Twelve percent of the owners have received some type of forestry assistance but a majority of owners do not know who to contact for forestry assistance.
- ★ Twenty-six percent of the owners permit the public to use their woodland for recreation. The most commonly allowed recreational use was hunting.

INTRODUCTION

THE RECENTLY COMPLETED forest survey of Maryland (Powell and Kingsley 1980) provides estimates of the total area of forest land, the timber volume, and the area of forest land owned by broad categories of owners. However, the forest survey is not designed to provide estimates of the volume or acreage of timber that may be currently available for harvesting. Nor does it provide descriptions of typical forest-land owners, their reasons for owning forest land, or their attitudes toward timber harvesting, forest management, and the recreational use of their lands by the public.

This study is based on a mail canvass of 615 owners of privately held commercial forest land in Maryland. Most of these own land on which forest survey field plots were established. In addition to owners of forest survey plots, all owners who hold 500 acres or

more of commercial forest land were sent questionnaires.

It is the intent of the authors to present the results of this study in a way that will facilitate their use in conjunction with the information provided in the forest resource report. THE USER OF THE DATA PRESENTED IN THE APPENDIX OF THIS REPORT IS STRONGLY ADVISED TO READ THE DEFINITIONS OF TERMS, THE DISCUSSION OF STUDY METHODS, AND THE DISCUSSION OF SAMPLING ERRORS PRESENTED IN THE APPENDIX.

THE FOREST LAND AND ITS OWNERS

The 2,280,000 acres of privately owned commercial forest land in Maryland are held by an estimated 95,800 owners. Thus, the average Maryland forest-land owner holds nearly 24 acres of forest land. However, the average size of holding varies substantially from one geographic unit to another (Fig. 1).

Figure 1.—Relative distribution of private forest-land owners and private commercial forest land in the geographic units.

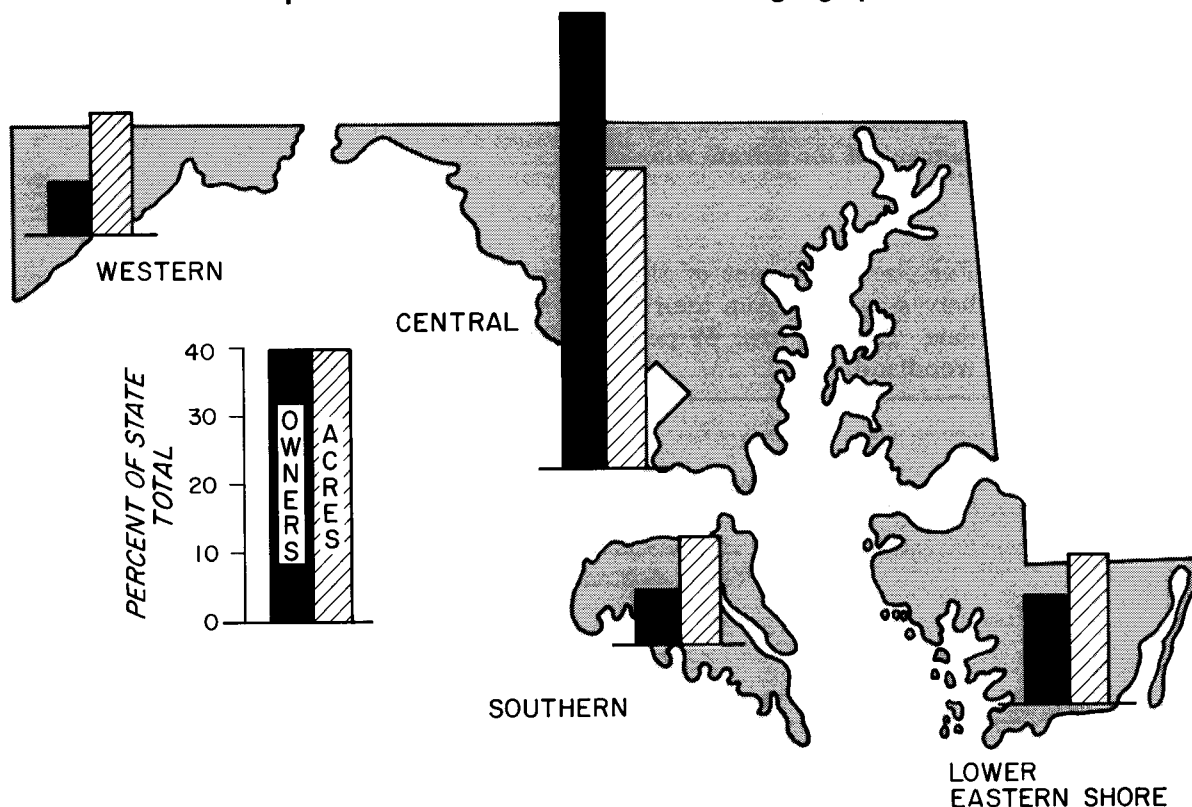
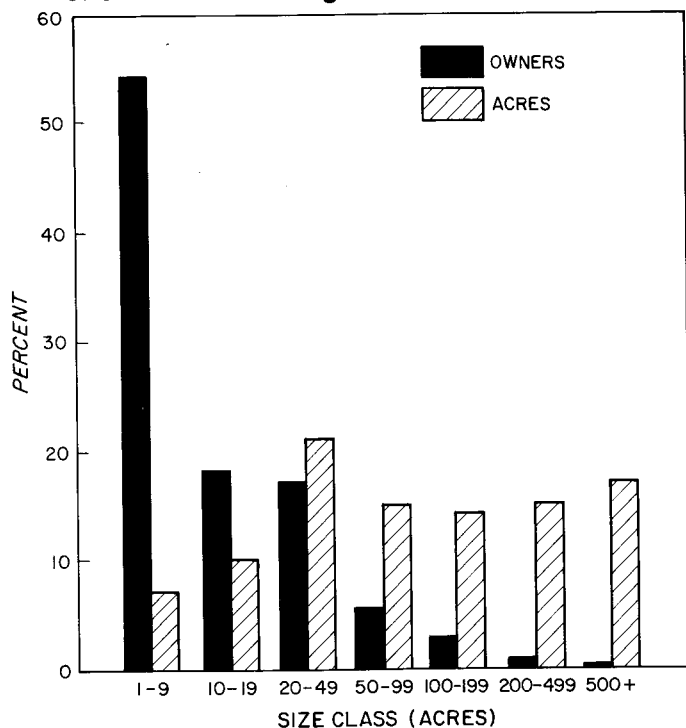


Figure 2.—Distribution of private ownerships, by size, class of forest holding and percentage of owners and acreage.



In the most densely populated Central geographic unit, the average owner holds just under 16 acres, while in the more rural Western

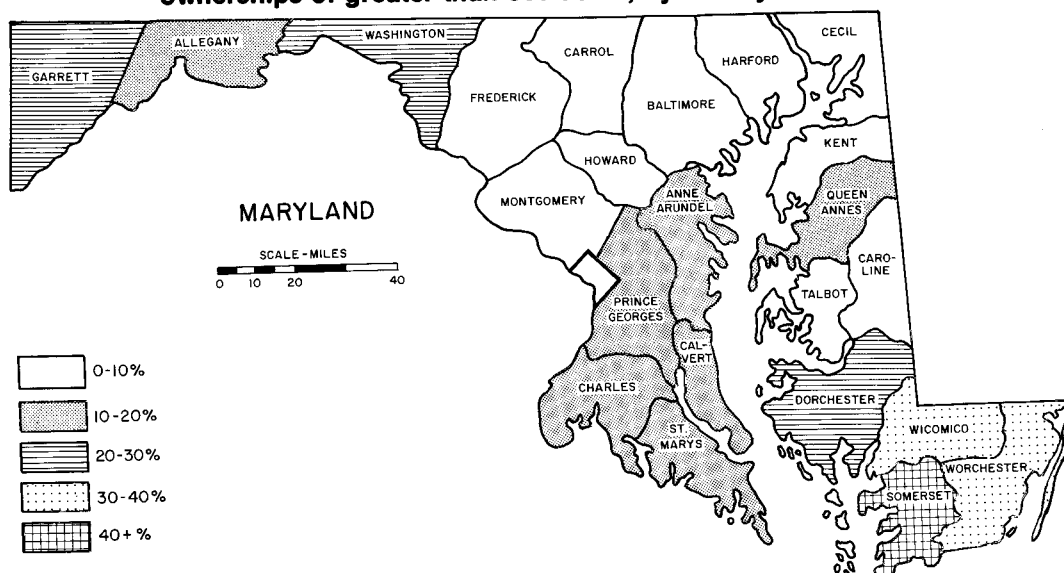
geographic unit the average ownership is just over 50 acres.

Of the 95,800 forest-land owners in the state, 52,600—55 percent—hold fewer than 10 acres (Fig. 2). In total, these owners hold only 7 percent of the privately owned commercial forest land in the state. Such small tracts are seldom looked upon as a source of timber. The continued fragmentation of forest land into essentially oversized house lots could pose a deterrent not only to timber management, but also to comprehensive land planning and management.

When we remove those owners with fewer than 10 acres from consideration, the average size of holding increases markedly to nearly 50 acres statewide and to more than 74 acres in the Lower Eastern Shore geographic unit. Only an estimated 1,400 forest-land owners in Maryland own 200 acres or more. However, these owners hold 732,800 acres of forest land in the state.

As mentioned earlier, owners of 500 acres or more of commercial forest land in Maryland were enumerated rather than sampled. There are more than 200 of these owners and they hold a total of 389,500 acres. Most large ownerships are concentrated in the Lower Eastern Shore unit (Fig. 3). Several of these

Figure 3.—Percentage of private commercial forest land in ownerships of greater than 500 acres, by county.



large ownerships are held by forest-based industries that require large tracts of land to sustain their operations. Other large ownerships are concentrated in the western three counties. Through most of central Maryland large tracts of forest land are rare.

The individual forest-land owner

Individuals hold 72 percent of the privately owned commercial forest land in Maryland (Fig. 4). These 83,100 hold 1,642,100 acres. People who own forest land in Maryland are relatively young to middle aged, well educated, affluent, and usually have a rural background. One of three is under the age of 45 and nearly three of four are under 65. Nearly two of five have more than a high school education. Two of five also have incomes over \$15,000 per year. And over half spent the first 12 years of their lives on a farm or in a rural area.

One in five Maryland owners is employed in a skilled trade (Fig. 5). Retired people make up 16 percent of the forest-land owning population. White collar workers account for 14 percent and professionals and executives, 19 percent. Farmers account for 13 percent,

but they hold more forest land than any other group—25 percent.

Just as Maryland is a heterogeneous state in land forms and land uses, so, too, the profile of forest-land owners differs from one region of the state to another. In the Western geographic unit, 81 percent of the individual owners are under 65. But in the Lower Eastern Shore unit, only 54 percent are under that age. Also, in the Lower Eastern Shore unit only 15 percent of the owners have more than a high school education, while in the Southern unit 52 percent do. Statewide, 41 percent of Maryland owners have incomes in excess of \$15,000, but only 7 percent in the Western unit have incomes over \$15,000. Only 45 percent of the owners in the Central unit have rural or farm backgrounds. This is to be expected since the Central unit is the most urbanized and industrialized geographic unit. Conversely, the most rural area, the Lower Eastern Shore, has the highest proportion of owners with rural backgrounds—86 percent. In the Lower Eastern Shore unit, one in five owners is a farmer. This region also has the highest proportion of retired owners with 31 percent. In the other geographic units, either skilled workers or white collar workers account for the largest occupation groups.

Figure 4.—Percentage of all owners and acreage of privately owned commercial forest land, by form of ownership.

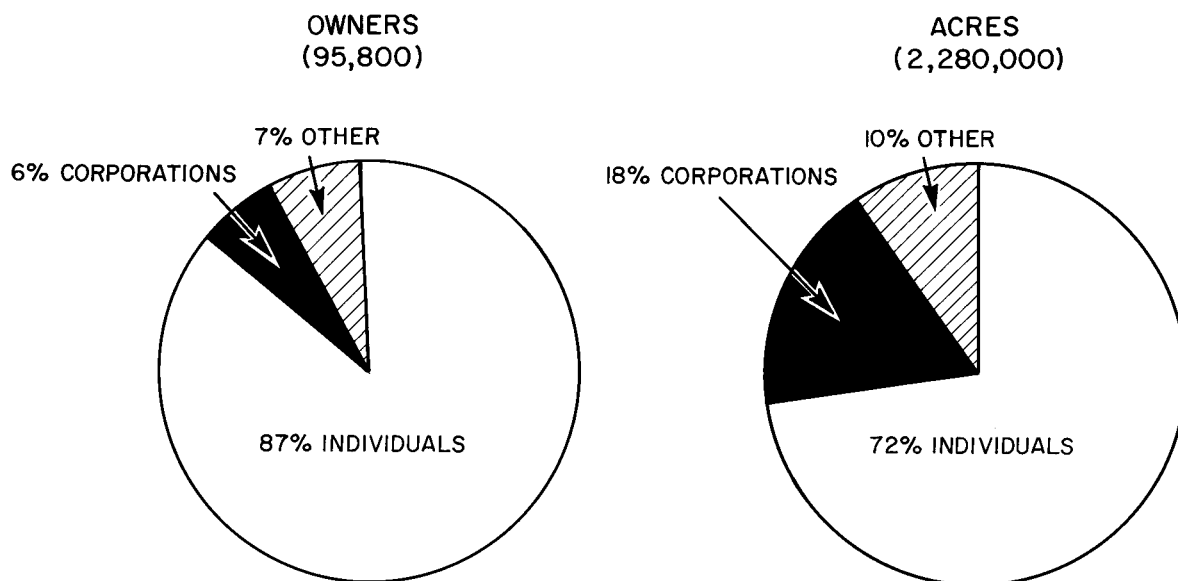
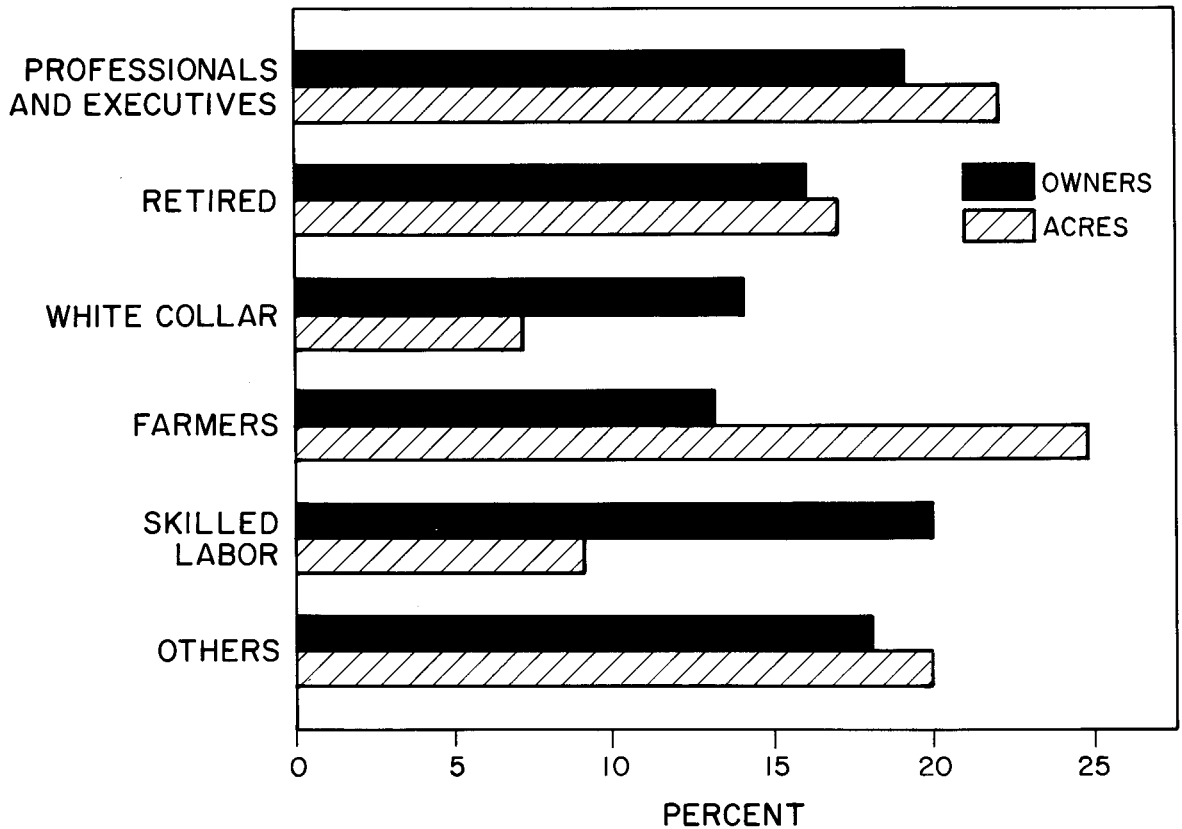


Figure 5.—Owner occupations, by percentage of owners and acreage.



Profiles of Individuals Owning Commercial Forest Land in Maryland

<i>Item</i>	<i>Central</i>	<i>Southern</i>	<i>Lower Eastern Shore</i>	<i>Western</i>	<i>Total</i>
Age (under 65)	78%	75%	54%	81%	74%
Education (Beyond high school)	43%	52%	15%	24%	38%
Income (\$15,000+)	51%	56%	13%	17%	41%
Background	45% rural or farm	66% rural or farm	86% rural or farm	76% rural	57% rural
Occupation	23% skilled labor 10% farmer	23% white collar 18% farmer	31% retired 20% farmer	23% skilled labor 17% farmer	20% skilled labor 13% farmer

Other factors that help describe the owners relations to their land are tenure of ownership and distance from tract. Forty-seven percent of the individual owners have owned their land for fewer than 10 years; 29 percent, 10 to 24 years; and 18 percent, over 25 years. Most owners own only one tract and live on it or within 1 mile of it.

Corporate and other owners

An estimated 6,200 corporations of various types hold 417,400 acres of commercial forest land in Maryland. Corporations engaged in real estate hold 132,700 acres and number 1,600. Corporations engaged in timber-based industries, while numbering fewer than 50, hold 107,600 acres. Nonindustrial business corporations, such as banks, insurance companies, and merchandisers—while accounting for more than half of all corporate owners—hold only 35,700 acres. The remaining 141,400 acres of forest land held by corpora-

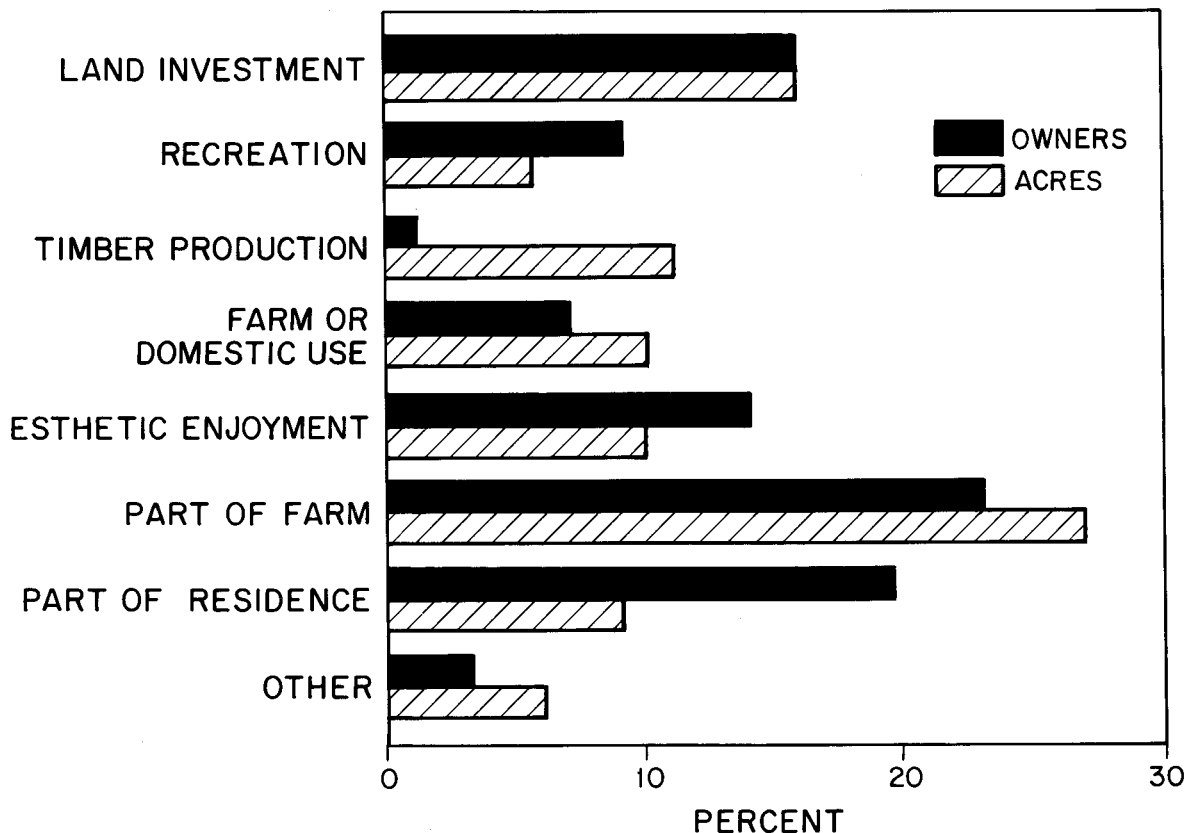
tions is held by corporate farms, nonforest industries, and other corporations.

An estimated 3,600 partnerships hold 126,100 acres of Maryland's privately held commercial forest land. The remaining 94,400 acres are owned by clubs, associations, trusts, undivided estates, and other groups and organizations.

WHY PEOPLE OWN FOREST LAND

Maryland owners were asked to rank eight reasons for owning forest land. These included land investment, recreation, timber production, farm or domestic use, esthetic enjoyment, part of farm (but serves no useful function in the farm operation), part of residence, and "other" (Fig. 6). Nearly one in four owners ranked "part of the farm" as the most important reason for owning forest land. Being part of the residence was ranked most

Figure 6.—Primary reason for owning forest land, by percentage of owners and acreage.



important by one owner in five. These two groups control 36 percent of the privately owned commercial forest land in the state. Thus, more than one-third of Maryland's private commercial forest land is held by owners who apparently have no planned use for the land. With no firm ownership objective in mind, such owners are highly unlikely to manage their land for any purpose.

Land as an investment was the third most often stated reason for owning forest land. These people account for 16 percent of the owners and they hold 16 percent of the private commercial forest land. The investment motive appears to be more important in the Lower Eastern Shore unit than anywhere else in the state. In that unit, 22 percent listed investment as the most important reason. However, these owners hold somewhat smaller than average tracts since they account for only 17 percent of the unit's private commercial forest land.

Another commonly expressed reason for holding forest land in Maryland is the esthetic enjoyment of it. Fourteen percent list this as the number one reason for holding forest land. These owners, however, own only 10 percent of the forest land.

Timber production is the least commonly stated primary reason for owning forest land in Maryland. Only 2 percent would list this reason first. These owners hold 12 percent of Maryland's privately owned commercial forest land. While the percentage of owners who indicate timber production as the primary reason for owning forest land varies only slightly from one geographic unit to another, the area of land varies significantly. In the Lower Eastern Shore unit, the major timber producing region of the state, 31 percent of the forest land is held by the 2 percent who listed timber production as their primary reason for owning forest land. Conversely in the Central unit, the region where timber production is least significant, only 4 percent of the privately owned commercial forest land is held by such owners.

An estimated 37,100 Maryland forest-land owners would list a second reason for owning forest land. Apparently 53,000 owners would not be able to think of a reason for owning forest land other than the one they listed as

their primary reason. Of the estimated 37,100 who would list a second reason, 25 percent would list recreation and 25 percent farm or domestic use as the second reason for owning forest land. An additional 19 percent would list esthetics and 14 percent would indicate part of the residence.

Only 7 percent of the 37,200 owners—2,700—would indicate timber production as their second reason for owning forest land. These owners hold 157,600 acres of commercial forest land. Combining these owners with those indicating timber production as their most important reason for holding forest land gives a total of 4,300 owners—5 percent. These two groups hold a combined total of 426,000 acres. Thus, 18 percent of the private commercial forest land in Maryland is held by owners who consider timber production a motive for owning forest land. Excluding the corporate forest industry lands, we find that only 14 percent in private nonforest-industry ownership is held with timber production in mind.

Owners were also asked to list the most important benefits they have derived from their forest land over the past 5 years and the most important expected benefit in the coming 5 years. Esthetic enjoyment was the most frequently mentioned benefit that owners derived over the past 5 years. Statewide, 31 percent of the owners holding 24 percent of the private commercial forest land listed this benefit as the most important one they had received. Esthetic enjoyment was the front runner among benefits in all geographic units except in the Lower Eastern shore. In this unit, 25 percent—holding 30 percent of the private commercial forest land—listed the increase in the value of land as the most important benefit.

Farm or domestic use as a benefit received in the last 5 years ranked second among owners followed by increase in land value, recreation, timber production, and all other reasons combined. Increase in the value of land ranked behind esthetic enjoyment, accounting for 23 percent of the acreage. Farm or domestic use accounts for 18 percent of the private forest land; timber production, 14 percent; recreation, 8 percent; and other, 4 percent.

Looking to the future, 41 percent of Maryland's owners expect esthetic enjoyment to be the most important benefit during the coming 5 years. These owners hold 23 percent of the privately held commercial forest land. In the Lower Eastern Shore unit, the increase in land value led the list of expected future benefits. In this unit, 48 percent listed land value increase as the most important expected benefit and they hold 31 percent of the private forest land in the unit. Statewide, the increase in land value was the second most frequently listed benefit expected. Twenty-one percent of the owners in the state listed increase in land value as most important. These owners hold 26 percent of the land. Only 16 percent expect farm or domestic use to be most important. These owners hold 7 percent of the land. As many owners—3 percent—said they expect timber production to be the most important benefit in the coming 5 years as those who said it was the most important over the past 5 years. These owners hold 13 percent of the forest land. Over half of this acreage is in the Lower Eastern Shore unit, where nearly one third of the land is held by owners who expect income from timber to be important in the next 5 years.

HOW MUCH TIMBER IS AVAILABLE?

How much of the timber on privately owned commercial forest land is available for harvesting? The answer is influenced by how one defines availability and the assumptions that are used to develop the estimate. The usefulness of the resulting estimate is also limited to the time period in which it is made. Industrial developments, market conditions, and other social and economic factors can drastically alter those factors that interact to determine how much timber will be made available. However, by examining the future intentions and past practices of forest-land owners, we can get an idea of how much

forest land in Maryland would be made available for cutting.

An estimated 47 percent—44,900—of the current forest-land owners in Maryland intend to harvest timber from their land sometime. These owners hold nearly 1.6 million acres—69 percent—of the privately held commercial forest land in the state. This land contains an estimated 2.2 billion cubic feet of growing stock and has an average annual net growth of 71.5 million cubic feet per year. However, only 7,700 owners have firm enough intentions to harvest that they can say they plan to harvest during the next 10 years. These owners hold only 619 thousand acres with an estimated 887 million cubic feet of growing stock and a net annual growth of 30 million cubic feet. Thus, there appears to be a considerable gap between those owners with firm intentions to cut and those who are “entertaining” the thought of cutting timber. Obviously, many owners hold tracts that are too small for timber production; others have timber of too poor quality or have species for which there is very little demand. Still other owners may place such stringent restrictions on harvesting that a willing buyer cannot be found.

We now have an indication of what Maryland owners say they intend to do. How does this compare with what they have done? Of the current owners of forested land in Maryland, an estimated 21,100—22 percent—have harvested timber from their land. These owners hold 1.2 million acres with an estimated volume of 1.7 billion cubic feet of growing stock and an estimated 55.2 million cubic feet of net growth annually.

Now we have a range of possible available volume and an indication, based on past performance, of what we may expect land-owners to do. The following shows these estimates based on past cutting, intention to cut during next 10 years, and intention to cut someday for each geographic unit and for the state as a whole.

Available Volume Under Different Assumptions, by Geographic Unit

<i>Item</i>	<i>Central</i>	<i>Southern</i>	<i>Lower Eastern Shore</i>	<i>Western</i>	<i>State</i>
Average volume per acre (private land) (ft ³)	1496.2	1319.5	1644.8	824.3	1381.6
Growth per acre (ft ³)	45	45	62	22	44
<i>Have cut:</i>					
Acres owned (thousand)	431.5	211.7	345.8	221.9	1210.9
Volume (million ft ³)	645.6	279.3	568.8	182.9	1676.6
Annual growth (million ft ³)	19.4	9.5	21.4	4.9	55.2
<i>Cut next 10 years:</i>					
Acres owned (thousand)	227.0	66.8	232.6	92.8	619.2
Volume (million ft ³)	339.6	88.1	382.6	76.5	886.8
Annual growth (million ft ³)	10.2	3.0	14.4	2.0	29.6
<i>Next 10 years + Indefinite:</i>					
Acres owned (thousand)	657.6	252.2	397.5	273.5	1581.2
Volume (million ft ³)	983.9	332.8	661.6	225.8	2184.6
Annual growth (million ft ³)	29.6	11.3	24.6	6.0	71.5

There is yet another way to look at the question of availability of timber from privately owned forest land. This we might call the sustainable average annual removal. If we assume that all of the owners who express a willingness to harvest made available a combined volume equal to the average net annual growth on all lands held by these owners, we could expect that 71.5 million cubic feet could be made available. In theory, this volume could be harvested annually in Maryland from lands held by owners expressing a willingness to harvest without depleting the growing stock on these lands.

In 1975, an estimated 58.9 million cubic feet of growing stock was removed from commercial forest land in Maryland. Of this total an estimated 57.1 million was removed from privately held commercial forest land.

According to this analysis, Maryland forestland owners in 1975 made available 14.4 (71.5 minus 57.1) million cubic feet more than was removed.

If, however, we look at the trend of timber removals for the 1964-1975 decade we see that 1975 was not typical of the period. If 1975 had been consistent with the trend, a total of about 83.6 million cubic feet would have been removed from private commercial forest land. Thus, it would appear that in a normal year the available annual growth on private forest land in Maryland would be 9 percent less than is demanded by the market. The following shows this analysis, by geographic unit for 1975 based on the trends from the forest survey. Note that this analysis indicates that there is severe overcutting on a trend-level basis in the Western Unit.

**Estimated Available Growth Versus
Estimated Timber Removals From
Private Forest Land**

<i>Geographic unit</i>	<i>Net growth</i>	<i>Removals</i>	<i>Surplus or deficit</i>
<i>----- Million ft³ -----</i>			
Central	29.6	28.8	+0.8
Southern	11.3	14.8	-3.5
Lower Eastern Shore	24.7	22.5	+2.2
Western	<u>6.0</u>	<u>16.7</u>	<u>-10.7</u>
Total	71.6	82.8	-11.2

In the Southern unit, growth equals about 76 percent of removals. In the Central unit growth and removals are nearly in balance. In the Lower Eastern Shore there appears to be a modest surplus of growth. One reason for the apparently severe imbalance of growth and removals in the Western unit is that in this region the realized annual net growth is only 22 cubic feet per acre per year.

This analysis indicates that Maryland is currently harvesting timber from private forest land at a rate that cannot be sustained by the annual net growth on land held by owners who would harvest timber. Thus, the problem appears to be how to make more timber available on a sustainable basis. There are three possible ways to do this:

1. Utilization—Nearly 20 million cubic feet of growing stock were removed in 1975 and apparently not used for products. Much of this material could have been used, particularly for fiber products.
2. Forest Management—Most of the non-forest industry land in Maryland is essentially unmanaged. Forest management could substantially increase growth on these lands, thus, producing more timber from the same land base.
3. Encouraging More Owners to Harvest—Nearly 700,000 acres of private commercial forest land in Maryland are held by owners

who have no intention of ever harvesting timber. Many of these owners could be encouraged to manage and harvest their timber.

It should be pointed out that because the present owner of a tract of forest land has no intention to harvest does not mean that the timber on the land will never be harvested. In a state like Maryland, land is constantly changing hands. In fact, 59 percent of the private commercial forest land in the state has been held by the same owners for fewer than 25 years. Further, what an owner says he intends to do and what he does are often very different. Research in Delaware indicates that the percentages of owners who intend to cut or not cut at any point in time are about the same (Turner et al. 1977). However, owners are very inconsistent about their intentions and few gave the same response on both occasions.

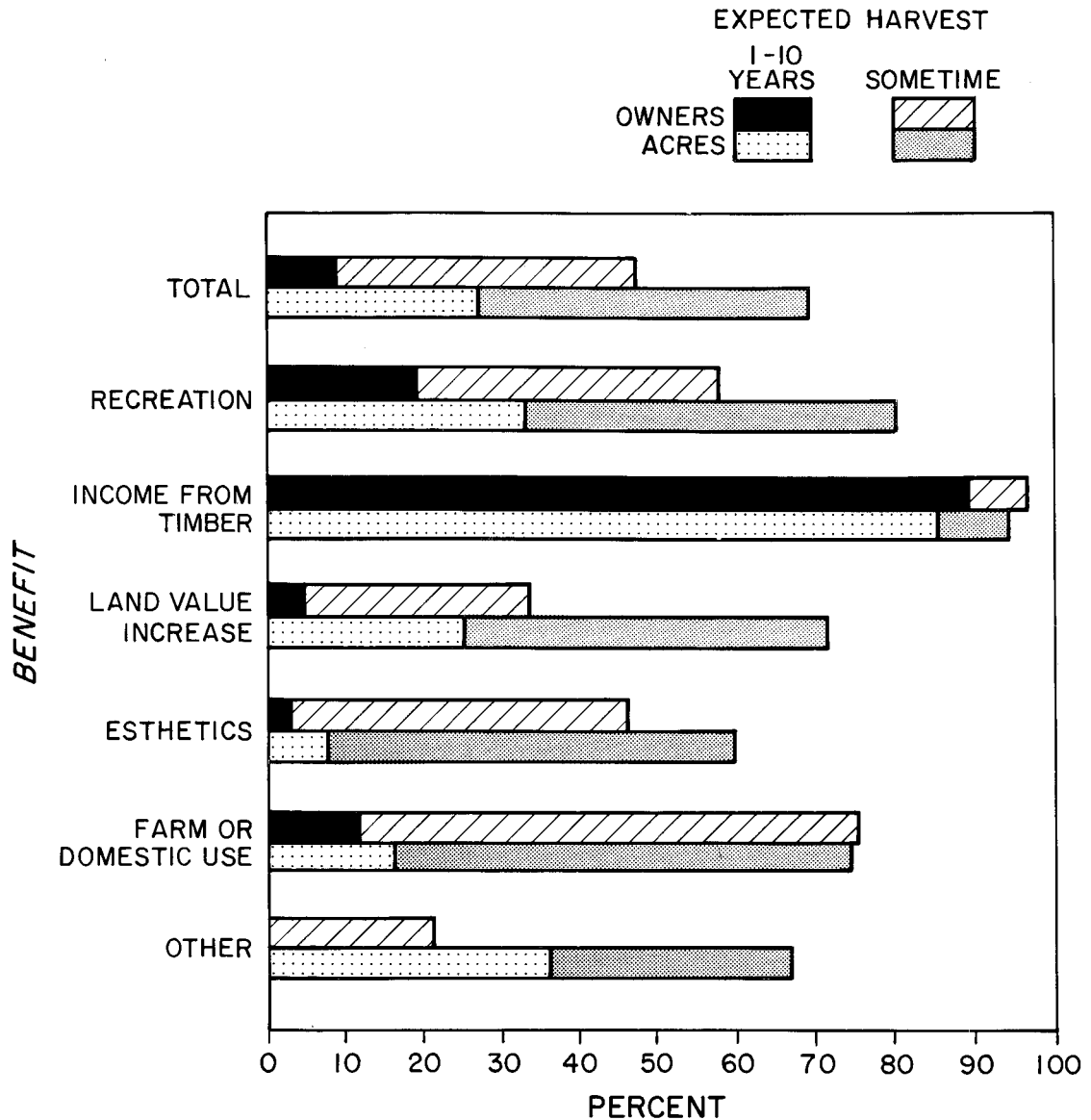
OWNER ATTITUDES ON TIMBER HARVESTING

Predicting owner behavior

Previous studies (Kingsley 1976; Kingsley and Birch 1977; Birch and Kingsley 1978; Birch and Powell 1978) indicate that attitudes on the following three areas consistently identify potential timber harvesters; primary benefits expected in the next 5 years, size of forest ownership, and primary reason for owning woodland.

A high proportion of owners (89 percent) who expect income from the sale of timber to be the primary benefit from owning forest land during the next 5 years intend to harvest timber during the next 10 years (Fig. 7). The remaining 11 percent said they intended to harvest at some time or did not answer the question on intention to harvest. If we look at owners who have definite or indefinite intentions to harvest, then at least 50 percent of those owners who expect benefits of farm or domestic use and recreation also expect to harvest timber. Even when less than 50 percent of the owners in an expected benefit group intend to harvest at some time, over 50

Figure 7.—Percentage of owners and acreage owned, by expected time of harvest and primary benefit expected in the next 5 years.



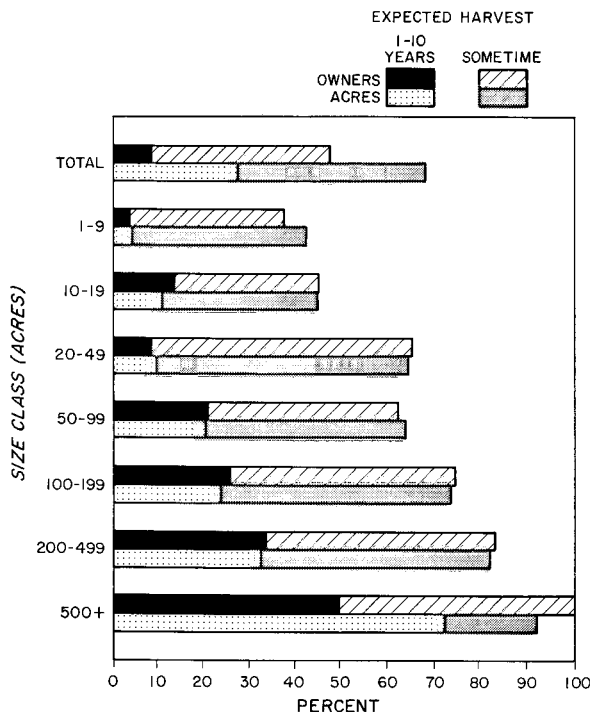
percent of the land in the group is owned by those who intend to harvest because these are owners of larger tracts. This ties in very closely with our second prediction question of size of forest ownership.

As might be expected, the more forest land an owner holds the more likely he is to harvest timber. Owners who plan to harvest within the coming decade hold an average of 78

acres. Those who are indefinite about future harvests own an average of 26 acres. And owners who say they never plan to harvest own an average 12 acres. Looking at past performance, those who have cut timber own an average of 57 acres, while those who have never harvested own an average of 14 acres.

When we look at intention to harvest within our seven size classes of ownership,

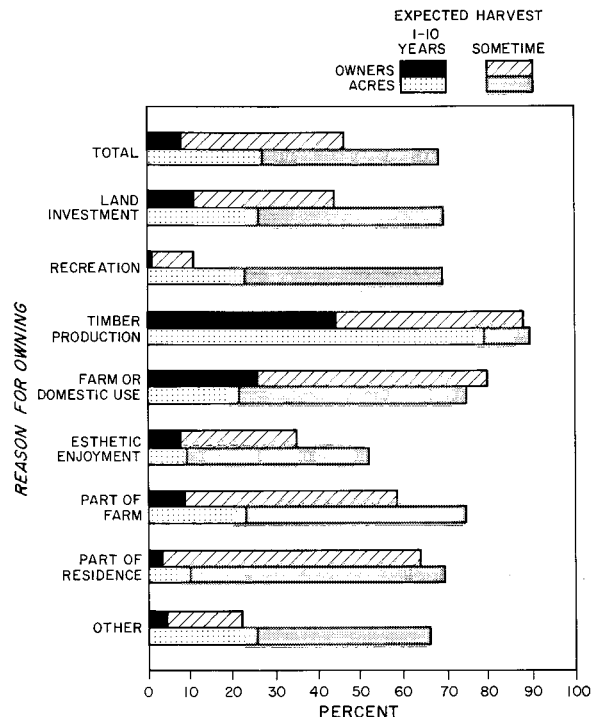
Figure 8.—Percentage of owners and acreage owned, by expected time of harvest and size class of ownership.



we see very clearly the predictive power of this question (Fig. 8). Fewer than 50 owners who own 500 or more acres of commercial forest land do not intend to harvest timber. Among ownerships of fewer than 20 acres, less than 50 percent of the owners within these classes intend to harvest timber. In the four classes between 50 and 500 acres, more than 60 percent of the owners intend to harvest sometime, but no more than 33 percent have definite plans to harvest in the next 10 years.

The third predictor of harvesting intentions is primary reason for owning forest land (Fig. 9). In no category of primary reason for owning forest land do 50 percent of the owners have intentions of harvesting in the next 10 years. When we include those owners with indefinite intentions to harvest only the land investment, esthetic enjoyment and "other" categories have less than 50 percent of the owners that intend to harvest.

Figure 9.—Percentage of owners and acreage owned, by expected time of harvest and primary reason for owning forest land.



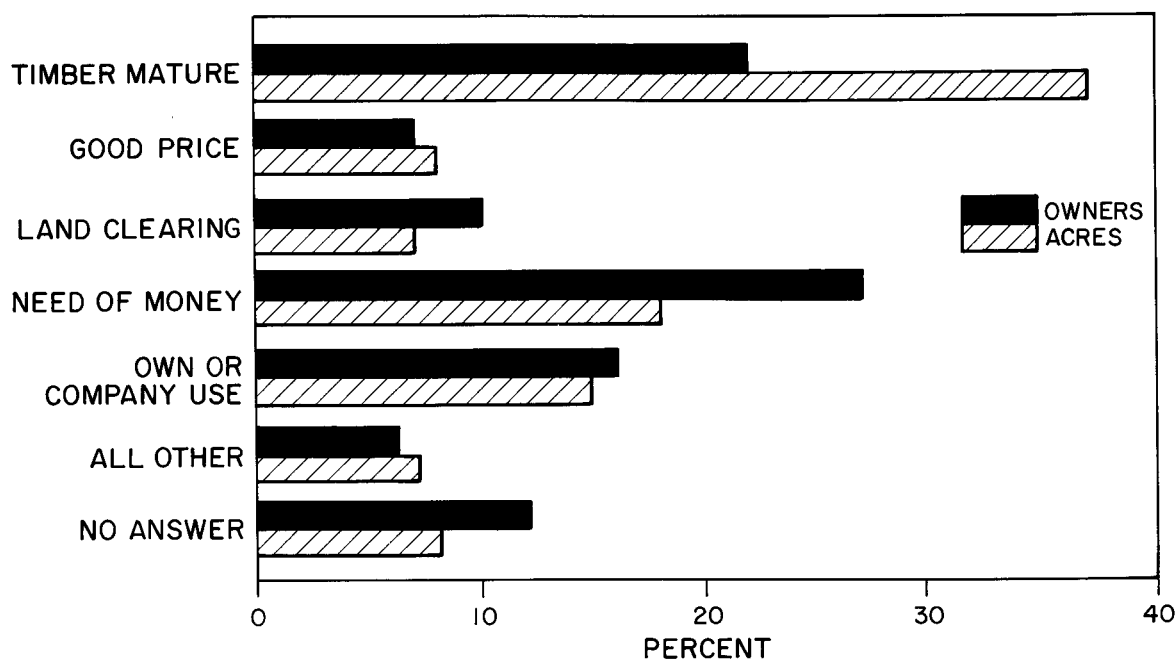
It should be noted that some owners who say they own forest land for timber production never intend to harvest timber. This seeming inconsistency is possible in situations where the owner is interested in timber production but knows that he will pass the land on to his heirs before the next harvest.

In looking at all three variables, it seems that timber producers have a broad range of reasons for owning timber and benefits they expect from their land. But the common thread that ties together the owners who expect to harvest is the more forest land an owner has the more likely he will harvest timber.

Why owners harvest timber

An estimated 21,100 of the current owners of private commercial forest land in Maryland have harvested timber from their lands. These owners account for 22 percent of all the

Figure 10.—Reasons for harvesting timber, by percentage of owners and acreage.



owners in the state. However, they hold a total of 1,210,900 acres or 53 percent of the privately owned commercial forest land in the state.

More Maryland owners—27 percent of those who have harvested—harvested timber because they needed the money than because of any other reason (Fig. 10). These owners hold 220,000 acres—18 percent of the total held by past harvesters. Another 22 percent of those owners who have harvested did so because they believed the timber was mature. These owners, however, own more forest land than any other group—449,500 acres or 37 percent of the land held by harvesters. Sixteen percent of the owners who harvested said they did so for their own use or for company use. These owners hold 15 percent of the land held by past harvesters.

Land clearing is often mentioned as a major reason for harvesting in Maryland; 10 percent of those owners who have cut timber from their land did so in clearing land. However, these owners hold only 7 percent of the land held by past harvesters. Often, these people are farmers who harvested timber incidental to enlarging a field or straightening the edges

of fields. Perhaps Maryland forest-land owners are not happy with the selling prices of timber. Only 7 percent of those who have harvested said they did so because they were offered a good price. These owners hold 8 percent of the land owned by past harvesters.

The conclusion that most privately owned commercial forest land in Maryland is essentially unmanaged is reinforced by the fact that less than 1 percent of the owners who harvest said they did so as part of a cultural treatment of their stands. And these owners hold only 16,200 acres, about 1 percent of the land owned by past harvesters. Only 2 percent of the owners who harvested said they did so to salvage diseased or damaged timber. These owners hold 4 percent of the acreage owned by past harvesters. This is an interesting finding in view of the outbreak of the southern pine bark beetle (*Dendroctonus frontalis*) in the Lower Eastern Shore unit in recent years.

Why some owners do not harvest timber

Seventy-eight percent—74,700—of the owners of privately held commercial forest

land in Maryland have never harvested timber from their land. Nearly one fourth of the land—245,800 acres—held by nonharvesting owners have not been harvested because the owner considers the timber immature (Fig. 11). Another important reason for not harvesting in Maryland is that many owners believe that harvesting would ruin the scenery. An estimated 17 percent of the owners who have not harvested would give this reason. These owners hold 21 percent of the land held by nonharvesters. Concern over the possible ruin of scenery is highest in the Western unit, where 29 percent of the owners gave this reason for not harvesting. Twelve percent of the nonharvesting owners say that they have not harvested timber for fear that hunting values of the land would be destroyed. However, these owners hold fewer than 5 acres of forest land each.

Very few Maryland forest-land owners are philosophically opposed to cutting. Only 2 percent of the owners who have not harvested said they have not because they are opposed

to harvesting. These owners account for 2 percent of the land held by nonharvesters.

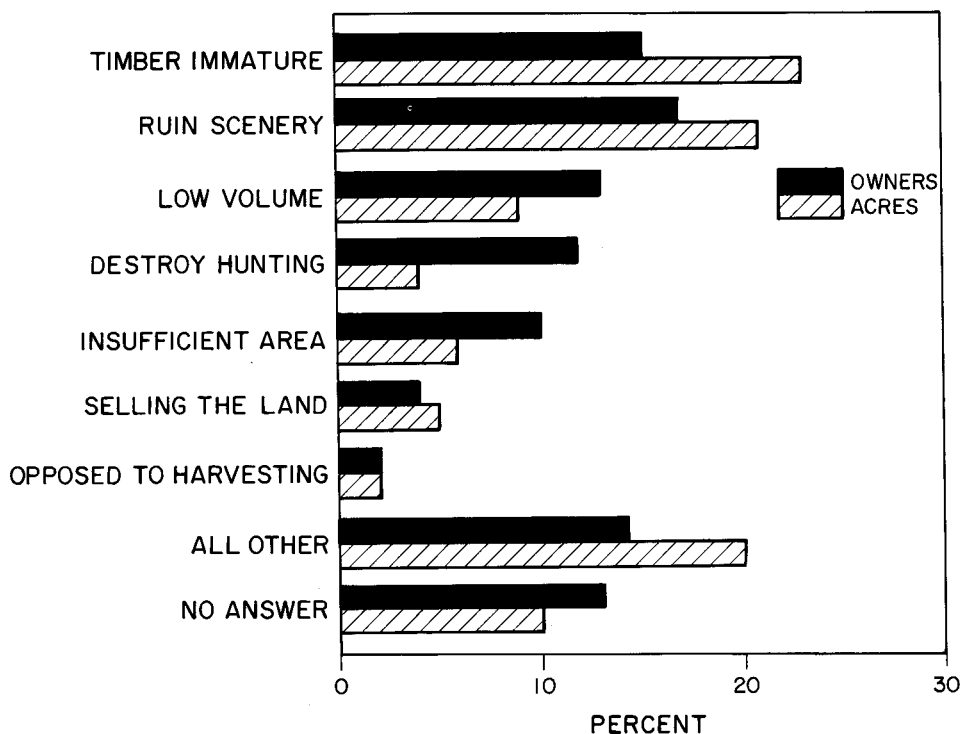
SOME ASPECTS OF LAND MANAGEMENT ON PRIVATE COMMERCIAL FOREST LAND

Selection of harvested timber

Nearly one-third of the owners who have harvested timber in Maryland stated that they, the landowners, were the ones who decided which area would be cut or how trees would be chosen for harvest. These owners control 401,800 acres or 33 percent of the land held by harvesters. An estimated 30 percent of the owners who harvested allowed the buyer to choose the area or trees to be cut. These owners tend to hold somewhat smaller than average tracts as they account for 24 percent of the land held by harvesters.

An estimated 12 percent of the owners who have harvested had a forester choose the

Figure 11.—Reasons for not harvesting timber, by percentage of owners and acreage.



area or trees to be harvested. These owners hold 19 percent of the land held by harvesters. An additional 7 percent of those who harvested said that they, the landowner, and a forester jointly chose the timber.

The diameter-limit method seems the most widely used method of selecting trees to be cut. An estimated 28 percent of the owners who have cut said this was the method used. They account for 28 percent of the land held by harvesters. The second most common method was individual-tree selection, used by 22 percent of the owners who have cut. Individual-tree selection is apparently most popular with owners of slightly smaller than average tracts since those owners who report this method hold 17 percent of the land held by harvesters. Conversely, it seems that owners of large tracts favor clearcutting. While only 7 percent of the owners listed this method, they account for 25 percent of the acreage held by harvesters. Part of the explanation is that large forest industry holdings in Maryland tend to be concentrated in the Lower Eastern Shore unit and consist primarily of loblolly pine stands. Clearcutting is an acceptable, and often a preferred, method of regenerating loblolly pine stands.

Products harvested

Sawlogs are the most common single product harvested from private commercial forest land in Maryland. Forty percent of those who have harvested cut only sawlogs and they hold 31 percent of the land owned by harvesters. Pulpwood was the second most commonly harvested single product. Only 7 percent of the owners, holding 8 percent of the forest land owned by harvesters, listed pulpwood as the only product they harvested.

In recent years, there has been a trend toward multiple-product logging. With this system tree lengths are often skidded to where they are sorted into veneer logs, sawlogs, or pulp bolts. In some systems, once the sawlogs or veneer logs have been removed the remainder of the tree is chipped and shipped to a pulpmill. Maryland is no exception to this trend. Thirty-seven percent of those owners who have harvested cut more than one

product from their lands. These 6,900 owners hold 604,200 acres of Maryland's privately owned commercial forest land.

Those owners who have harvested more than one product are generally owners of large tracts of forest land. Multiproduct harvesters hold an average of 87.6 acres while those who harvested only pulpwood own an average of 66.1 acres and those who harvested only sawlogs own, on an average, only 43.4 acres.

Forestry assistance

When asked what office, agency, or individual they would contact for forestry assistance an estimated 51 percent of the state's forest-land owners said they did not know. These owners hold 32 percent of Maryland's private commercial forest land. It should be noted that this question has a relatively high rate of "no answer", 20 percent. It would seem reasonable to assume that many of those owners who did not answer do not know who to contact.

Of those owners who listed an agency or individual, 17,100 owners or 18 percent of the state's owners listed "county." Another 1,000 owners listed the state forestry agency. In Maryland, forestry assistance to landowners is provided by the Maryland Forest Service through foresters at various locations throughout the state, frequently with offices in the county seat. Presumably, those owners who listed "county" meant the Maryland Forest Service, though owners seldom identified the agency by name.

Another 8,500 owners indicated various public forestry or conservation agencies in the U.S. Department of Agriculture such as the Soil Conservation Service, Forest Service, Agricultural Stabilization and Conservation Service, and the Cooperative Extension Service. While most of these agencies do not provide direct forestry assistance to forest-land owners, they would undoubtedly forward the request to the Maryland Forest Service. An estimated 200 owners indicated that they would contact either an industrial forester or a consulting forester.

An estimated 11,800 Maryland forest-land owners—only 12 percent—have received for-

estry assistance. These owners, however, hold larger than average tracts—68.3 acres—and account for 35 percent of the state's privately owned commercial forest land. In the Lower Eastern Shore unit, 11 percent of the owners have had forestry assistance but, they account for 55 percent of the private commercial forest land in the unit. Only 10 percent of the owners in the Western unit have availed themselves of forestry assistance yet they hold 39 percent of the private commercial forest land in the unit.

Most landowners—an estimated 3,900—who have had forestry assistance received assistance in tree planting. However, 2 percent or 1,700 have had general forest management assistance. These owners account for 272,000 acres of commercial forest land.

Public use

An estimated 62,200 Maryland forest-land owners—65 percent of the total—do not permit the general public to use their forest land for recreational purposes. These owners hold 48 percent of the private commercial forest land in the state. Of those owners who do permit the general public to use their forest land for recreation, most permit hunting—18,100. These owners hold 749,400 acres—about one-third of the private forest land in the state. Few owners permit picnicking or camping, only 6,500. It seems that more owners permit hunting than permit camping or picnicking because the latter activities often result in site degradation and littering. Most hunting, however, is transitory and hunters cause little site degradation or littering.

Although 65 percent of Maryland's forest-land owners do not permit the general public to use their land, only 41 percent actually post. Of these, an estimated 17,000 post their land to control access. These owners account for more commercial forest land than any other group who post their land—427,100 acres. When an owner posts his land to limit access, it does not necessarily mean that the land is unavailable to the recreationist. Rather, the owner wishes to know who is using his land, for what purpose, when, and where. These owners also reserve the right to

exclude users whom they deem undesirable. Conversely, because land is not posted does not necessarily mean that it is available to the recreationist.

An estimated 12,700 owners post their land to control hunting. These owners hold 366,700 acres of Maryland's privately held commercial forest land.

LANDOWNER INTERESTS

To better understand owner interests and motivations we asked them to indicate from separate lists the organizations in which they are active and the publications they receive. The organizations included groups such as farmer and sportsman's associations, and conservation groups. We asked these questions to try to identify a medium of communication to forest-land owners. Often, programs of interest to forest-land owners do not succeed simply because the owners are not aware of the programs.

An estimated 62 percent of the private forest-land owners in Maryland are not active in any conservation, farmer, or sportsman's organization. Of those members who do belong to such organizations, more than half—an estimated 16,500 owners—are members of the National Wildlife Federation. These owners hold 213,500 acres. Second in popularity, 9,400 owners, were sportsman's clubs. Farmers organizations accounted for 4,900 owners.

It is not surprising that the most widely read periodicals are "National Wildlife" and "Ranger Rick", both publications of the National Wildlife Federation. Sportsman's publications such as "Field and Stream" and "Sports Afield" also reach many landowners. The owners who receive these publications tend to own more land than owners who are members of the National Wildlife Federation.

We can draw some general conclusions from this information on organization memberships and subscriptions. The owners who are interested enough to join a conservation organization or subscribe to a conservation periodical are primarily interested in the wildlife resource. Only a very few indicate interest in managing the timber resource of their lands.

CONSERVATION QUIZ

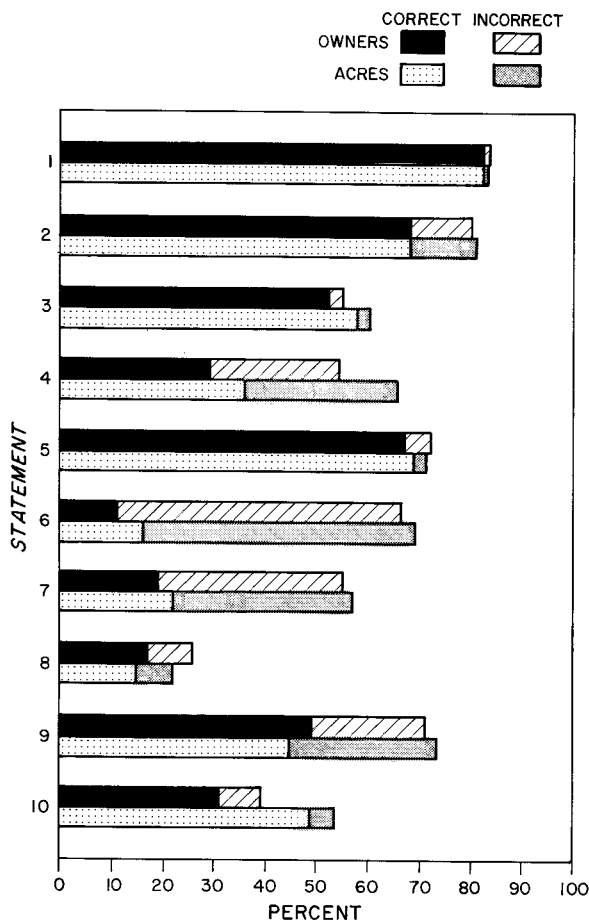
To learn how individual woodland owners define certain conservation and forestry terms, we asked those in our sample of owners to indicate whether each of 10 statements was true or false. The responses were then expanded for all individual woodland owners in the state. Percentages of various responses are shown in Figure 12. With a discussion of each statement, we have provided the answer that professionals in conservation and forestry would give.

Statement 1. Conservation means that natural resources should be used wisely.

Answer: True

This question had the highest correct response of the 10 statements.

Figure 12.—Responses to true-false statements by individuals and acres.



Statement 2. Once a forest is cut it will not grow back unless planted.

Answer: False

Over two-thirds answered this correctly. This indicates that most owners realize that a large percentage of the current stands in Maryland grew back naturally after previous harvests.

Statement 3. Sustained yield is an important forestry objective

Answer: True

Over half the owners would answer this correctly, and only 3 percent would say the statement was false.

Statement 4. Clearcutting is always bad forestry.

Answer: False

Nearly as many owners would answer incorrectly—26 percent—as answer correctly—29 percent. This forestry practice has received much adverse publicity. It is a sound practice in the southern pine types as well as in the oak/hickory type.

Statement 5. All forest land in the United States is managed.

Answer: False

This question has the third highest percentage of correct response. Most owners need look no farther than their own woodland to answer this correctly.

Statement 6. Selective logging is always good forestry.

Answer: False

This question is answered correctly only 11 percent of the time, and 56 percent of the owners would say this statement is true. Many owners apparently thought clearcutting was bad and reasoned that selective logging is, therefore, “good forestry.”

Statement 7. Commercial forest land is forest land that is owned by wood-using industries.

Answer: False.

It is not surprising that so many owners — 36 percent — answered this question incorrectly since the term is used primarily by the Forest Service. See appendix for the definition.

Statement 8. An ecosystem is any complex of living organisms together with their environment that is isolated for study.

Answer: True

A majority of the owners would admit that they do not know the correct answer. This shows that those in our sample of owners made a sincere effort to answer the questions and seldom guessed at the correct response.

Statement 9. A virgin forest is any forest of old or large trees.

Answer: False

Nearly half -- 49 percent -- of the individual owners would answer this correctly. It seems that many owners still do not understand that a virgin forest is a forest that has not been disturbed by man.

Statement 10. Stumpage price is the price paid for standing timber.

Answer: True

Only 31 percent of the individual owners would answer correctly. Considering that only 23 percent of the individual owners have harvested in the past, this is not a bad percentage of correct response. This quiz shows that several forestry terms are unfamiliar to many forest-land owners in Maryland. And it points out that if the forest land in individual ownerships is to be managed for the production of renewable forest resources, much education is needed.

CONCLUSIONS

With 397 people per square mile, Maryland is the fifth most densely populated state in the Nation. Thus, in such an urbanized environment it is not surprising to find that the overwhelming majority of the state's 95,800 forest-land owners take little active or productive interest in their forested land. Seventy-two percent of these owners—holding 62 percent of the privately owned forest land—list such reasons for owning forest land as “land investment,” “esthetic enjoyment,” “part of the farm,” or “part of the residence.” Only 18 percent of the privately held commercial forest land in Maryland is held by

owners who list timber production as the most important or second most important reason for owning forest land.

Perhaps even more telling is the fact that fewer than 12,000 owners have enlisted the assistance of a forester for any reason. These people own larger than average tracts and an aggregate of 805,400 acres. However, this begs the question since this leaves nearly 1.5 million acres held by owners who have never sought assistance. Certainly, many—if not most—of these tracts are of sufficient size and productive potential to be worthy of active management.

Our discussion of the availability of timber in Maryland reveals two significant points. First, while little privately owned commercial forest land in Maryland is actively managed for timber, more than 1.3 million acres are held by owners who express a willingness to harvest timber. This indicates that much of the harvesting that occurs is likely to be haphazard. Second, it would appear that under the present circumstances, Maryland is producing more timber than can be sustained from the available supply. The key to increasing timber output from Maryland's private commercial forest land appears to be encouraging a more active interest on the part of the owners in their land.

It should not be misconstrued that the authors advocate the ownership of forest land solely for the production of timber. What appears most significant to us is the large amount of forest land in Maryland that is held by owners who show only a passive interest in it. The development of a conscious active interest in forest land on the part of more owners will go a long way in enhancing the natural beauty of the state, increasing esthetic values for those who hold land for that reason, and increasing recreational and wildlife values for those who hold it for these reasons. In a highly urbanized state like Maryland, the promotion of forest management on private forest land solely for timber production is too narrow an objective. The objectives of each individual owner must be defined and met. In so doing, more timber will undoubtedly be made available as the nontimber objectives are met.

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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 720 privately owned forested field plots in the state. The field crews obtained usable addresses for more than 90 percent of the field plots. In addition, a list of owners of 500 or more acres of commercial forest land was obtained from the Maryland Forest Service. This list contained an estimate of the forest land they owned in 1975. A total of 813 questionnaires were mailed to owners of commercial forest land in Maryland. A total of 615 were returned with usable information—76 percent.

The questionnaire was developed after investigation of several earlier ownership studies and consultations with other investigators. The mailing consisted of the questionnaire plus a cover letter explaining the purpose of the survey. One week after the first mailing, a post card was sent reminding those that had not responded to do so and thanking those that had returned their questionnaire. After another week, those addressees who had not responded were mailed a second copy of the questionnaire and cover letter plus a second letter urging cooperation with the study. Approximately 1 month later, 404 owners had responded. Then a 100-percent field canvass of nonrespondents was undertaken by personnel of the Maryland Forest Service. This effort resulted in an additional 211 usable questionnaires. The 615 questionnaires represented 567 of the privately owned forested field plots—79 percent—and 179 of the 240 entries on the over 500 acre ownership list—75 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 Maryland had a different rate of sampling. The state forestry organization is organized into four regions. The regional boundaries do not match the

forest survey units. Each region had a different rate of success in persuading non-respondents to reply. Both the survey rate of sampling and the region's success rate affect the probability of an owner being included in the final tabulations. The combinations of units and regions produces seven sampling areas in Maryland.

The total acreage of commercial forest land in private ownerships was obtained from the forest survey. To calculate the area represented by owners of 500 or more acres of commercial forest land, a ratio estimate of the responses and the acreage of forest land held by the large owners in each of the four regions was determined. To calculate the area represented by each of the over 500 acre responses, the estimated area in 500 acre or more ownerships was divided by the actual forest area owned by the large respondents in the region. This factor was then multiplied by the forested acreage owned by each owner with 500 acres or more who responded. For the owners of fewer than 500 acres the acreage of commercial forest land was estimated in a manner similar to that used in the forest survey. The area of privately owned land, other than in the 500 acre and over class, in each sampling area was divided by the number of field plots represented. Thus, if a particular respondent owned land on which one forested plot was located, his response was given a weight of 1. If a respondent represented two forested plots, his response received a weight of 2 or double the acreage, and so on.

Since the sampling scheme for this study is essentially the one used for the forest survey, owners of small parcels of woodland have a low probability of being included in the sample. To estimate the total number of persons who own commercial forest land in Maryland, it was necessary to weight the number of owners obtained in the sample. This procedure can be stated as:

$$N = \frac{CFL_p}{N_r} \sum \frac{1}{A_i}$$

where:

- N = estimated number of private owners in the sampling area
 CFL_p = the acres of privately owned commercial forest land in the sampling area
 N_r = number of respondents in the sampling area
 A_i = acres by individual respondent

The estimated total number of owners in the state equals the sum of the N's. The resulting number of owners is a statistically unbiased estimate of the total number of persons who own commercial forest land in Maryland.

The data were compiled by electronic computer using the FINSYS generalized computer system (Wilson, Robert W. Jr. and Robert C. Peters, 1967. The Northeastern Forest Inventory Data Processing System I: Introduction. USDA For. Serv. Res. Paper NE-61. 20 p.)

It was necessary to determine if those questionnaires obtained through the mail and those obtained by means of field follow-up were both samples of the same population. The hypothesis tested was that there was a significant difference in the mean acreage of the subsamples. Student's t-test showed no significant difference at the 99 percent probability level.

We also tested to determine if there was a significant difference between estimates of the amount of land owned by owners of 500 or more acres of commercial forest land. Four estimates were made. The first was the survey estimate based on the large owners who had forested field plots. The second was a simple expansion of the acreages of the respondents from the large owner list obtained from the state. The third was a regression estimate of their 1975 acreages. And the fourth was a ratio estimate using the acreages of the respondents from the large owner list and all of the 1975 acreage estimates. There were no significant differences in tests of the last three 1977 estimates. The first estimate seemed to underestimate the amount of commercial forest land in the over 500 acre class of owners by 13 percent.

We tested our method of estimating numbers of landowners by comparing our esti-

mates of how many owners own 500 or more acres and the list of owners obtained from the state. There was no significant difference between the estimated number of owners of 500 or more acres and the number of large owners listed by the state.

Because this study encompasses seven sampling areas, data have been aggregated to the forest survey units. The following tabulation shows the pertinent data for each unit:

Unit	Usable questionnaires	Survey plots	Average area per plot
Central	241	204	5,005
Southern	133	131	2,805
Lower Eastern	167	175	2,830
Shore			
Western	83	57	7,067
Total	615	567	4,032

Sampling errors

Sampling errors were calculated for the estimated total number of forest-land owners in each unit and for the combined total. The sampling error for the number of acres of commercial forest land in private ownership was calculated as part of the forest survey. In addition, the estimated error of the land in the 500 acre and over class from the ratio estimate is ± 4 percent. The user of these data is cautioned that, as the size of any estimate decreases in relation to the total estimate, the sampling error, expressed as a percent of the estimate, increases drastically.

The inclusion of small woodland parcels (nine acres and less) in the study population substantially influences the sampling error for the estimated number of owners.

Unit	Sampling error Private commercial forest land	
	Acres	Percent
Central	1,015.5	$\pm 3\%$
Southern	367.5	$\pm 3\%$
Lower Eastern	495.2	$\pm 2\%$
Shore		
Western	401.8	$\pm 2\%$
Total	2,280.0	$\pm 2\%$

Unit	Estimated population		More than 9 acres	
	Owners	Sampling errors	Owners	Sampling errors
Central	64,300	±14.45%	25,100	±11.66%
Southern	8,200	±19.02%	6,000	±10.58%
Lower Eastern	15,700	±26.72%	6,300	±11.12%
Shore				
Western	8,000	±15.06%	8,000	±15.06%
Total	96,200	±10.75%	45,400	± 7.27%

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 and surviving to its end, plus net volume of trees reaching poletimber size during that period, minus the net volume of trees that died during 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 Resources Evaluation 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 and all that is not merchantable is left standing.

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 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.

Sawlog. Any log from which lumber is to be sawed.

Sawtimber trees. Live trees of commercial species: (a) that are of the following minimum diameter at breast height: softwoods, 9.0 inches and hardwoods, 11.0 inches, 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.

Metric equivalents

One inch = 25.4 millimeters (mm) or 2.54 centimeters (cm)

One foot = 30.48 centimeters for 0.3048 meters (m)

One mile = 1.609 kilometers (km)

One square foot (ft²) = 929.03 square centimeters (cm²) or 0.0929 meters (m²)

One acre = 4,046.873 square meters or 0.4046873 hectares (ha)

Million acres = 404,687.3 hectares

One cubic foot (ft³) = 28,317 cubic centimeters (cm³) or 0.028317 cubic meters (m³)

Thousand cubic feet = 28.317 cubic meters

Million cubic feet = 28,317 cubic meters



QUESTIONNAIRE

NE FOREST EXPERIMENT STATION
FOREST SERVICE, U.S. DEPARTMENT OF AGRICULTURE

OMB 40-R-3941

NORTHEASTERN WOODLAND OWNERSHIP STUDY

State _____

County _____

Plot _____

Please complete the following questions 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 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. Which statement most accurately describes your woodland?

Check one

- a. Most of the trees are sugar (hard) maple, beech, and yellow birch. _____
- b. Most of the trees are red (soft) maple, elm, and ash. _____
- c. Most of the trees are oaks, hickories, gums, and yellow-poplar. _____
- d. Most of the trees are pines. _____
- e. Most of the trees are softwoods other than pines. _____
- f. None of the above apply. Please describe your woodland briefly: _____

g. I do not know what kinds of trees are on my land. _____

12. Which statement most accurately describes average size of the trees in your woodland?

Check one

- a. The average tree is 5 inches in diameter or smaller. _____
- b. The average tree is between 5 and 12 inches in diameter. _____
- c. The average tree is 12 inches in diameter or larger. _____
- d. I don't know how big the trees are. _____

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

Yes 1. _____ No. 2. _____

NOTE. IF YOU HAVE NEVER HARVESTED TIMBER OR TREES FROM YOUR WOODLAND SKIP TO QUESTION 23.

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

15. What percent of your woodland was involved in the most recent timber sale? _____

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

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

	<u>Check</u>		<u>Che</u>
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. _____

18. Please indicate amounts of products harvested.

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

19. How were your trees selected for harvesting? (Please check only the method that accounted for the greatest volume, if more than one method was used.)

Check one

Selection (only preselected market trees were removed).	1. _____
Diameter limit (only trees over a minimum diameter were removed). Please indicate minimum diameter _____	2. _____
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. _____
Don't know method used.	6. _____

20. 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 _____ | _____ |

21. If you did not have the assistance of a forester in the harvesting of your timber, do you now wish you had?

Check

- | | |
|-----------------------|-------|
| Yes | _____ |
| If yes, why _____ | _____ |
| No | _____ |
| No feeling either way | _____ |

22. 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
(industry only) | 6. _____ |
| Other (please specify) _____ | 7. _____ |

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

Check one

- | | | |
|--|-----|-------|
| 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. | _____ |

24. Do you plan to harvest timber from your woodlands in:

Check one

- | | | |
|------------------------------|----|-------|
| Next 5 years | 1. | _____ |
| 5 to 10 years | 2. | _____ |
| Possibly at some future date | 3. | _____ |
| Never plan to harvest | 4. | _____ |

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

Yes _____ Please indicate the nature of assistance. _____

No _____

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

27. 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.).	_____
Aesthetic 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) _____	_____

28. 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.	_____
Aesthetics (just enjoy woodland, wildlife, and the general satisfaction of owning "green space").	_____
Farm and domestic use.	_____
Other (please specify) _____	_____

29. 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.)

	<u>Rank</u>
Increase in land value (investment).	_____
Recreation (hunting, camping, etc.).	_____
Income from sale of timber.	_____
Aesthetics (just enjoy woodland, wildlife, and the general satisfaction of owning "green space").	_____
Farm or domestic use.	_____
Other (please specify) _____	_____

30. 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. _____

31. Is your land posted?

No _____, go to next question.

Yes _____, why is it posted? _____

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

Yes _____ No _____

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

	<u>Check</u>
American Forestry Association	1. ☐
Ohio Forestry Association	2. ☐
Pennsylvania Forestry Association	3. ☐
Isaac Walton League	4. ☐
Audubon Society	5. ☐
Natural History Society	6. ☐
National Wildlife Federation	7. ☐
A Sportsman's Club	8. ☐
A Garden Club	9. ☐
National Farmer's Organization	10. ☐
The Grange	11. ☐
The American Tree Farm Program	12. ☐
The Sierra Club	13. ☐
Any other organizations similar to those listed above	14. ☐
(Please specify) _____	
No, I don't hold membership in any of the above.	15. ☐

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

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

35. Please indicate whether each of the following statements is true or false. If you feel you don't know, don't guess, please check "Don't Know" column.

	<u>True</u>	<u>False</u>	<u>Don't Know</u>
a. Conservation means that natural resources should be used wisely.	_____	_____	_____
b. Once a forest is cut it will not grow back unless planted.	_____	_____	_____
c. Sustained yield is an important forestry objective.	_____	_____	_____
d. Clearcutting is always bad forestry.	_____	_____	_____
e. All forest land in the United States is managed.	_____	_____	_____
f. Selective logging is always good forestry.	_____	_____	_____
g. Commercial forest land is forest land that is owned by wood-using industries.	_____	_____	_____
h. An ecosystem is any complex of living organisms together with their environment.	_____	_____	_____
i. A virgin forest is any forest of old or large trees.	_____	_____	_____
j. Stumpage price is the price paid for standing timber.	_____	_____	_____

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.

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.

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

- | | <u>Check one</u> |
|---|------------------|
| 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. _____ |

37. What is the sex of the owner?

Male _____ Female _____

38. What is the age of the owner?

- | | <u>Check one</u> |
|-------------|------------------|
| Under 25 | 1. _____ |
| 25-44 | 2. _____ |
| 45-64 | 3. _____ |
| 65 and over | 4. _____ |

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

Check one

- | | |
|--|----------|
| 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. _____ |

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

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

Check one

- | | |
|----------------------|----------|
| 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. _____ |

42. Comments?

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-

Table 1.—Estimated number of private owners and acres of commercial forest land owned, by size class and geographic unit, Maryland, 1977.

Size class (in acres)	Central		Southern		Lower Eastern Shore		Western		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
OWNERS										
1- 9	41,000	64	2,200	27	9,400	59	a	a	52,600	55
10- 19	10,600	17	2,000	25	2,100	13	2,800	35	17,500	18
20- 49	8,500	13	2,200	27	2,400	15	3,500	44	16,600	17
50- 99	2,500	4	800	10	1,100	7	900	11	5,300	6
100-199	1,000	2	600	7	400	3	400	5	2,400	3
200-499	300	W	300	4	300	2	300	4	1,200	1
500+	W	W	W	W	100	1	100	1	200	W
Total	63,900	100	8,100	100	15,800	100	8,000	100	95,800	100
ACRES OWNED										
1- 9	141,900	14	8,300	2	19,600	4	a	a	169,800	7
10- 19	139,300	14	27,700	8	25,300	5	32,600	8	224,900	10
20- 49	258,000	25	66,600	18	70,200	14	91,400	23	486,200	21
50- 99	176,000	17	52,700	14	70,100	14	58,700	15	357,500	16
100-199	128,400	13	77,700	21	50,500	10	52,200	13	308,800	14
200-499	88,200	9	86,000	24	84,200	17	84,900	21	343,300	15
500+	83,700	8	48,500	13	175,300	36	82,000	20	389,500	17
Total	1,015,500	100	367,500	100	495,200	100	401,800	100	2,280,000	100

^aSampling detected no owners of fewer than 10 acres.

(W)Fewer than 50 owners or less than 0.5 percent.

Table 2.—Estimated number of private owners and acres of commercial forest land owned, by form of ownership, percent of harvesters, percent of acres owned by harvesters, and geographic unit, Maryland, 1977

Form of ownership	All private owners		Acres owned		Harvesters	Acres owned by harvesters
	Number	Percent	Number	Percent	Percent	Percent
CENTRAL						
Individual ^a	54,300	85	736,400	72	16	30
Corporation	5,000	8	161,200	16	W	6
Partnership	3,000	5	58,800	6	1	3
Other ^b	1,600	2	59,100	6	1	4
Total	63,900	100	1,015,500	100	18	43
SOUTHERN						
Individual	7,300	89	269,700	74	26	43
Corporation	400	5	62,900	17	1	12
Partnership	300	5	23,800	6	1	1
Other	100	1	11,100	3	1	2
Total	8,100	100	367,500	100	29	58
LOWER EASTERN SHORE						
Individual	14,300	90	338,300	68	24	45
Corporation	400	3	127,300	26	1	21
Partnership	100	1	18,400	4	W	3
Other	1,000	6	11,200	2	W	1
Total	15,800	100	495,200	100	25	70
WESTERN						
Individual ^a	7,200	88	297,700	74	32	37
Corporation	400	6	66,000	17	4	13
Partnership	200	3	25,100	6	3	5
Other ^b	200	3	13,000	3	—	—
Total	8,000	100	401,800	100	39	55
TOTAL						
Individual	83,100	87	1,642,100	72	20	37
Corporation	6,200	6	417,400	18	W	11
Partnership	3,600	4	126,100	6	1	3
Other	2,900	3	94,400	4	1	2
Total	95,800	100	2,280,000	100	22	53

^aIncludes joint ownerships.

^bIncludes undivided states, clubs, associations, etc.

(W) Fewer than 50 owners or less than 0.5 percent.

Table 3.—Estimated number of corporate owners and acres of commercial forest land owned, by nature of business, Maryland, 1977

Nature of business	Corporate owners		Acres owned	
	<i>Number</i>	<i>Percent</i>	<i>Number</i>	<i>Percent</i>
Forest Industry	W	W	107,600	26
Non-forest industry	200	3	44,500	11
Non-industrial business	3,400	54	35,700	8
Real estate	1,600	25	132,700	32
Corporate farms	800	13	60,700	14
Other corporations	200	5	36,200	9
Total	6,200	100	417,400	100

(W) Fewer than 50 owners or less than 0.5 percent.

Table 4.—Estimated number of individual owners and acres of commercial forest land owned, by occupation and geographic unit, Maryland, 1977

Occupation	Central		Southern		Lower Eastern Shore		Western		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
OWNERS										
Professional	8,500	16	300	4	700	4	100	1	9,600	11
Executive	5,000	9	500	7	200	1	700	10	6,400	8
Retired	6,900	13	800	11	4,300	31	1,100	15	13,100	16
White collar	8,700	16	1,700	23	500	3	500	7	11,400	14
Skilled laborer	12,700	23	1,000	14	1,400	10	1,600	23	16,700	20
Unskilled laborer	100	W	400	5	300	2	1,000	13	1,800	2
Housewife	1,300	2	500	7	2,900	20	400	6	5,100	6
Farmer	5,500	10	1,300	18	2,800	20	1,200	17	10,800	13
Other	—	—	W	W	—	—	—	—	W	W
No answer	5,600	11	800	11	1,200	9	600	8	8,200	10
Total	54,300	100	7,300	100	14,300	100	7,200	100	83,100	100
ACRES OWNED										
Professional	123,300	17	26,200	10	16,900	5	18,200	6	184,600	11
Executive	87,000	12	34,200	13	28,800	9	28,400	9	178,400	11
Retired	83,200	11	47,200	18	82,100	24	61,700	21	274,200	17
White collar	63,800	8	13,900	5	14,000	4	26,100	9	117,800	7
Skilled laborer	58,200	8	36,000	13	16,800	5	33,800	11	144,800	9
Unskilled laborer	4,500	1	11,100	4	8,400	2	19,600	7	43,600	3
Housewife	32,000	4	8,300	3	12,100	4	6,500	2	58,900	3
Farmer	167,700	23	54,800	20	127,100	38	57,100	19	406,700	25
Other	—	—	1,200	W	—	—	—	—	1,200	W
No answer	116,700	16	36,800	14	32,000	9	46,400	16	231,900	14
Total	736,400	100	269,700	100	338,200	100	297,800	100	1,642,100	100

(W) Fewer than 50 owners or less than 0.5 percent.

Table 5.—Number of individual owners and acreage owned, by age class, education level, income category, and life environment, Maryland, 1977.

Owner attributes	Number of owners	Percent of owners	Acres of commercial forest land owned	Percent of acres
AGE CLASS				
Under 25	100	W	2,800	W
25-44	27,900	34	311,600	19
45-64	33,300	40	725,100	44
65 and over	18,300	22	470,600	29
No answer	3,500	4	132,000	8
Total	83,100	100	1,642,100	100
EDUCATION LEVEL				
0-8 years	15,000	18	267,800	16
9-12 years	30,800	37	418,900	26
1-4 years of college	19,900	24	518,900	32
More than 4 years of college	11,200	14	216,300	13
No answer	6,200	7	220,200	13
Total	83,100	100	1,642,100	100
INCOME CATEGORY				
Less than \$10,000	20,000	24	364,400	22
\$10,000 to \$14,999	12,700	15	195,400	12
\$15,000 to \$19,999	15,000	18	120,900	7
\$20,000 to \$24,999	4,800	6	76,100	5
\$25,000 to \$29,999	4,300	5	87,800	5
\$30,000 or more	10,200	12	368,500	23
No answer	16,100	20	429,000	26
Total	83,100	100	1,642,100	100
TYPE OF ENVIRONMENT ^a				
City over 100,000	9,100	11	202,600	12
City 10,000-99,999	11,600	14	115,100	7
Town or city under 10,000	10,600	13	186,300	12
Rural area	18,200	22	281,500	17
On a farm	29,000	35	675,300	41
No answer	4,600	5	181,300	11
Total	83,100	100	1,642,100	100

^aFirst 12 years of life

(W) Less than 0.5 percent or fewer than 50 owners.

Table 6.—Number of individual owners and acreage owned, by age class, education level, income category, and life environment, Central geographic unit, Maryland, 1977

Owner attributes	Number of owners	Percent of owners	Acres of commercial forest land owned	Percent of acres
AGE CLASS				
Under 25	—	—	—	—
25-44	20,800	38	161,300	22
45-64	21,600	40	343,000	47
65 and over	9,600	18	173,300	23
No answer	2,300	4	58,800	8
Total	54,300	100	736,400	100
EDUCATION LEVEL				
0-8 years	6,800	13	90,900	12
9-12 years	20,100	37	150,400	21
1-4 years of college	13,600	25	265,800	36
More than 4 years of college	9,800	18	134,400	18
No answer	4,000	7	94,900	13
Total	54,300	100	736,400	100
INCOME CATEGORY				
Less than \$10,000	9,600	18	114,900	16
\$10,000 to \$14,999	8,900	16	87,500	12
\$15,000 to \$19,999	13,600	25	71,900	10
\$20,000 to \$24,999	3,600	7	36,800	5
\$25,000 to \$29,999	2,400	4	49,300	7
\$30,000 or more	8,200	15	186,800	25
No answer	8,000	15	189,200	25
Total	54,300	100	736,400	100
TYPE OF ENVIRONMENT ^a				
City over 100,000	8,000	15	131,300	18
City 10,000-99,999	9,900	18	62,800	9
Town or city under 10,000	9,000	17	90,900	12
Rural area	10,700	20	116,700	16
On a farm	14,000	25	250,200	34
No answer	2,700	5	84,500	11
Total	54,300	100	736,400	100

^aFirst 12 years of life

Table 7.—Number of individual owners and acreage owned, by age class, education level, income category, and life environment, Southern geographic unit, Maryland, 1977

Owner attributes	Number of owners	Percent of owners	Acres of commercial forest land owned	Percent of acres
AGE CLASS				
Under 25	—	—	—	—
25-44	3,000	41	40,500	15
45-64	2,500	34	119,800	45
65 and over	1,600	22	79,000	29
No answer	200	3	30,400	11
Total	7,300	100	269,700	100
EDUCATION LEVEL				
0-8 years	1,400	19	47,200	18
9-12 years	1,800	25	72,900	27
1-4 years of college	3,100	42	76,300	28
More than 4 years of college	700	10	37,300	14
No answer	300	4	36,000	13
Total	7,300	100	269,700	100
INCOME CATEGORY				
Less than \$10,000	1,300	18	52,700	20
\$10,000 to \$14,999	1,100	15	31,300	12
\$15,000 to \$19,999	600	8	27,700	10
\$20,000 to \$24,999	1,000	14	16,700	6
\$25,000 to \$29,999	1,600	22	11,100	4
\$30,000 or more	900	12	56,900	21
No answer	800	11	73,300	27
Total	7,300	100	269,700	100
TYPE OF ENVIRONMENT ^a				
City over 100,000	400	5	34,500	13
City 10,000-99,999	1,500	21	13,900	5
Town or city under 10,000	300	4	18,800	7
Rural area	800	11	42,900	16
On a farm	4,000	55	140,200	52
No answer	300	4	19,400	7
Total	7,300	100	269,700	100

^aFirst 12 years of life

Table 8.—Number of individual owners and acreage owned, by age class, education level, income category, and life environment, Lower Eastern Shore geographic unit, Maryland, 1977

Owner attributes	Number of owners	Percent of owners	Acres of commercial forest land owned	Percent of acres
AGE CLASS				
Under 25	100	1	2,800	1
25-44	1,400	10	36,500	11
45-64	6,100	43	155,900	46
65 and over	5,800	40	125,600	37
No answer	900	6	17,400	5
Total	14,300	100	338,200	100
EDUCATION LEVEL				
0-8 years	5,300	37	65,900	19
9-12 years	5,200	37	107,400	32
1-4 years of college	2,000	14	110,200	33
More than 4 years of college	200	1	16,800	5
No answer	1,600	11	37,900	11
Total	14,300	100	338,200	100
INCOME CATEGORY				
Less than \$10,000	5,400	38	68,000	20
\$10,000 to 14,999	1,100	8	30,900	9
\$15,000 to \$19,999	800	6	14,800	4
\$20,000 to \$24,999	200	1	16,100	5
\$25,000 to \$29,999	200	1	14,300	4
\$30,000 or more	700	5	94,100	28
No answer	5,900	41	100,000	30
Total	14,300	100	338,200	100
TYPE OF ENVIRONMENT ^a				
City over 100,000	400	3	30,300	9
City 10,000-99,999	W	W	15,300	4
Town or city under 10,000	500	3	29,500	9
Rural area	4,500	32	63,800	19
On a farm	7,700	54	173,400	51
No answer	1,200	8	25,900	8
Total	14,300	100	338,200	100

^aFirst 12 years of life.

(W) Fewer than 50 owners or less than 0.5 percent.

Table 9.—Number of individual owners and acreage owned, by age class, education level, income category, and life environment, Western geographic unit, Maryland, 1977

Owner attributes	Number of owners	Percent of owners	Acres of commercial forest land owned	Percent of acres
AGE CLASS				
Under 25	—	—	—	—
25-44	2,700	38	73,300	25
45-64	3,100	43	106,400	36
65 and over	1,300	18	92,700	31
No answer	100	1	25,400	8
Total	7,200	100	297,800	100
EDUCATION LEVEL				
0-8 years	1,500	21	63,800	22
9-12 years	3,700	51	88,200	30
1-4 years of college	1,200	17	66,600	22
More than 4 years of college	500	7	27,800	9
No answer	300	4	51,400	17
Total	7,200	100	297,800	100
INCOME CATEGORY				
Less than \$10,000	3,700	51	128,800	43
\$10,000 to \$14,999	1,600	22	45,700	16
\$15,000 to \$19,999	W	W	6,500	2
\$20,000 to \$24,999	W	W	6,500	2
\$25,000 to \$29,999	100	1	13,100	5
\$30,000 or more	400	6	30,700	10
No answer	1,400	20	66,500	22
Total	7,200	100	297,800	100
TYPE OF ENVIRONMENT ^a				
City over 100,000	300	4	6,500	2
City 10,000-99,999	200	3	23,100	8
Town or city under 10,000	800	11	47,100	16
Rural area	2,200	30	58,100	20
On a farm	3,300	46	111,500	37
No answer	400	6	51,500	17
Total	7,200	100	297,800	100

^aFirst 12 years of life.

(W) Fewer than 50 owners or less than 0.5 percent.

Table 10.—Estimated number of private owners and acres of commercial forest land owned, by period of ownership and geographic unit, Maryland, 1977

Period of ownership	Central		Southern		Lower Eastern Shore		Western		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
OWNERS										
Fewer than 5 years	25,100	39	2,400	29	1,400	9	3,400	43	32,300	34
5-9 years	7,200	11	1,400	17	1,700	11	700	9	11,000	12
10-24 years	16,600	26	2,200	27	5,500	35	2,500	31	26,800	28
25-49 years	6,900	11	1,300	16	5,400	34	1,100	14	14,700	15
Over 50 years	1,600	3	300	5	300	1	100	1	2,300	2
No answer	6,500	10	500	6	1,500	10	200	2	8,700	9
Total	63,900	100	8,100	100	15,800	100	8,000	100	95,800	100
ACRES OWNED										
Fewer than 5 years	218,800	22	48,300	13	69,100	14	79,700	20	415,900	18
5-9 years	107,500	11	48,100	13	39,300	8	37,700	9	232,600	10
10-24 years	336,500	33	121,300	33	113,300	23	141,100	35	712,200	31
25-49 years	177,200	17	95,500	26	184,600	37	77,900	20	535,200	24
Over 50 years	73,800	7	37,600	10	54,800	11	43,000	11	209,200	9
No answer	101,700	10	16,700	5	34,100	7	22,400	5	174,900	8
Total	1,015,500	100	367,500	100	495,200	100	401,800	100	2,280,000	100

Table 11.—Estimated number of individual owners and acres of commercial forest land owned, by period of ownership and geographic unit, Maryland, 1977

Period of ownership	Central		Southern		Lower Eastern Shore		Western		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
OWNERS										
Fewer than 5 years	21,900	40	2,400	33	1,200	8	3,400	48	28,900	35
5-9 years	6,600	12	1,300	18	1,600	11	700	10	10,200	12
10-24 years	15,200	28	1,900	26	5,400	38	1,900	27	24,400	29
25-49 years	6,800	13	1,200	16	4,500	32	800	11	13,300	16
Over 50 years	1,100	2	300	4	200	1	200	1	1,800	2
No Answer	2,700	5	200	3	1,400	10	200	3	4,500	6
Total	54,300	100	7,300	100	14,300	100	7,200	100	83,100	100
ACRES OWNED										
Fewer than 5 years	167,800	23	33,300	12	46,900	14	72,800	24	320,800	20
5-9 years	69,100	9	27,700	10	33,700	10	26,100	9	156,600	10
10-24 years	272,700	37	101,200	38	105,300	31	103,300	35	582,500	35
25-49 years	144,900	20	76,700	28	111,200	33	56,200	19	389,000	24
Over 50 years	35,400	5	20,200	8	13,000	4	23,500	8	92,100	5
No answer	46,500	6	10,600	4	28,100	8	15,900	5	101,100	6
Total	736,400	100	269,700	100	338,200	100	297,800	100	1,642,100	100

Table 12.—Estimated number of private owners and acres of commercial forest land owned, by distance from tracts and number of tracts owned, Maryland, 1977

Distance (miles)	Distance from nearest tract		Distance from farthest tract				Total	
			1 tract	2 tracts	3 or more tracts			
	<i>Number</i>	<i>Percent</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Percent</i>	
OWNERS								
Residence to 1	57,200	60	48,600	4,600	1,800	55,000	58	
2-5	8,300	9	5,500	2,400	1,100	9,000	9	
6-15	5,000	5	4,000	800	700	5,500	6	
16-25	3,100	3	3,000	600	200	3,800	4	
26-50	4,000	4	3,000	800	300	4,100	4	
Over 50	10,500	11	8,900	700	1,100	10,700	11	
No answer	7,700	8	7,700	W	W	7,700	8	
Total	95,800	100	80,700	9,900	5,200	95,800	100	
ACRES OWNED								
Residence to 1	1,259,100	55	810,800	128,300	105,700	1,044,800	46	
2-5	296,100	13	96,100	71,900	110,400	278,400	12	
6-15	178,500	8	70,400	55,700	83,000	209,100	9	
16-25	89,800	4	60,700	18,000	47,500	126,200	6	
26-50	114,400	5	63,900	21,900	73,100	158,900	7	
Over 50	233,800	10	107,800	39,900	206,800	354,500	15	
No answer	108,300	5	68,600	900	38,600	108,100	5	
Total	2,280,000	100	1,278,300	336,600	665,100	2,280,000	100	

(W) Fewer than 50 owners or less than 0.5 percent.

Table 13.—Estimated number of private owners and acres of commercial forest land owned, by primary reason for owning and harvesters and nonharvesters, Maryland, 1977

Primary reason for owning	Private owners		Acres owned	
	Number	Percent	Number	Percent
HARVESTERS				
Land investment	2,300	2	149,500	7
Recreational use	400	1	54,700	2
Timber production	1,100	1	257,500	11
Farm and domestic use	3,300	4	115,100	5
Esthetic enjoyment	3,000	3	74,900	3
Part of farm	7,100	7	340,800	15
Part of residence	1,900	2	74,700	3
Other	200	W	78,200	4
No answer	1,800	2	65,500	3
Total	21,100	22	1,210,900	53
NONHARVESTERS				
Land investment	12,800	14	218,200	9
Recreational use	8,700	9	70,400	3
Timber production	500	1	10,800	1
Farm and domestic use	3,700	4	112,300	5
Esthetic enjoyment	10,900	11	143,000	7
Part of farm	14,900	16	280,100	12
Part of residence	16,800	17	126,400	6
Other	2,500	2	58,800	2
No answer	3,900	4	49,100	2
Total	74,700	78	1,069,100	47
ALL PRIVATE OWNERS				
Land investment	15,100	16	367,700	16
Recreational use	9,100	10	125,100	5
Timber production	1,600	2	268,300	12
Farm and domestic use	7,000	8	227,400	10
Esthetic enjoyment	13,900	14	217,900	10
Part of farm	22,000	23	620,900	27
Part of residence	18,700	19	201,100	9
Other	2,700	2	137,000	6
No answer	5,700	6	114,600	5
Total	95,800	100	2,280,000	100

(W) Less than 0.5 percent or fewer than 50 owners.

Table 14.—Estimated number of private owners and acres of commercial forest land owned, by primary reason for owning and harvesters and nonharvesters, Central geographic unit, Maryland, 1977

Primary reason for owning	Private owners		Acres owned	
	Number	Percent	Number	Percent
HARVESTERS				
Land investment	1,500	2	30,800	3
Recreational use	100	W	26,200	3
Timber production	600	1	36,900	4
Farm and domestic use	2,200	3	51,100	5
Esthetic enjoyment	1,800	3	38,900	4
Part of farm	3,800	6	164,300	16
Part of residence	1,000	2	33,600	3
Other	200	W	32,800	3
No answer	500	1	16,900	2
Total	11,700	18	431,500	43
NONHARVESTERS				
Land investment	8,900	14	119,300	12
Recreational use	7,500	12	32,800	3
Timber production	400	1	4,500	W
Farm and domestic use	1,700	3	50,000	5
Esthetic enjoyment	8,000	12	82,700	8
Part of farm	11,000	17	173,000	17
Part of residence	10,500	16	76,300	8
Other	600	1	24,600	2
No answer	3,600	6	20,800	2
Total	52,200	82	584,000	57
ALL PRIVATE OWNERS				
Land investment	10,400	16	150,100	15
Recreational use	7,600	12	59,000	6
Timber production	1,000	2	41,400	4
Farm and domestic use	3,900	6	101,100	10
Esthetic enjoyment	9,800	15	121,600	12
Part of farm	14,800	23	337,300	33
Part of residence	11,500	18	109,900	11
Other	800	1	57,400	5
No answer	4,100	7	37,700	4
Total	63,900	100	1,015,500	100

(W) Less than 0.5 percent or fewer than 50 owners.

Table 15.—Estimated number of private owners and acres of commercial forest land owned, by primary reason for owning and harvesters and nonharvesters, Southern geographic unit, Maryland, 1977

Primary reason for owning	Private owners		Acres owned	
	Number	Percent	Number	Percent
HARVESTERS				
Land investment	100	1	26,400	7
Recreational use	W	W	2,800	1
Timber production	W	W	14,000	4
Farm and domestic use	500	6	43,700	12
Esthetic enjoyment	300	4	14,700	4
Part of farm	1,100	14	69,300	19
Part of residence	200	2	16,600	4
Other	W	W	14,300	4
No answer	200	2	9,900	3
Total	2,400	29	211,700	58
NONHARVESTERS				
Land investment	400	5	46,500	13
Recreational use	400	5	13,900	4
Timber production	100	1	2,700	1
Farm and domestic use	900	11	25,000	7
Esthetic enjoyment	900	11	12,200	3
Part of farm	900	11	27,700	7
Part of residence	1,800	23	16,700	5
Other	300	4	8,300	2
No answer	W	W	2,800	W
Total	5,700	71	155,800	42
ALL PRIVATE OWNERS				
Land investment	500	6	72,900	20
Recreational use	400	5	16,700	5
Timber production	100	1	16,700	5
Farm and domestic use	1,400	17	68,700	19
Esthetic enjoyment	1,200	15	26,900	7
Part of farm	2,000	25	97,000	26
Part of residence	2,000	25	33,300	9
Other	300	4	22,600	6
No answer	200	2	12,700	3
Total	8,100	100	367,500	100

(W) Fewer than 50 owners or less than 0.5 percent.

Table 16.—Estimated number of private owners and acres of commercial forest land owned, by primary reason for owning and harvesters and nonharvesters, Lower Eastern Shore geographic unit, Maryland, 1977

Primary reason for owning	Private owners		Acres owned	
	Number	Percent	Number	Percent
HARVESTERS				
Land investment	400	3	62,000	13
Recreational use	W	W	6,400	1
Timber production	300	2	148,000	30
Farm and domestic use	200	1	12,600	3
Esthetic enjoyment	100	1	5,600	1
Part of farm	1,300	8	61,500	12
Part of residence	700	4	24,500	5
Other	W	W	12,700	3
No answer	900	6	12,500	2
Total	3,900	25	345,800	70
NONHARVESTERS				
Land investment	3,100	19	22,500	4
Recreational use	700	4	8,400	2
Timber production	W	W	3,600	1
Farm and domestic use	200	2	11,200	2
Esthetic enjoyment	1,200	7	14,000	3
Part of farm	1,700	11	53,300	11
Part of residence	3,900	25	20,300	4
Other	1,100	7	11,200	2
No answer	W	W	4,900	1
Total	11,900	75	149,400	30
ALL PRIVATE OWNERS				
Land investment	3,500	22	84,500	17
Recreational use	700	4	14,800	3
Timber production	300	2	151,600	31
Farm and domestic use	400	3	23,800	5
Esthetic enjoyment	1,300	8	19,600	4
Part of farm	3,000	19	114,800	23
Part of residence	4,600	29	44,800	9
Other	1,100	7	23,900	5
No answer	900	6	17,400	3
Total	15,800	100	495,200	100

(W) Fewer than 50 owners or less than 0.5 percent.

Table 17.—Estimated number of private owners and acres of commercial forest land owned, by primary reason for owning and harvesters and nonharvesters, Western geographic unit, Maryland, 1977

Primary reason for owning	Private owners		Acres owned	
	Number	Percent	Number	Percent
HARVESTERS				
Land investment	300	4	30,300	8
Recreational use	300	4	19,300	5
Timber production	200	2	58,600	15
Farm and domestic use	400	5	7,700	2
Esthetic enjoyment	800	10	15,700	4
Part of farm	900	11	45,700	11
Part of residence	—	—	—	—
Other	W	W	18,400	4
No answer	200	3	26,200	6
Total	3,100	39	221,900	55
NONHARVESTERS				
Land investment	400	5	29,900	7
Recreational use	100	1	15,300	4
Timber production	—	—	—	—
Farm and domestic use	900	11	26,100	7
Esthetic enjoyment	800	10	34,100	8
Part of farm	1,300	17	26,100	7
Part of residence	600	8	13,100	3
Other	500	6	14,700	4
No answer	300	3	20,600	5
Total	4,900	61	179,900	45
ALL PRIVATE OWNERS				
Land investment	700	9	60,200	15
Recreational use	400	5	34,600	9
Timber production	200	2	58,600	15
Farm and domestic use	1,300	16	33,800	9
Esthetic enjoyment	1,600	20	49,800	12
Part of farm	2,200	28	71,800	18
Part of residence	600	8	13,100	3
Other	500	6	33,100	8
No answer	500	6	46,800	11
Total	8,000	100	401,800	100

(W) Fewer than 50 owners or less than 0.5 percent.

Table 18.—Estimated number of private owners and acres of commercial forest land owned, by primary and secondary reason for owning, Maryland, 1977

Reason for owning	Primary reason		Secondary reason	
	<i>Number</i>	<i>Percent</i>	<i>Number</i>	<i>Percent</i>
OWNERS				
Land investment	15,100	16	2,000	2
Recreational use	9,100	10	9,200	10
Timber production	1,600	2	2,700	3
Farm and domestic use	7,000	8	9,100	9
Esthetic enjoyment	13,900	14	7,100	7
Part of farm	22,000	23	1,500	2
Part of residence	18,700	19	5,000	5
Other	2,700	2	500	1
No secondary reason given	—Not applicable—		53,000	55
No answer	5,700	6	5,700	6
Total	95,800	100	95,800	100
ACRES OWNED				
Land investment	367,700	16	218,300	10
Recreational use	125,100	5	167,100	7
Timber production	268,300	12	157,600	7
Farm and domestic use	227,400	10	172,300	7
Esthetic enjoyment	217,900	10	199,600	9
Part of farm	620,900	27	81,700	4
Part of residence	201,700	9	84,300	4
Other	137,000	6	32,300	1
No secondary reason given	—Not applicable—		1,052,200	46
No answer	114,600	5	114,600	5
Total	2,280,000	100	2,280,000	100

Table 19.—Estimated number of private owners and acres of commercial forest land owned, by primary reason for owning and expected time of future harvest, Maryland, 1977

Primary reason for owning	Expected time of future harvest									
	Next 10 years		Indefinite		Never		No answer		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
OWNERS										
Land investment	1,700	2	5,000	5	8,300	9	100	W	15,100	16
Recreational use	100	W	900	1	8,100	9	W	W	9,100	10
Timber production	700	1	700	1	200	W	W	W	1,600	2
Farm and domestic use	1,800	2	3,800	4	1,000	1	400	1	7,000	8
Esthetic enjoyment	1,000	1	3,900	4	8,700	9	300	W	13,900	14
Part of farm	1,900	2	11,000	12	8,800	9	300	W	22,000	23
Part of residence	600	W	11,300	12	6,100	6	700	1	18,700	19
Other	100	W	500	W	2,100	2	W	W	2,700	2
No answer	W	W	100	W	1,100	1	4,500	5	5,700	6
Total	7,900	8	37,200	39	44,400	46	6,300	7	95,800	100
ACRES OWNED										
Land investment	98,700	4	158,100	7	104,500	5	6,500	W	367,800	16
Recreational use	28,300	1	58,200	2	35,800	2	2,800	W	125,100	5
Timber production	211,800	9	29,100	1	10,100	1	17,400	1	268,400	12
Farm and domestic use	49,900	2	120,900	5	39,800	2	16,800	1	227,400	10
Esthetic enjoyment	20,800	1	92,600	5	90,900	4	13,600	W	217,900	10
Part of farm	144,500	6	318,400	14	140,400	6	17,600	1	620,900	27
Part of residence	20,200	1	119,600	5	45,500	2	15,600	1	200,900	9
Other	35,500	2	52,900	2	47,600	2	1,000	W	137,000	6
No answer	9,400	1	12,200	1	22,500	W	70,500	3	114,600	5
Total	619,100	27	962,000	42	537,100	24	161,800	7	2,280,000	100

(W) Fewer than 50 owners or less than 0.5 percent.

Table 20.—Estimated number of private owners and acres of commercial forest land owned, by primary benefit derived in the last 5 years, primary benefit expected in the next 5 years, and harvesters and nonharvesters, Maryland, 1977

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	600	1	80,500	3	1,300	1	98,900	4
Sale of timber	3,300	3	315,800	14	3,000	3	282,100	12
Land value increase	4,300	5	293,000	13	5,000	5	309,100	14
Esthetic enjoyment	4,100	4	179,600	8	4,200	5	154,000	7
Farm and domestic use	5,700	6	176,400	8	3,500	4	172,600	8
Other	W	W	56,500	2	200	W	51,300	2
No answer	3,100	3	109,100	5	3,900	4	142,900	6
Total	21,100	22	1,210,900	53	21,100	22	1,210,900	53
NONHARVESTERS								
Recreational use	12,100	12	98,400	5	2,800	3	81,100	4
Sale of timber	—	—	—	—	500	W	13,700	1
Land value increase	12,100	12	237,600	10	14,800	15	287,300	12
Esthetic enjoyment	25,300	27	359,500	16	35,000	37	358,500	16
Farm and domestic use	15,400	17	225,200	10	11,700	12	212,700	9
Other	1,200	1	47,100	2	700	1	26,400	1
No answer	8,600	9	101,300	4	9,200	10	89,400	4
Total	74,700	78	1,069,100	47	74,700	78	1,069,100	47
ALL PRIVATE OWNERS								
Recreational use	12,700	13	178,900	8	4,100	4	180,000	8
Sale of timber	3,300	3	315,800	14	3,500	3	295,800	13
Land value increase	16,400	17	530,600	23	19,800	21	596,400	26
Esthetic enjoyment	29,400	31	539,100	24	39,200	41	512,500	23
Farm and domestic use	21,100	23	401,600	18	15,200	16	385,300	17
Other	1,200	1	103,600	4	900	1	77,700	3
No answer	11,700	12	210,400	9	13,100	14	232,300	10
Total	95,800	100	2,280,000	100	95,800	100	2,280,000	100

(W) Less than 0.5 percent or fewer than 50 owners.

Table 21.—Estimated number of private owners and acres of commercial forest land owned, by primary benefit derived in the last 5 years, primary benefit expected in the next 5 years, and harvesters and nonharvesters, Central geographic unit, Maryland, 1977

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	300	1	35,800	4	700	1	40,700	4
Sale of timber	1,900	3	71,800	7	2,500	4	65,200	7
Land value increase	2,900	5	117,600	12	2,600	4	104,700	10
Esthetic enjoyment	2,200	3	96,600	10	2,800	5	92,200	9
Farm and domestic use	3,300	5	59,500	6	1,600	2	56,100	6
Other	W	W	23,900	2	200	W	25,300	2
No answer	1,100	1	26,300	2	1,300	2	47,300	5
Total	11,700	18	431,500	43	11,700	18	431,500	43
NONHARVESTERS								
Recreational use	7,800	12	46,000	4	1,200	2	34,100	3
Sale of timber	—	—	—	—	400	1	4,500	W
Land value increase	7,800	12	112,600	11	7,200	11	146,000	15
Esthetic enjoyment	18,000	28	208,000	20	28,300	44	219,000	22
Farm and domestic use	11,900	19	136,000	13	8,400	13	118,700	11
Other	1,100	2	34,400	4	600	1	18,100	2
No answer	5,600	9	47,000	5	6,100	10	43,600	4
Total	52,200	82	584,000	57	52,200	82	584,000	57
ALL PRIVATE OWNERS								
Recreational use	8,100	13	81,800	8	1,900	3	74,800	7
Sale of timber	1,900	3	71,800	7	2,900	5	69,700	7
Land value increase	10,700	17	230,200	23	9,800	15	250,700	25
Esthetic enjoyment	20,200	31	304,600	30	31,100	49	311,200	31
Farm and domestic use	15,200	24	195,500	19	10,000	15	174,800	17
Other	1,100	2	58,300	6	800	1	43,400	4
No answer	6,700	10	73,300	7	7,400	12	90,900	9
Total	63,900	100	1,015,500	100	63,900	100	1,015,500	100

(W) Less than 0.5 percent or fewer than 50 owners.

Table 22—Estimated number of private owners and acres of commercial forest land owned, by primary benefit derived in the last 5 years, primary benefit expected in the next 5 years, and by harvesters and nonharvesters, Southern geographic unit, Maryland, 1977

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	100	1	16,600	4	100	1	18,000	5
Sale of timber	200	2	36,800	10	100	1	23,800	7
Land value increase	300	4	41,800	11	400	5	47,800	13
Esthetic enjoyment	400	5	31,200	9	400	5	26,800	7
Farm and domestic use	1,100	13	55,500	15	700	8	55,500	15
Other	W	W	6,000	2	W	W	3,200	1
No answer	300	4	23,800	7	700	9	36,600	10
Total	2,400	29	211,700	58	2,400	29	211,700	58
NONHARVESTERS								
Recreational use	400	5	17,400	5	400	5	11,100	3
Sale of timber	—	—	—	—	—	—	—	—
Land value increase	500	6	42,900	12	600	7	50,800	14
Esthetic enjoyment	3,300	41	53,900	14	3,000	37	45,600	12
Farm and domestic use	900	11	25,000	7	800	11	22,200	6
Other	W	W	5,500	1	100	1	6,700	2
No answer	600	8	11,100	3	800	10	19,400	5
Total	5,700	71	155,800	42	5,700	71	155,800	42
ALL PRIVATE OWNERS								
Recreational use	500	6	34,000	9	500	6	29,100	8
Sale of timber	200	2	36,800	10	100	1	23,800	7
Land value increase	800	10	84,700	23	1,000	12	98,600	27
Esthetic enjoyment	3,700	46	85,100	23	3,400	42	72,400	19
Farm and domestic use	2,000	24	80,500	22	1,500	19	77,700	21
Other	W	W	11,500	3	100	1	9,900	3
No answer	900	12	34,900	10	1,500	19	56,000	15
Total	8,100	100	367,500	100	8,100	100	367,500	100

(W) Less than 0.5 percent or fewer than 50 owners.

Table 23.—Estimated number of private owners and acres of commercial forest land owned, by primary benefit derived in the last 5 years, primary benefit expected in the next 5 years, and harvesters and nonharvesters, Lower Eastern Shore geographic unit, Maryland, 1977

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	100	1	10,300	2	100	1	10,200	2
Sale of timber	700	4	164,500	33	200	1	150,500	30
Land value increase	400	2	83,000	17	1,300	8	101,300	21
Esthetic enjoyment	100	1	17,600	4	100	1	20,400	4
Farm and domestic use	1,100	7	40,700	8	900	6	33,700	7
Other	W	W	4,500	1	W	W	4,500	1
No answer	1,500	10	25,200	5	1,300	8	25,200	5
Total	3,900	25	345,800	70	3,900	25	345,800	70
NONHARVESTERS								
Recreational use	3,800	24	19,600	4	900	5	14,000	3
Sale of timber	—	—	—	—	100	1	9,200	2
Land value increase	3,600	23	65,200	13	6,300	40	54,000	10
Esthetic enjoyment	2,100	13	30,900	6	2,100	13	33,700	7
Farm and domestic use	200	1	12,000	3	300	2	19,600	4
Other	100	1	5,600	1	—	—	—	—
No answer	2,100	13	16,100	3	2,200	14	18,900	4
Total	11,900	75	149,400	30	11,900	75	149,400	30
ALL PRIVATE OWNERS								
Recreational use	3,900	25	29,900	6	1,000	6	24,200	5
Sale of timber	700	4	164,500	33	300	2	159,700	32
Land value increase	4,000	25	148,200	30	7,600	48	155,300	31
Esthetic enjoyment	2,200	14	48,500	10	2,200	14	54,100	11
Farm and domestic use	1,300	8	52,700	11	1,200	8	53,300	11
Other	100	1	10,100	2	W	W	4,500	1
No answer	3,600	23	41,300	8	3,500	22	44,100	9
Total	15,800	100	495,200	100	15,800	100	495,200	100

(W) Less than 0.5 percent or fewer than 50 owners.

Table 24.—Estimated number of private owners and acres of commercial forest land owned, by primary benefit derived in the last 5 years, primary benefit expected in the next 5 years, and harvesters and nonharvesters, Western geographic unit, Maryland, 1977

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	100	1	17,800	4	400	5	30,000	7
Sale of timber	500	6	42,700	11	200	2	42,600	11
Land value increase	700	9	50,600	13	700	9	55,300	13
Esthetic enjoyment	1,400	18	34,200	8	900	11	14,600	4
Farm and domestic use	200	3	20,700	5	300	4	27,300	7
Other	W	W	22,100	6	W	W	18,300	5
No answer	200	2	33,800	8	600	8	33,800	8
Total	3,100	39	221,900	55	3,100	39	221,900	55
NONHARVESTERS								
Recreational use	100	1	15,400	4	300	4	21,900	6
Sale of timber	—	—	—	—	—	—	—	—
Land value increase	200	2	16,900	4	700	9	36,500	9
Esthetic enjoyment	1,900	24	66,700	17	1,600	20	60,200	15
Farm and domestic use	2,400	30	52,200	13	2,200	27	52,200	13
Other	W	W	1,600	W	W	W	1,600	W
No answer	300	4	27,100	7	100	1	7,500	2
Total	4,900	61	179,900	45	4,900	61	179,900	45
ALL PRIVATE OWNERS								
Recreational use	200	2	33,200	8	700	9	51,900	13
Sale of timber	500	6	42,700	11	200	2	42,600	11
Land value increase	900	11	67,500	17	1,400	18	91,800	22
Esthetic enjoyment	3,300	42	100,900	25	2,500	31	74,800	19
Farm and domestic use	2,600	33	72,900	18	2,500	31	79,500	20
Other	W	W	23,700	6	W	W	19,900	5
No answer	500	6	60,900	15	700	9	41,300	10
Total	8,000	100	401,800	100	8,000	100	401,800	100

(W) Less than 0.5 percent or fewer than 50 owners.

Table 25.—Estimated number of private owners and acres of commercial forest land owned, by primary benefit expected in the next 5 years and expected time of future harvest, Maryland, 1977

Primary benefit	Expected time of future harvest									
	Next 10 years		Indefinite		Never		No answer		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
OWNERS										
Recreational use	800	1	1,600	1	1,700	2	—	—	4,100	4
Sale of timber	3,100	3	300	W	—	—	100	W	3,500	3
Land value increase	1,000	1	5,700	7	13,000	13	100	W	19,800	21
Esthetic enjoyment	1,100	1	17,100	18	20,500	21	500	1	39,200	41
Farm and domestic use	1,800	2	9,800	10	3,000	3	600	1	15,200	16
Other	W	W	200	W	700	1	—	—	900	1
No answer	100	W	2,500	3	5,500	6	5,000	5	13,100	14
Total	7,900	8	37,200	39	44,400	46	6,300	7	95,800	100
ACRES OWNED										
Recreational use	59,900	2	85,000	4	35,100	2	—	—	180,000	8
Sale of timber	253,700	12	27,500	1	—	—	14,100	W	295,300	13
Land value increase	151,900	6	275,500	12	148,600	7	20,900	1	596,900	26
Esthetic enjoyment	40,600	2	265,100	12	187,600	8	19,200	1	512,500	23
Farm and domestic use	66,800	3	222,900	10	75,900	3	19,600	1	385,200	17
Other	28,800	1	23,700	1	25,300	1	—	—	77,800	3
No answer	17,400	1	62,300	2	64,600	3	88,000	4	232,300	10
Total	619,100	27	962,000	42	537,100	24	161,800	7	2,280,000	100

(W) Less than 0.5 percent or fewer than 50 owners.

Table 26.—Estimated number of private owners who have harvested timber and acres of commercial forest land owned, by reason for harvesting and form of ownership, Maryland, 1977

Reason for harvesting	Individual ^a		Corporation		Other ^b		All forms of ownership	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
HARVESTERS								
Timber mature	4,500	24	100	20	100	6	4,700	22
Good price	1,200	6	100	20	100	6	1,400	7
Land clearing	1,500	8	W	W	500	28	2,000	10
Needed money	5,000	26	W	W	700	39	5,700	27
Own/company use	3,300	18	W	W	100	5	3,400	16
Timber salvage	400	2	W	W	100	5	500	2
Cultural treatment	100	1	W	W	—	—	100	W
Other	600	3	200	40	W	W	800	4
No answer	2,100	12	100	20	300	11	2,500	12
Total	18,700	100	500	100	1,900	100	21,100	100
ACRES OWNED								
Timber mature	317,200	38	95,800	37	36,500	31	449,500	37
Good price	65,100	8	16,400	6	9,600	8	91,100	8
Land clearing	58,800	7	11,600	4	15,400	13	85,800	7
Needed money	182,000	22	14,700	6	23,300	20	220,000	18
Own/company use	82,800	10	89,100	34	11,200	10	183,100	15
Timber salvage	32,300	4	5,700	2	6,700	6	44,700	4
Cultural treatment	13,100	2	3,100	1	—	—	16,200	1
Other	11,800	1	7,700	3	4,400	4	23,900	2
No answer	70,100	8	17,400	7	9,100	8	96,600	8
Total	833,200	100	261,500	100	116,200	100	1,210,900	100

^aIncludes joint ownership.

^bIncludes partnerships, undivided estates, clubs, associations, etc.

(W) Less than 0.5 percent or fewer than 50 owners.

Table 27.—Estimated number of private owners who have harvested timber and acres of commercial forest land owned, by reason for harvesting and geographic unit, Maryland, 1977

Reason for harvesting	Central		Southern		Lower Eastern Shore		Western		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
HARVESTERS										
Timber mature	2,900	25	600	25	700	18	500	16	4,700	22
Good price	200	2	300	13	500	13	400	13	1,400	7
Land clearing	1,300	11	100	4	400	11	200	7	2,000	10
Needed money	2,900	25	900	37	1,300	34	600	19	5,700	27
Own/company use	2,200	19	400	17	200	5	600	19	3,400	16
Timber salvage	W	W	100	4	400	8	—	—	500	2
Cultural treatment	W	W	—	—	—	—	100	3	100	W
Other	600	5	W	W	—	—	200	7	800	4
No answer	1,600	13	W	W	400	11	500	16	2,500	12
Total	11,700	100	2,400	100	3,900	100	3,100	100	21,100	100
ACRES OWNED										
Timber mature	193,800	45	63,000	30	127,500	37	65,200	30	449,500	37
Good price	32,600	8	13,900	7	25,700	7	18,900	8	91,100	8
Land clearing	17,100	4	16,000	8	23,900	7	28,800	13	85,800	7
Needed money	78,200	18	67,700	32	44,800	13	29,300	13	220,000	18
Own/company use	51,200	12	36,100	17	76,500	22	19,300	9	183,100	15
Timber salvage	1,100	W	6,700	3	36,900	11	—	—	44,700	4
Cultural treatment	3,100	1	—	—	—	—	13,100	6	16,200	1
Other	10,200	2	2,800	1	—	—	10,900	5	23,900	2
No answer	44,200	10	5,500	2	10,500	3	36,400	16	96,600	8
Total	431,500	100	211,700	100	345,800	100	221,900	100	1,210,900	100

(W) Less than 0.5 percent or fewer than 50 owners.

Table 28.—Estimated number of private owners who have not harvested timber and acres of commercial forest land owned, by reason for not harvesting and form of ownership, Maryland, 1977

Reason for not harvesting	Individual ^a		Corporation		Other ^b		All forms of ownership	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
NONHARVESTERS								
Timber immature	10,400	16	400	7	400	9	11,200	15
Destroy hunting	9,100	14	W	W	—	—	9,100	12
Selling the land	2,400	4	300	5	100	2	2,800	4
Ruin scenery	11,000	17	700	12	500	11	12,200	17
Land in estate	100	W	—	—	900	20	1,000	1
Opposed to harvesting	1,800	3	—	—	—	—	1,800	2
Poor quality	300	W	—	—	1,900	41	2,200	3
Low volume	9,800	15	100	2	W	W	9,900	13
Insufficient area	7,200	11	500	9	100	2	7,800	10
Other	6,200	10	500	9	400	9	7,100	10
No answer	6,100	10	3,200	56	300	6	9,600	13
Total	64,400	100	5,700	100	4,600	100	74,700	100
ACRES OWNED								
Timber immature	183,400	23	31,500	20	30,900	30	245,800	23
Destroy hunting	42,400	5	2,200	1	—	—	44,600	4
Selling the land	34,700	4	12,500	8	6,300	6	53,500	5
Ruin scenery	154,600	19	50,400	32	13,800	13	218,800	21
Land in estate	4,500	1	—	—	5,600	5	10,100	1
Opposed to harvesting	20,900	3	—	—	—	—	20,900	2
Poor quality	12,100	1	—	—	3,700	4	15,800	1
Low volume	74,600	9	15,000	10	2,800	3	92,400	9
Insufficient area	54,000	7	4,600	3	4,400	4	63,000	6
Other	149,400	18	29,600	19	17,400	17	196,400	18
No answer	78,300	10	10,100	7	19,400	18	107,800	10
Total	808,900	100	155,900	100	104,300	100	1,069,100	100

^aIncludes joint ownerships.

^bIncludes partnerships, undivided estates, clubs, associations, etc.

(W) Less than 0.5 percent or fewer than 50 owners.

Table 29.—Estimated number of private owners who have not harvested timber and acres of commercial forest land owned, by reason for not harvesting and geographic unit, Maryland, 1977

Reason for not harvesting	Central		Southern		Lower Eastern Shore		Western		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
NONHARVESTERS										
Timber immature	7,100	14	1,300	23	1,400	12	1,400	29	11,200	15
Destroy hunting	8,400	16	300	5	300	2	100	2	9,100	12
Selling the land	2,500	5	100	2	100	1	100	2	2,800	4
Ruin scenery	9,400	18	300	5	1,100	9	1,400	29	12,200	17
Land in estate	100	W	W	W	900	8	—	—	1,000	1
Opposed to harvesting	1,700	3	W	W	100	1	—	—	1,800	2
Poor quality	1,900	4	200	4	100	1	—	—	2,200	3
Low volume	4,500	8	1,400	24	3,300	28	700	14	9,900	13
Insufficient area	5,900	11	—	—	1,600	13	300	6	7,800	10
Other	4,500	9	1,700	30	100	1	800	16	7,100	10
No answer	6,200	12	400	7	2,900	24	100	2	9,600	13
Total	52,200	100	5,700	100	11,900	100	4,900	100	74,700	100
ACRES OWNED										
Timber immature	107,900	18	42,400	27	44,900	30	50,600	28	245,800	23
Destroy hunting	13,600	2	11,100	7	5,600	4	14,300	8	44,600	4
Selling the land	33,100	6	8,300	5	5,600	4	6,500	4	53,500	5
Ruin scenery	149,100	26	10,300	7	25,300	17	34,100	19	218,800	21
Land in estate	4,500	1	2,800	2	2,800	2	—	—	10,100	1
Opposed to harvesting	15,300	3	2,800	2	2,800	2	—	—	20,900	2
Poor quality	7,400	1	2,800	2	5,600	4	—	—	15,800	1
Low volume	47,000	8	5,500	3	20,300	13	19,600	11	92,400	9
Insufficient area	48,100	8	—	—	8,400	5	6,500	4	63,000	6
Other	98,000	17	55,900	36	14,800	10	27,700	15	196,400	18
No answer	60,000	10	13,900	9	13,300	9	20,600	11	107,800	10
Total	584,000	100	155,800	100	149,400	100	179,900	100	1,069,100	100

(W) Less than 0.5 percent or fewer than 50 owners.

Table 30.—Expected number of private owners and acres of commercial forest land owned, by expected time of future harvest and harvesters and nonharvesters, Maryland, 1977

Expected time of future harvest	Private owners		Acres owned	
	<i>Number</i>	<i>Percent</i>	<i>Number</i>	<i>Percent</i>
HARVESTERS				
Next 5 years	4,000	4	411,700	18
5-10 years	600	1	67,700	3
Indefinite	10,500	11	505,400	22
Never	4,300	4	117,000	5
No answer	1,700	2	109,100	5
Total	21,100	22	1,210,900	53
NONHARVESTERS				
Next 5 years	1,700	2	98,700	4
5-10 years	1,400	1	41,100	2
Indefinite	26,700	28	456,600	20
Never	40,100	42	420,100	19
No answer	4,800	5	52,600	2
Total	74,700	78	1,069,100	47
ALL PRIVATE OWNERS				
Next 5 years	5,700	6	510,400	22
5-10 years	2,000	2	108,800	5
Indefinite	37,200	39	962,000	42
Never	44,400	46	537,100	24
No answer	6,500	7	161,700	7
Total	95,800	100	2,280,000	100

Table 31.—Expected number of private owners and acres of commercial forest land owned, by expected time of future harvest and harvesters and nonharvesters, Central geographic unit, Maryland, 1977

Expected time of future harvest	Private owners		Acres owned	
	<i>Number</i>	<i>Percent</i>	<i>Number</i>	<i>Percent</i>
HARVESTERS				
Next 5 years	3,600	6	139,100	14
5-10 years	100	W	9,600	1
Indefinite	5,600	9	190,300	19
Never	1,500	2	48,300	5
No answer	900	1	44,200	4
Total	11,700	18	431,500	43
NONHARVESTERS				
Next 5 years	1,400	2	48,300	4
5-10 years	1,100	2	30,000	3
Indefinite	20,000	31	240,300	24
Never	25,500	40	236,300	23
No answer	4,200	7	29,100	3
Total	52,200	82	584,000	57
ALL PRIVATE OWNERS				
Next 5 years	5,000	8	187,400	18
5-10 years	1,200	2	39,600	4
Indefinite	25,600	40	430,600	43
Never	27,000	42	284,600	28
No answer	5,100	8	73,300	7
Total	63,900	100	1,015,500	100

(W) Less than 0.5 percent.

Table 32.—Expected number of private owners and acres of commercial forest land owned, by expected time of future harvest and harvesters and nonharvesters, Southern geographic unit, Maryland, 1977

Expected time of future harvest	Private owners		Acres owned	
	<i>Number</i>	<i>Percent</i>	<i>Number</i>	<i>Percent</i>
HARVESTERS				
Next 5 years	200	2	34,800	9
5-10 years	200	2	23,700	7
Indefinite	1,400	17	99,800	27
Never	300	4	36,000	10
No answer	300	4	17,400	5
Total	2,400	29	211,700	58
NONHARVESTERS				
Next 5 years	W	W	2,800	1
5-10 years	200	3	5,500	1
Indefinite	2,900	36	85,600	23
Never	2,200	27	50,800	14
No answer	400	5	11,100	3
Total	5,700	71	155,800	42
ALL PRIVATE OWNERS				
Next 5 years	200	2	37,600	10
5-10 years	400	5	29,200	8
Indefinite	4,300	53	185,400	50
Never	2,500	31	86,800	24
No answer	700	9	28,500	8
Total	8,100	100	367,500	100

(W) Less than 0.5 percent or fewer than 50 owners.

Table 33.—Expected number of private owners and acres of commercial forest land owned, by expected time of future harvest and harvesters and nonharvesters, Lower Eastern Shore geographic unit, Maryland, 1977

Expected time of future harvest	Private owners		Acres owned	
	<i>Number</i>	<i>Percent</i>	<i>Number</i>	<i>Percent</i>
HARVESTERS				
Next 5 years	100	1	181,400	36
5-10 years	300	2	28,000	6
Indefinite	1,800	11	103,200	21
Never	1,400	9	19,700	4
No answer	300	2	13,500	3
Total	3,900	25	345,800	70
NONHARVESTERS				
Next 5 years	200	1	17,600	4
5-10 years	100	1	5,600	1
Indefinite	1,500	9	61,700	12
Never	10,000	63	59,600	12
No answer	100	1	4,900	1
Total	11,900	75	149,400	30
ALL PRIVATE OWNERS				
Next 5 years	300	2	199,000	40
5-10 years	400	3	33,600	7
Indefinite	3,300	20	164,900	33
Never	11,400	72	79,300	16
No answer	400	3	18,400	4
Total	15,800	100	495,200	100

Table 34.—Expected number of private owners and acres of commercial forest land owned, by expected time of future harvest and harvesters and nonharvesters, Western geographic unit, Maryland, 1977

Expected time of future harvest	Private owners		Acres owned	
	<i>Number</i>	<i>Percent</i>	<i>Number</i>	<i>Percent</i>
HARVESTERS				
Next 5 years	100	2	56,400	14
5-10 years	W	W	6,400	2
Indefinite	1,700	21	112,100	28
Never	1,100	13	13,000	3
No answer	200	3	34,000	8
Total	3,100	39	221,900	55
NONHARVESTERS				
Next 5 years	100	1	30,000	8
5-10 years	—	—	—	—
Indefinite	2,300	29	69,000	17
Never	2,400	30	73,400	18
No answer	100	1	7,500	2
Total	4,900	61	179,900	45
ALL PRIVATE OWNERS				
Next 5 years	200	3	86,400	22
5-10 years	W	W	6,400	2
Indefinite	4,000	50	181,100	45
Never	3,500	43	86,400	21
No answer	300	4	41,500	10
Total	8,000	100	401,800	100

(W) Less than 0.5 percent or fewer than 50 owners.

Table 35.—Estimated number of private owners and acres of commercial forest land owned, by size class and expected time of future harvest, Maryland, 1977

Size class (in acres)	Expected time of future harvest									
	Next 10 years		Indefinite		Never		No answer		Total	
	<i>Number</i>	<i>Percent</i>	<i>Number</i>	<i>Percent</i>	<i>Number</i>	<i>Percent</i>	<i>Number</i>	<i>Percent</i>	<i>Number</i>	<i>Percent</i>
OWNERS										
1-9	2,000	2	18,000	19	28,900	30	3,700	4	52,600	55
10-19	2,200	2	5,800	6	8,400	9	1,100	1	17,500	18
20-49	1,500	2	9,300	10	5,200	4	600	1	16,600	17
50-99	1,100	1	2,200	2	1,400	2	600	1	5,300	6
100-199	600	1	1,200	1	400	1	200	W	2,400	3
200-499	400	W	600	1	100	W	100	W	1,200	1
500+	100	W	100	W	W	W	W	W	200	W
Total	7,900	8	37,200	39	44,400	46	6,300	7	95,800	100
ACRES OWNED										
1-9	7,400	W	65,400	3	86,200	4	10,800	W	169,800	7
10-19	25,400	1	77,400	3	104,600	5	17,500	1	224,900	10
20-49	48,600	2	262,800	11	154,500	7	20,300	1	486,200	21
50-99	72,900	3	153,800	7	92,200	4	38,600	2	357,500	16
100-199	73,000	4	155,700	7	55,300	2	24,800	1	308,800	14
200-499	110,200	5	172,100	8	31,300	1	29,700	1	343,300	15
500+	281,700	12	74,800	3	13,000	1	20,000	1	389,500	17
Total	619,200	27	962,000	42	537,100	24	161,700	7	2,280,000	100

(W) Less than 0.5 percent or fewer than 50 owners.

Table 36.—Estimated number of private owners who have harvested timber and acres of commercial forest land owned, by individual selecting timber and method of selecting timber, Maryland, 1977

Individual or method of selecting timber	Harvesters		Acres owned	
	<i>Number</i>	<i>Percent</i>	<i>Number</i>	<i>Percent</i>
Individual				
Landowner	6,700	32	401,800	33
Forester	2,600	12	226,600	19
Friend	200	1	14,200	1
Buyer	6,400	30	293,100	24
Landowner and forester	1,400	7	103,100	9
Landowner and buyer	1,500	7	70,300	6
Other	200	1	23,700	2
No answer	2,100	10	78,100	6
Total	21,100	100	1,210,900	100
Method				
Selection	4,600	22	204,300	17
Diameter limit	5,900	28	336,500	28
Clearcutting	1,500	7	306,700	25
Land clearing	1,500	7	54,500	5
Combination of Methods	1,800	9	76,100	6
Other	1,100	5	55,600	5
Don't know	2,300	11	87,100	7
No answer	2,400	11	90,100	7
Total	21,100	100	1,210,900	100

Table 37.—Estimated number of private owners who have harvested timber and acres of commercial forest land owned, by timber product harvested, Maryland, 1977

Timber product	Harvesters		Acres owned	
	<i>Number</i>	<i>Percent</i>	<i>Number</i>	<i>Percent</i>
Sawlog	8,500	40	369,000	31
Veneer	1,000	5	10,700	1
Pulpwood	1,400	7	92,600	8
Pole, post, piling	900	4	24,600	2
1 other product	1,400	7	39,300	3
Sawlog and veneer	800	4	72,800	6
Sawlog and pulpwood	1,300	6	89,900	8
Sawlog and pole, post, piling	800	4	75,000	6
Another 2-product combination	800	4	42,000	3
3 products	1,200	5	136,400	11
4 or more products	600	3	148,800	12
Don't know	900	4	44,700	4
No answer	1,500	7	65,100	5
Total	21,100	100	1,210,900	100

Table 38.—Estimated number of private owners and acres of commercial forest land owned, by agency that owners would contact for forestry assistance, Maryland, 1977

Agency	Private owners		Acres owned	
	<i>Number</i>	<i>Percent</i>	<i>Number</i>	<i>Percent</i>
County/state	18,100	19	806,700	35
Soil Conservation Service	1,600	2	38,500	2
Forest Service	400	W	21,400	1
Agricultural Stabilization and Conservation Service	500	W	37,700	2
Consulting or industrial forester	200	W	128,300	6
Cooperative Extension Service	6,000	6	88,300	4
Other	1,500	2	5,900	W
Don't know	48,800	51	736,300	32
No answer	18,700	20	416,900	18
Total	95,800	100	2,280,000	100

(W) Less than 0.5 percent or fewer than 50 owners.

Table 39.—Estimated number of private owners who have received forestry assistance and acres of commercial forest land owned, by type of assistance, Maryland, 1977

Type of assistance	Assisted owners		Acres owned	
	<i>Number</i>	<i>Percent</i>	<i>Number</i>	<i>Percent</i>
Timber marking	800	1	79,800	4
Timber stand improvement	900	1	70,600	3
Tree planting	3,900	4	194,100	8
Timber sales administration	1,300	1	62,600	3
Insect and disease control	400	W	10,400	W
Timber evaluation	500	1	28,600	1
Surveying	400	W	76,200	3
General forest management	1,700	2	272,000	12
Other	1,100	1	49,700	2
Service not specified	2,300	2	106,400	5
Total receiving assistance ^a	11,800	12	805,400	35

^aColumns do not add to totals because some owners received more than one service.

(W) Less than 0.5 percent or fewer than 50 owners.

Table 40.—Estimated number of private owners and acres of commercial forest land owned, by type of public use permitted, Maryland, 1977

Type of public use	Private owners		Acres owned	
	<i>Number</i>	<i>Percent</i>	<i>Number</i>	<i>Percent</i>
Hiking	8,600	9	503,300	22
Picnicking	4,600	5	319,700	14
Camping	1,900	2	266,000	12
Fishing	5,900	6	294,900	13
Hunting	18,100	19	749,400	33
Other	2,300	2	155,800	7
All types ^a	24,600	26	973,700	43
Public use not permitted	62,200	65	1,104,400	48
No answer	9,000	9	202,900	9
Total	95,800	100	2,280,000	100

^a Columns do not add to totals because some owners permit more than one type of public use.

Table 41.—Estimated number of private owners who have posted their land and acres of commercial forest land owned, by reason for posting, Maryland, 1977

Reason for posting	Private owners		Acres owned	
	<i>Number</i>	<i>Percent</i>	<i>Number</i>	<i>Percent</i>
Abuse of property	2,400	3	143,700	6
Safety	2,500	3	72,800	3
Liability	300	W	18,400	1
Control access	17,000	18	427,100	19
Control hunting	12,700	13	366,700	16
Reason not specified	4,100	4	166,500	7
All reasons	39,000	41	1,195,200	52
Land not posted	49,500	52	928,500	41
No answer	7,300	7	156,300	7
Total	95,800	100	2,280,000	100

(W) Less than 0.5 percent or fewer than 50 owners.

Table 42.—Estimated number of individual owners and acres of commercial forest land owned, by membership in conservation-related organizations, Maryland, 1977

Organization membership	Individual owners		Acres owned	
	<i>Number</i>	<i>Percent</i>	<i>Number</i>	<i>Percent</i>
American Forestry Association	1,200	1	75,200	5
Izaak Walton League	700	1	15,500	1
Audubon Society	1,900	2	60,000	4
National Wildlife Federation	16,500	20	213,500	13
A sportsman's club	9,400	11	162,700	10
Farmer organization	4,900	6	158,700	10
American Tree Farm	300	W	118,100	7
Other	4,600	6	228,900	14
Some memberships	27,600	33	579,900	35
No memberships	51,100	62	923,200	56
No answer	4,400	5	139,000	9
Total ^a	83,100	100	1,642,100	100

^aColumns do not add to totals because some owners belong to more than one organization.

(W) Less than 0.5 percent or fewer than 50 owners.

Table 43.—Estimated number of individual owners and acres of commercial forest land owned, by conservation-oriented publications they receive, Maryland, 1977

Publications received	Individual owners		Acres owned	
	<i>Number</i>	<i>Percent</i>	<i>Number</i>	<i>Percent</i>
American Forests	1,200	1	75,200	5
National Wildlife	16,500	20	213,500	13
Pennsylvania Game News	7,300	9	50,400	3
Audubon Magazine	2,100	3	60,000	4
Field and Stream	6,300	8	214,700	13
Sports Afield	8,700	10	167,300	10
Ranger Rick	11,100	13	67,900	4
Maryland Conservation	2,800	3	125,600	8
Pennsylvania Farmer	5,900	7	157,600	10
Other	5,700	7	200,600	12
Some subscriptions	36,100	43	749,100	46
No subscriptions	41,700	50	752,700	46
No answer	5,300	6	140,300	9
Total ^a	83,100	100	1,642,100	100

^aColumns do not add to totals because some owners subscribe to more than one publication.

Table 44.—Estimated number of individual owners and acres of commercial forest land owned, by statement and response to statement of conservation quiz, Maryland, 1977

Statement number	Correct answer	Percent correct	Response to statement				
			True	False	Don't know	No answer	All responses
INDIVIDUAL OWNERS							
1	True	83	68,900	400	5,400	8,400	83,100
2	False	68	10,000	56,600	7,300	9,200	83,100
3	True	52	43,300	2,700	27,200	9,900	83,100
4	False	29	21,200	24,200	28,500	9,200	83,100
5	False	67	4,000	55,900	14,100	9,100	83,100
6	False	11	46,200	9,200	18,100	9,600	83,100
7	False	19	29,900	15,700	27,900	9,600	83,100
8	True	17	14,100	7,500	47,900	13,600	83,100
9	False	49	18,600	40,400	14,400	9,700	83,100
10	True	31	25,500	7,300	40,400	9,900	83,100
ACRES OWNED							
1	True	83	1,364,000	6,400	86,400	185,300	1,642,100
2	False	68	207,400	1,116,700	124,100	193,900	1,642,100
3	True	58	949,600	37,300	399,400	255,800	1,642,100
4	False	36	476,100	586,000	374,100	205,900	1,642,100
5	False	69	39,600	1,131,500	265,600	205,400	1,642,100
6	False	16	873,500	262,300	297,800	208,500	1,642,100
7	False	22	569,600	365,300	492,600	214,600	1,642,100
8	True	15	250,400	109,500	1,008,900	273,300	1,642,100
9	False	45	466,100	734,200	221,200	220,600	1,642,100
10	True	49	806,100	73,900	538,000	224,100	1,642,100

Table 45.—Estimated number of individual owners and acres of commercial forest land owned, by response to conservation quiz, Maryland, 1977

Responses	Individual owners		Acres owned	
	Number	Percent	Number	Percent
Percent/correct				
0	1,800	2	18,500	1
10	2,000	3	64,700	4
20	2,600	3	51,500	3
30	8,600	11	170,700	10
40	16,100	19	250,700	15
50	14,300	17	213,900	13
60	12,300	15	243,900	15
70	7,600	9	193,400	12
80	5,200	6	130,200	8
90	1,700	2	91,700	6
100	100	W	12,900	1
All who answered 10 statements	72,300	87	1,442,100	88
All who had 10 "don't knows"	2,800	3	26,500	2
All who answered no statements	8,000	10	170,700	10
All who had mixed responses	W	W	2,800	W
Total	83,100	100	1,642,100	100

(W) Less than 0.5 percent or fewer than 50 owners.

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

- **Amherst, Massachusetts, in cooperation with the University of Massachusetts.**
 - **Beltsville, Maryland.**
 - **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.**
 - **Kingston, Pennsylvania.**
 - **Morgantown, West Virginia, in cooperation with West Virginia University, Morgantown.**
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 - **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.**
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