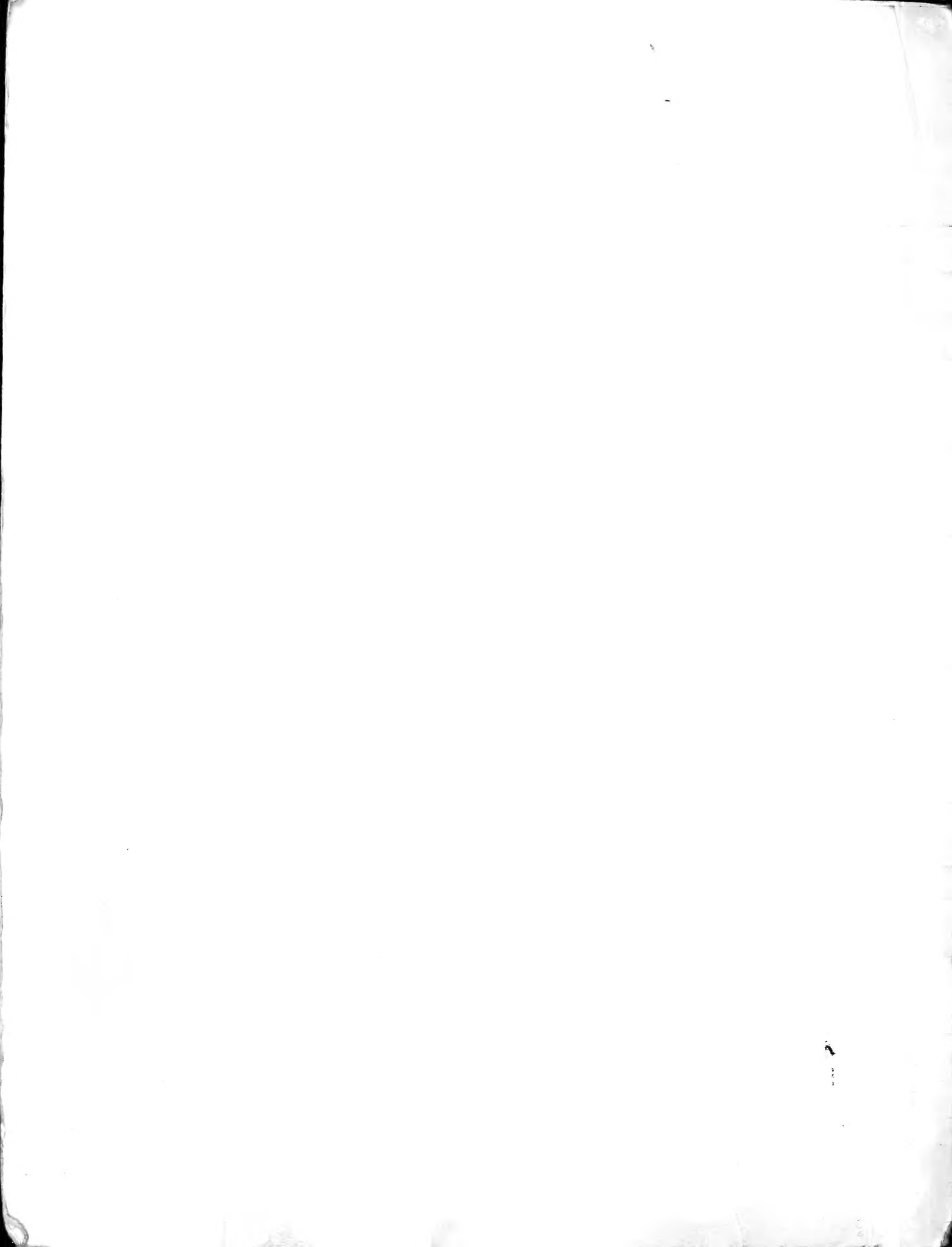


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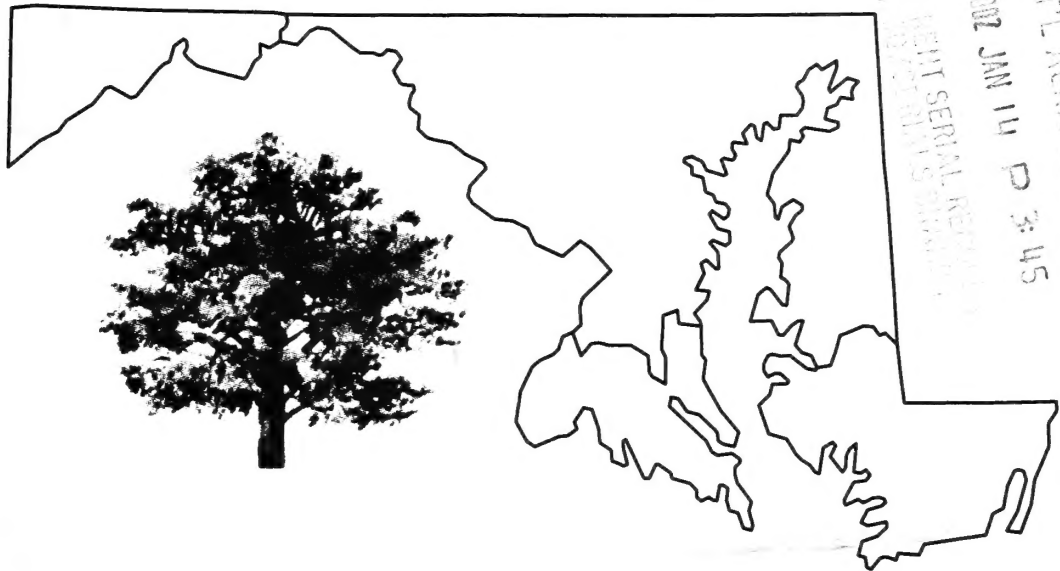
Northeastern  
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Resource Bulletin NE-154

# Forest Statistics for Maryland: 1986 and 1999



Thomas Frieswyk



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## Abstract

A statistical report on the fifth forest inventory of Maryland conducted in 1999 by the Forest Inventory and Analysis Unit of the Northeastern Research Station. Statistics for forest area, numbers of trees, wildlife habitat, tree biomass, timber volume, growth, and change are displayed at the state, geographic unit and, where appropriate, the county level. The current inventory indicates that there are approximately 5.1 billion cubic feet of growing-stock volume on 2.4 million acres of timberland in Maryland.

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## Acknowledgment

The Forest Inventory and Analysis Unit thanks the landowners of Maryland and the Maryland Forest Service for their cooperation and assistance during this inventory.

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## Foreword

The fifth inventory of Maryland was directed by John R. Peters (retired), Project Leader of the Forest Inventory and Analysis Unit. David J. Alerich supervised the data-collection phase of the inventory. He was assisted by Robert E. Ilgenfritz, Brian M. LaPoint, Richard A. McCullough, Jason W. Morrison, Lucretia B. Stewart, and Kathryn M. Tillman. The members of the data-collection field staff in Maryland were:

|                  |                     |                   |
|------------------|---------------------|-------------------|
| David Berger     | Anne M. Fuller      | Bryan Tirrell     |
| Jean Bonnet      | Richard Grassetti   | Jeff Tilley       |
| Linda Burke      | John Higham         | Neil Walker       |
| Amy Calehuff     | Brian Lapati        | Dean Wargo        |
| James Donaldson  | Amanda Lyon         | Jeff Wazenegger   |
| Gene Dressely    | Royce McConnell     | Ryan Weston       |
| Michael Effinger | Derek Mobley        | Michael Whitehill |
| Annetta Egely    | Christopher Sprague |                   |

Thomas S. Frieswyk supervised information-management activities. Carol L. Alerich applied FINSYS (Forest Inventory SYStem), a generalized data-processing system, ORACLE SQLPlus, and SAS to process and analyze the information provided by the field crews, and produced summary tables of estimates and errors for the state and counties. Kathryn M. Tillman produced the summary information of the quality control data for this report. Richard L. Goren and Michael J. Kazimer performed data entry services. Vickie M. Sharon was responsible for administrative and secretarial services. She was assisted by Karen Y. Chenery.

Wade Dorsey, Kenneth Jolly, Steven Koehn, Wayne Merkel, Jack Perdue, Kip Powers, Don VanHassent, and Robert Webster of the Maryland Forest Service assisted in reviewing this document for accuracy.

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**Forest Statistics for Maryland:  
1986 and 1999**

**Thomas Frieswyk, Forester**



**Forest Inventory and Analysis Unit  
Northeastern Research Station  
USDA Forest Service  
Newtown Square, PA**

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## Highlights

### Forest-Land Area

Maryland encompasses 6.256 million acres of land according to the U.S. Bureau of Census 1990 figures. Forest land covers 2.566 million acres or 41 percent of that land area. There has been a 3 percent decrease in forest land since the 1986 inventory.

| Unit               | 1986           |                | Percent change |
|--------------------|----------------|----------------|----------------|
|                    | 1986           | 1999           |                |
| Forest land        | 2,645.3        | 2,565.8        | -3.0           |
| Nonforest land     | 3,610.4        | 3,690.0        | +2.2           |
| <b>State total</b> | <b>6,255.8</b> | <b>6,255.8</b> |                |

Figure 1. Land Area (in thousand acres) and percent change, Maryland, 1986 and 1999 (Source: Table 1).

Timberland, the largest component of forest land, totals 2.372 million acres and makes up 92 percent of the forest land and 38 percent of the land area. This is a decrease from 1986, when timberland totaled 2.522 million acres, or 95 percent of the forest land, and 40 percent of the land area.

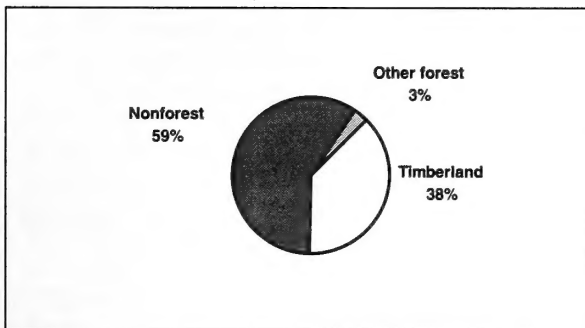


Figure 2. Percent area by land class, Maryland, 1999 (Source: Table 1).

### Timberland

Eighty-two percent of the timberland acres are privately owned. The state controls approximately 73 percent of publicly owned lands.

The oak/hickory forest-type group makes up the preponderance of timberland acres, accounting for 58 percent (1.388 million acres) of the acreage. The loblolly/shortleaf pine group contributes 12 percent (282,600 acres); and the oak/pine group 9.7 percent (229,600 acres). Northern hardwood forests, characterized by

sugar maple, beech, yellow birch, and black cherry, cover 8.8 percent (209,100 acres); other forest-type groups combined contribute about 262,700 acres.

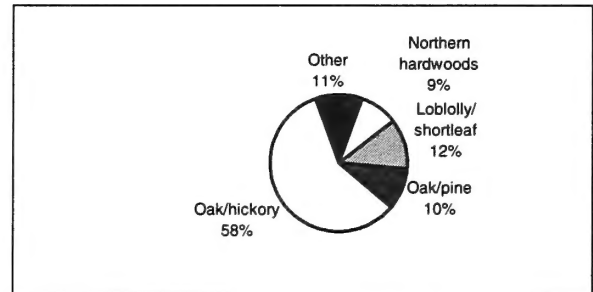


Figure 3. Timberland by forest-type group, Maryland, 1999 (Source: Table 4).

Sawtimber stands (stands in which live sawtimber trees make up the majority of stocking) occupy 66 percent (1.575 million acres) of timberland. Poletimber stands occupy 21 percent (506,100 acres), and sapling and seedling stands occupy 11 percent (268,400 acres). In 1986, sawtimber stands occupied 60 percent (1.511 million acres) of timberland area, poletimber stands 29 percent (740,000 acres) and sapling and seedling stands 10 percent (252,000 acres).

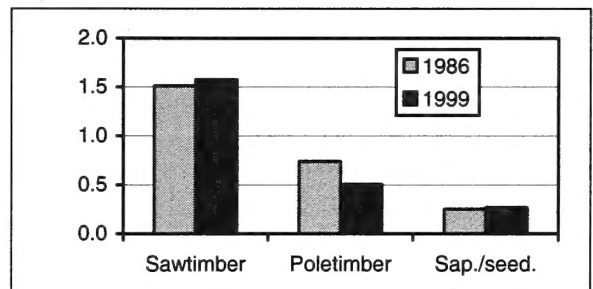


Figure 4. Area of timberland (million acres) by stand-size class, Maryland, 1986 and 1999 (Source: Tables 3 and 4).

### Numbers of Trees

There are 1.447 billion live trees 1 inch or larger in diameter at breast height (d.b.h.) on Maryland's timberland, or 609 trees per acre. Of these, 385 million (162 trees per acre) are at least 5 inches in d.b.h. Red maple is the most common tree species in Maryland, accounting for 18 percent of all saplings and 15 percent of the live trees 5 inches and larger in d.b.h. Sweetgum is the second most common tree

species, with 10 percent of the saplings and 9 percent of the live trees at least 5 inches in diameter. Loblolly pine rounds out the top three, with 8 percent of the saplings and 14 percent of the live trees 5 inches and larger in d.b.h.

Growing-stock trees make up 94 percent of live trees 5 inches and larger in d.b.h. Loblolly pine and red maple are the most common trees in this category and each species accounts for 14 percent of the growing-stock trees. Most of the loblolly pine can be found on the lower eastern shore (75 percent) while red maple's distribution is more ubiquitous. Sweetgum is third, with 10 percent of all growing-stock trees.

A 4.5 percent decrease in growing-stock trees 5 to 12.9 inches d.b.h has been recorded. However, there has been a 12 percent increase in growing-stock trees 13 inches or greater in diameter.

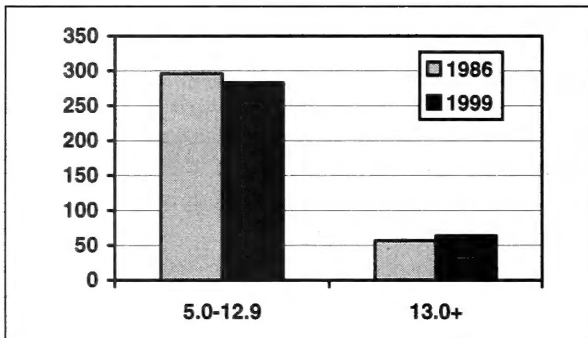


Figure 5. Number of growing-stock trees (million trees) on timberland by diameter group, Maryland, 1986 and 1999 (Source: Tables 20 and 21).

### Growing-Stock Volume

The volume of growing-stock trees in Maryland is 5.072 billion cubic feet, or 2,133 cubic feet per acre. This is a 7 percent increase since 1986 when the volume totaled 4.745 billion cubic feet, or 1,881 cubic feet per acre. Yellow-poplar is the leading species in growing-stock volume, with 749.9 million cubic feet, or 15 percent of the total. Red maple contributes 13 percent of the total volume, or 640.7 million cubic feet. Other red oaks rank third with 11 percent of the total (570.8 million cubic feet).

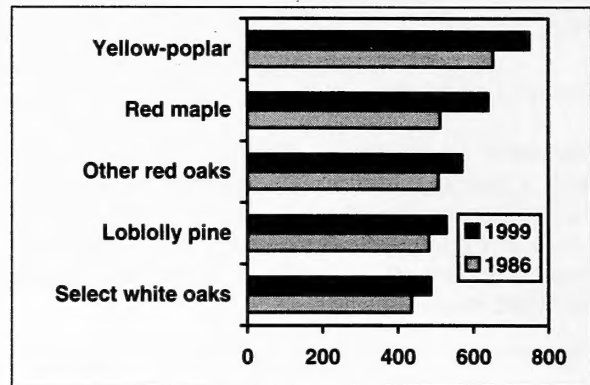


Figure 6. Net volume of growing-stock trees (million cubic feet) on timberland, top five species, Maryland, 1986 and 1999 (Source: Tables 35 and 36).

### Sawtimber Volume

With an average of 6,797 board feet per acre, there are 16.161 billion board feet of sawtimber in Maryland. In 1986, the volume was 14.156 billion board feet, or 5,953 board feet per acre. Sawtimber volume increased by 14 percent since the last inventory. Although the top three species are the same as the top species in growing-stock volume, there is a different ranking. Yellow-poplar is the top species with 3.164 billion board feet, or 20 percent of the total, and a 20-percent increase over its 1986 volume. Other red oaks have 2.136 billion board feet or 13 percent of the sawtimber volume. Rounding out the top three species in sawtimber volume is red maple with 11 percent of the total (1.846 billion board feet).

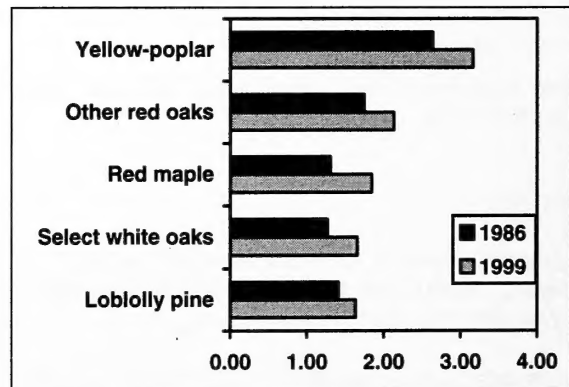


Figure 7. Net volume of sawtimber trees (billion board feet) on timberland, top five species, Maryland, 1986 and 1999 (Source: Tables 38 and 39).



## Biomass

There are more than 204 million dry tons of biomass in all live trees on forest land in Maryland, or an average of 79.6 dry tons per acre. Sixty-five percent of the weight is in growing-stock trees, 19 percent is in stumps and roots, and 16 percent is distributed among branches, foliage, and cull trees.

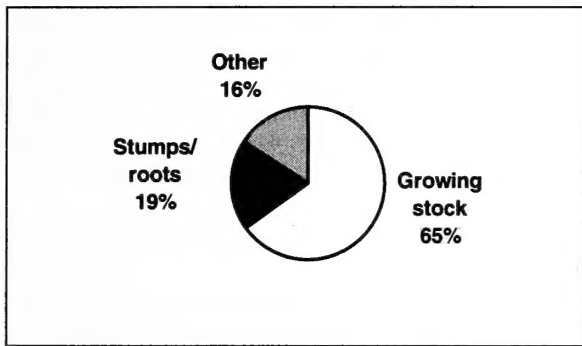


Figure 8. Biomass of all timber on forest land by component, Maryland, 1999 (Source: Table 101).

## Growth, Mortality, and Removals

Since the last inventory, the average annual net growth of growing stock on timberland is 106.8 million cubic feet, or 45 cubic feet per acre per year. This represents 2.1 percent of the current inventory. Average annual mortality is 36.5 million cubic feet or 15 cubic feet per acre per year. Mortality is 34 percent of net growth. Average annual removals of growing stock total 82.6 million cubic feet, or 35 cubic feet per acre per year. Sixty-three percent of the removals comes from harvesting and 37 percent from land-use change. The removals going into land-use change are not necessarily trees that are harvested. The trees may still be standing, but the use may have changed from timberland to another use for example, reserved or unproductive forest. Even in the case of timberland being converted to a nonforest land use, the trees may be standing, but it is much more likely that these trees are harvested or killed.

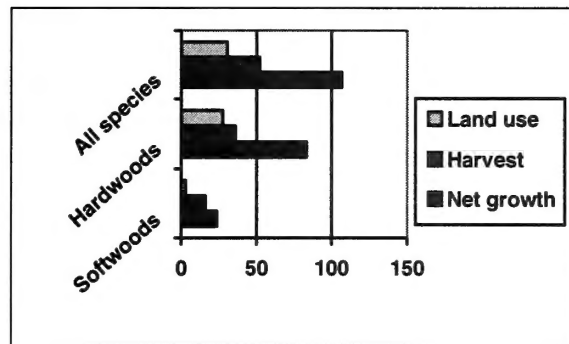


Figure 9. Average annual net change (millions of cubic feet) of growing stock by net growth, harvest removals and land-use change removals, Maryland 1986-1999 (Source: Table 41).

Ratios of growth to removals of growing-stock volume vary with tree species. Yellow-poplar is growing 4.5 times faster than it is being removed, either by harvest or by land-use change, while red maple, the species with the highest amount of total growing-stock removals, has a growth-to-removals ratio of 0.5 to 1.

Average annual net growth of sawtimber on timberland is 428.6 million board feet, or 181 board feet per acre per year. The ratio of growth to removals of sawtimber volume is 1.6 to 1. Annual removals are 272.7 million board feet per year, or 115 board feet per acre annually. Removals combined with growth yielded a positive annual change in board-foot volume of 156 million board feet.

Yellow-poplar exhibited an annual increase of 150 million board feet, a growth-to-removals ratio of 6.2 to 1. Loblolly pine showed no significant increase in sawtimber volume and has a growth-to-removals ratio of 1.1 to 1.

## Introduction

The USDA Forest Service conducts periodic inventories of all states to provide up-to-date information on the forest resources of the Nation under the authority of the McSweeney-McNary Forest Research Act of 1928 and subsequent acts, including the Renewable Resources Planning Act of 1974 and the Renewable Resources Research Act of 1978.

The initial inventory of Maryland's forest resources was conducted in 1950, and subsequent inventories were conducted in 1964, 1975, and 1986. This report presents forest-resource data from the fifth inventory conducted in 1999, through a cooperative effort by the Northeastern Research Station, the Maryland Forest Service, and the landowners of Maryland.

The Forest Inventory and Analysis (FIA) Unit of the Northeastern Research Station conducted the inventory on all lands, developed the resource tables, and prepared this report.

During the 1999 Maryland inventory, a new system to select ground plots was implemented. This system has been adopted by all of the FIA Units in the United States as the basis for the upcoming *Annual Inventory Program*. A hexagonal grid with each cell representing approximately 5,933 acres was superimposed over the United States. One ground plot was selected in each hexagon. If the hexagon contained one or more ground plots from the 1986 inventory, the plot closest to the hexagon center was selected; otherwise, a new ground plot was established randomly near the hexagon center.

There were 516 ground plots from the previous inventory that were remeasured, and 582 ground plots were established for the first time. The data collected were summarized using the FINSYS computer system developed at the Northeastern Research Station. More detailed analysis of the state's forest resource are being prepared.

The forest area, numbers of trees and shrubs, biomass, timber volume, growth, and change statistics in this report summarize the information collected by the field crews. Other information or additional summaries may be developed. For information, contact the **Forest Inventory and Analysis Unit, USDA Forest**

**Service, 11 Campus Boulevard, Suite 200, Newtown Square, PA 19073 (Telephone: 610-557-4075; Fax: 610-557-4250; Web site: [www.fs.fed.us/ne/fia](http://www.fs.fed.us/ne/fia)).**

The Northeastern, North Central, and Southern Research Stations have agreed to include a set of 25 core tables in each of their state resource bulletins. The format of any of these tables will be identical for all 37 states in the Stations' territories. Rather than being grouped as a set, these core tables have been interspersed throughout this publication according to their level of data or content. The index in this report includes both a list of tables in this publication and the corresponding core-table number.

## Reliability of the Estimates

The data in this report were based on a carefully designed sample of forest conditions throughout Maryland. But, the field crews did not measure every tree or every acre in the state, hence the results are estimates. The reliability of the estimating procedure can be judged by two important statistical measures: accuracy and precision. Accuracy refers to the success of estimating the true value. Precision refers to the clustering of sample values about their own averages or to the variation among repeated samples. We are interested primarily in the accuracy of the inventory but in most cases we can only measure its precision.

Although accuracy cannot be measured exactly, it can be checked. Preliminary tables were sent to other agencies and to outside experts familiar with the forest conditions in Maryland. If questions arose, the data were reviewed and reanalyzed to resolve differences. Great effort was taken to minimize sources of procedural error through detailed training of both field and office personnel, frequent inspection of field and office work, and application of the most reliable inventory methods.

Because of the care exercised in the inventory process, estimates of precision afford a reasonable measure of the inventory's adequacy. The precision of each estimate is described by its sampling error. Sampling errors are given with several tables in this report. The others are available upon request.

Here is an example of how the sampling error is used to indicate reliability. The estimate of

timberland for Maryland is 2,377,800 acres. The associated sampling error is 2 percent, or 47,556 acres. This means that if there are no errors in the procedure, we are 68 percent confident that the true number of acres is between 2,330,244 and 2,425,356 acres, or  $2,377,800 \pm 47,556$  (one standard deviation). Similarly, we are 95 percent confident that the true number of acres is within  $\pm 95,112$  acres (two standard deviations). County estimates are less precise. While the sampling error for timberland at the state level is 2 percent, the sampling error for Carroll County is 14.3 percent. In general, as the size of the sample decreases, the sampling error, expressed as a percentage of the estimate, increases. A high amount of variance within a county increases the sampling error.

For many of the tables in this report, both the last column and last row are labeled "SE." These figures are the sampling errors of the column and row totals. The last sampling error given (SE) is for the table total. To calculate the approximate sampling error ( $SE_{ij}$ ) for a table cell (ij), use the following formula (**this formula is reliable only for estimating sampling errors of individual cells in AREA tables**):

$$SE_{ij} = 1/P_{ij}((P_{ij}(1 - P_{ij}))/n)^{1/2}$$

where:

n = total number of sample plots of a population

$$P_{ij} = A_{ij} / A$$

$A_{ij}$  = cell estimate

A = total land area of a population

ij = row(i) and column(j)

***A note of caution:***

**Any estimate with a sampling error of 50 percent or more is not significantly different from zero, and estimates with errors of 25 to 50 percent are suspect. Therefore, any estimates with errors exceeding 25 percent should be used with caution.**

## Comparison Between Inventories

To evaluate the condition of the forest resource, it is useful to compare the current estimates with those from the previous inventory. As a result of ongoing efforts to improve the efficiency of the inventory, we have made several changes in procedures and definitions since 1986. Because these changes make it inappropriate to compare some of the current estimates with those published by Frieswyk and DiGiovanni (1988), users should use caution when comparing the data in this report with those in the 1986 report. In this report, several tables containing 1986 data are provided to allow comparisons. The changes in methods and definitions follow.

To improve data consistency at the national level, a standard plot design is being used by all FIA projects in the country. The new plot design, a cluster of four 24-foot-radius points covering a 1/6-acre area, was established with this inventory at all selected plot locations, both new and previously measured. Field crews recorded different conditions on the plots if certain attributes (land use, forest type, stand origin, stand size, tree density, and/or owner) differed from those at plot center. Crews "mapped" these conditions by recording information that described the boundaries of the conditions. This mapping procedure is designed to reduce bias in the estimates

On all selected remeasured plots, a subsample of the trees that were recorded in the past were reconciled to calculate change estimates. Condition mapping was ignored for change estimation because mapping was not used at the previous occasion.

FIA uses U.S. Bureau of Census estimates of total state or county land area as the basis for estimating land area by various classes. For the 1986 report (1988), 1980 Bureau of Census data were used; in 1999, 1990 data were available. Between 1980 and 1990, the Bureau of Census changed its estimating procedures: it now can identify as inland water streams that are more than 200 feet wide and bodies of water 4.5 acres and larger in area. Previously, the minimum width for streams was 660 feet and the minimum area for bodies of water was 40 acres. This new procedure results in a reduction in total land area. For comparison of land area between inventories, 1986 estimates of land area by class were recalculated using 1990 total land-area values from the Bureau of Census.

Stocking, stand size, and forest-type algorithms have been revised. The algorithms for stocking and stand size are consistent across the Nation. Stocking is a quantitative expression of live-tree stand density that can be expressed in absolute terms, such as basal area per acre, volume per acre, or number of trees per acre; or in relative terms, such as a percentage of a previously defined standard.<sup>1</sup> For the 1986 inventory statistics, the stocking value of a tree was calculated using the basal area of the tree as a percent of 75 square feet per acre, which is the basal-area standard for full use of the site.<sup>2</sup>

Basal-area stocking may well describe current timber volume, but it is inadequate to describe stand composition in a multiresource inventory because it neither adequately measures present site utilization nor describes small-diameter stands. For the statistics in this publication, stocking is calculated using relative density, which represents site occupancy based on normal yield tables. Basal area is diameter-dependent only, whereas relative density reflects species composition, stage of development, and the social position of the trees present. A relative measure of stand density is useful for interpreting findings of extensive inventories, such as those performed by FIA in which a variety of stands are sampled. A procedure using relative density to calculate stocking was developed and accepted as a standard to be used by all FIA projects in the United States.

Stand size is a classification (sapling/seedling, poletimber, sawtimber, or nonstocked) of forest land based on the size of the trees that dominate an area, and forest type is a classification of forest land based on the species found in the area. Both stand size and forest type are calculated based on stocking of all live trees, and, therefore, are affected by the change in the procedure to calculate stocking. To allow comparisons, this report includes several 1986 area tables showing estimates of area of timberland by stand-size class and forest type and forest-type group that are calculated based on relative density.

Forty-five percent of the 1986 plots were remeasured in 1999. The estimates of average annual change are derived from this set of data. These estimates afford an opportunity to look at components of change in the volume from occasion to occasion or from plot to plot.

The tables showing 1986 information are from the plots that were selected at the prior inventory to produce an estimate of the area and volume. This data set has been reprocessed using current procedures to produce a new estimate of the area and volume of the 1986 inventory.

Because the tables of estimates for average annual change only contain a portion of the plots from the 1986 survey, inconsistencies in trends may result when the recalculated estimates of 1986 are compared with the average annual change estimates between the 1986 and 1999 tables.

<sup>1</sup> Amer, Stanford L. and others. **National algorithms for determining stocking class, stand size class, and forest type for Forest Inventory and Analysis plots.** In preparation.

<sup>2</sup> U.S. Department of Agriculture, Forest Service. 1967. **Forest survey handbook.** For. Serv. Handb. 4809.11. On file at Northeastern Research Station, Forest Inventory and Analysis, Newtown Square, PA.

## Definitions of Terms

**Acceptable tree.** (a) Live sawtimber trees that do not qualify as preferred trees but are not cull trees. (b) Live poletimber trees that prospectively will not qualify as preferred trees, but are not now or prospectively cull trees.

**Accretion.** The estimated net growth on growing-stock trees that were measured during the previous inventory (divided by the number of growing seasons between surveys to produce

average annual accretion). It does not include the growth on trees that were cut during the period, nor those trees that died.

**Apical meristem.** The point on a tree where stem elongation and growth occur.

**Azimuth.** The horizontal direction as sighted from subplot center to the center of the base of the tree. Recorded to the nearest degree on all trees 1 inch d.b.h. or greater.

Basal-area class. A classification of forest land based on basal area (cross-sectional area of a tree stem at breast height in square feet per acre) of all live trees of all sizes.

Board foot. A unit of lumber measurement 1 foot long, 1 foot wide, and 1 inch thick, or its equivalent. International ¼ inch rule is used as the USDA Forest Service standard log rule in the eastern United States.

Board-foot cull. The volume within the sawlog length of the tree that cannot be used as lumber because of rot, sweep, crook, excessive limbs, and other defects.

Board-foot soundness. The amount of board-foot cull that is sound, expressed as a percentage.

Board-foot stand-volume class. A classification of forest land based on net board-foot volume of sawtimber trees per acre.

Bog/Marsh/Swamp. Land that has less than 10 percent stocking with live trees and which characteristically supports low, generally herbaceous or shrubby vegetation, and which is intermittently covered with water during all seasons; includes tidal areas that are covered with brackish water during high tides.

Bole length. The length of a tree stem from a 1 foot stump to a 1) four-inch top diameter outside bark (d.o.b.); 2) where the central stem terminates by branching before reaching four inches d.o.b.; or 3) point of a break on broken-off trees. Recorded to the nearest foot on all live and sound dead poletimber and sawtimber trees.

Christmas tree plantation. Forest land sufficiently productive to qualify as timberland but is used exclusively for Christmas tree production.

Commercial species. Tree species currently or prospectively suitable for industrial wood products; excludes species of typically small size, poor form, or inferior quality, such as hawthorn and sumac.

Condition. A classification of a land area based on land use, forest type, stand origin, and stand size (see definitions).

Corporate-owned lands. Lands owned by private corporations, partnerships, trusts, or clubs other than forest industry or farmers.

County and municipal lands. Lands owned by counties and local public agencies or municipalities or leased to them for 50 years or more.

Cropland. Land that currently supports agricultural crops including silage and feed grains, bare farm fields resulting from cultivation or harvest, and maintained orchards.

Crown class. An indicator of the status of the tree in relation to other trees in the stand.

Crown ratio. The percentage of the total tree height that supports a full, live crown.

Cubic-foot cull. The volume within the bole length of the tree that is not suitable for products because of rot, decay, large limbs, forks, sweep, crook, embedded wire, and other defects.

Cubic-foot soundness. The amount of cubic-foot cull that is sound, expressed as a percentage.

Cubic-foot stand-volume class. A classification of forest land based on net cubic-foot volume of either all live trees per acre or growing-stock trees per acre.

Cull decrement. The net volume of rough or rotten trees in the previous inventory that are classified as growing-stock trees in current inventory (divided by the number of growing seasons between surveys to produce average annual cull decrement).

Cull tree. A rough tree or a rotten tree.

Cull increment. The net volume of growing-stock trees in the previous inventory that are classified as rough or rotten trees in the current inventory (divided by the number of growing seasons between surveys to produce average annual cull increment).

Damage, general. An agent that is serious enough to cause the reduction of tree class, significantly deter growth of the tree, or prevent it from producing marketable products within the next 10 years.

Damage, special. An indication of the presence, to any extent, of an agent.

Diameter at breast height (d.b.h.). The diameter



outside bark of a standing tree measured at 4-1/2 feet above the ground.

Dry ton. A unit of measure of dry weight equivalent to 2,000 pounds or 907.1848 kilograms.

Dry ton stand-volume class. A classification of forest land based on net dry weight of the aboveground components of all live trees per unit area; usually expressed in dry tons per acre.

Dry weight. The weight of wood and bark as it would be if it had been oven-dried; usually expressed in pounds or tons.

Farmer-owned lands. Lands owned by farm operators, whether part of the farmstead or not; excludes land leased by farm operators from nonfarm owners.

Federal lands. Lands (other than National Forests) administered by Federal agencies.

Forest industry lands. Lands owned by companies or individuals that operate primary wood-using plants.

Forest land. Land that is at least 10 percent stocked with trees of any size, or that formerly had such tree cover and is not currently developed for a nonforest use. The minimum area for classification of forest land is one acre. The components that make up forest land are timberland and all noncommercial forest land (see definitions).

Forest type. A classification of forest land based on the species that form a plurality of live-tree stocking.

Forest-type group. A classification of forest land based on the species forming a plurality of live-tree stocking. A combination of forest types that share closely associated species or site requirements are combined into the following major forest-type groups (the descriptions apply to this report):

a. White/red pine. Forests in which eastern white pine, red pine, or eastern hemlock, singly or in combination, make up the plurality of the stocking; common associates include red maple, oak, sugar maple, and aspen.

b. Spruce/fir. Forests in which red, white, black, or Norway spruces, balsam fir, northern white-cedar, tamarack, or planted larch, singly or in combination, make up a plurality of the stocking; common associates include white pine, red maple, yellow birch, and aspens.

c. Hard pine (also called loblolly/shortleaf pine). Forests in which eastern redcedar or pitch pine, singly or in combination, make up a plurality of the stocking; common associates include white pine, paper birch, sugar maple, and basswood.

e. Oak/pine. Forests in which hardwoods (usually hickory or upland oaks) make up a plurality of the stocking and in which pines or eastern redcedar contribute 25 to 50 percent of the stocking.

f. Oak/hickory. Forests in which upland oaks, hickory, yellow-poplar, black locust, sweetgum, or red maple (when associated with central hardwoods), singly or in combination, make up a plurality of the stocking and in which pines or eastern redcedar make up less than 25 percent of the stocking; common associates include white ash, sugar maple, and hemlock.

g. Oak/gum/cypress. Bottomland forests in which tupelo, blackgum, sweetgum, oaks, or southern cypress, singly or in combination, make up a plurality of the stocking and in which pines make up less than 25 percent of the stocking; common associates include cottonwood, willow, ash, elm, hackberry, and maple.

h. Elm/ash/red maple (also called elm/ash/cottonwood). Forests in which elm, willow, cottonwood, or red maple (when growing on wet sites), singly or in combination, make up a plurality of the stocking; common associates include white ash, sugar maple, aspens, and oaks.

i. Northern hardwoods (also called maple/beech/birch). Forests in which sugar maple, beech, yellow birch, black cherry, or red maple (when associated with northern hardwoods), singly or in

combination, make up a plurality of the stocking; common associates include white ash, eastern hemlock, basswood, aspens, and red oak.

j. Aspen/birch. Forests in which aspen, paper birch, or gray birch, singly or in combination, make up a plurality of the stocking; common associates include red maple, white pine, red oaks, and white ash.

Gross growth. The sum of accretion and ingrowth.

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

Growing-stock volume. Net volume, in cubic feet, of growing-stock trees 5 inches d.b.h. and larger from a 1-foot stump to a minimum 4-inch top diameter outside bark of the central stem, or to the point where the central stem breaks into limbs. Net volume equals gross volume less deduction for cull.

Hard hardwoods. Hardwood species with an average specific gravity of greater than 0.50.

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

Harvested cropland. All lands from which crops were harvested or hay was cut; all land in orchards, citrus groves, vineyards, and nursery and greenhouse products.

Horizontal distance. The measure of length on a horizontal plane from subplot center to the center of the base of the tree. Recorded to the nearest .1 foot on all trees 1 inch d.b.h. and greater.

Idle farmland. Former cropland or pasture that has not been tended for within the last 2 years and has less than 10 percent stocking with live trees (established seedlings or larger trees), regardless of species.

Improved/maintained pasture. Land that is currently used and maintained for grazing (not including grazed cropland).

Individual-owned lands. Lands owned by private individuals that do not own a farm, wood-processing plant, or corporation.

Industrial and commercial lands. Supply yards, parking lots, factories, etc.

Ingrowth. The estimated net volume of growing-stock trees that became 5 inches d.b.h. or larger during the period between inventories (divided by the number of growing seasons between surveys to produce average annual ingrowth). Also, the estimated net volume of growing-stock trees 5 inches d.b.h. and larger that are growing on land that was reclassified from noncommercial forest land or nonforest land to timberland.

International 1/4-inch rule. A log rule or formula for estimating the board-foot volume of logs. The mathematical formula is:

$$(0.22D^2 - 0.71D)(0.904762)$$

for 4-foot sections, where D=diameter inside bark at the small end of the log section. This rule is used as the USDA Forest Service standard log rule in the Eastern United States.

Land area. (a) Bureau of Census: The area of dry land and land temporarily or partly covered by water, such as marshes, swamps, and river flood plains; streams, sloughs, estuaries, and canals less than 200 feet wide; and lakes, reservoirs, and ponds less than 4.5 acres in area. (b) Forest Inventory and Analysis: same as (a) except that the minimum width of streams, etc. is 120 feet, and the minimum size of lakes, etc. is 1 acre.

Land use. A classification of land that indicates the primary use at the time of inventory. Major categories are forest land and nonforest land (see definitions).

Merchantability class. An indicator of the relative amounts of sound and unsound cull in a tree. Based on board-foot cull for sawtimber-sized trees and on cubic-foot cull for poletimber-sized trees.

Merchantable stem. The main stem of the tree between a 1-foot stump height and a 4-inch top diameter (outside the bark), including the wood and bark.

Mining and waste land. Surface mining, gravel pits, dumps.

Mortality. The estimated net volume of growing-stock trees at the previous inventory that died from natural causes before the current

inventory (divided by the number of growing seasons between surveys to produce average annual mortality).

Multi-family house. House or building sheltering multiple families and immediately adjacent managed land.

National Forest lands. Federal lands legally designated as National Forests or purchase units and other lands administered as part of the National Forest System by the USDA Forest Service.

Net change. The difference between the current and previous inventory estimates of growing-stock volume (divided by the number of growing seasons between surveys to produce average annual net change). Components of net change are ingrowth plus accretion, minus mortality, minus cull increment, plus cull decrement, minus removals.

Net dry weight. The dry weight of woody material less the weight of all unsound (rotten) material.

Net growth. The change, resulting from natural causes, in growing-stock volume during the period between surveys (divided by the number of growing seasons to produce average annual net growth). Components of net growth are ingrowth plus accretion, minus mortality, minus cull increment, plus cull decrement.

Noncensus water. Streams/rivers between 120 feet and 200 feet in width, and bodies of water between 1 and 4.5 acres in size. The Bureau of the Census classifies such water as land.

Noncommercial forest land. Reserved productive forest land, Christmas tree plantations, other forest land, and other reserved forest land (see definitions).

Noncommercial species. Tree species of typically small size, poor form, or inferior quality that normally do not develop into trees suitable for industrial wood products.

Nonforest land. Land that has never supported forests, or land formerly forested but now in nonforest use such as cropland, pasture, idle farmland, other farmland, single- and multi-family housing, bogs/marshes/swamps, rights-of-way, industrial or commercial sites, or noncensus water.

Nonsalvable dead tree. A dead tree with most or all of its bark missing that is at least 5 inches d.b.h. and is at least 4.5 feet tall.

Nonstocked area. A stand-size class of forest land that is less than 10 percent stocked with live trees of any size.

Other cropland. Includes cropland used for cover crops and soil improvement (legumes).

Other farmland. All nonforest land on a farm excluding cropland, pasture, and idle farmland; includes farm lanes, stock pens, and farmsteads.

Other forest land. Forest land that is incapable of producing 20 cubic feet per acre per year of industrial wood under natural conditions, because of adverse site conditions (formerly known as unproductive forest land).

Other reserved forest land. Forest land that is incapable of producing 20 cubic feet per acre per year of industrial wood under natural conditions, because of adverse site conditions, and is protected through statute or administrative designation.

Ownership class. A classification of forest land based on ownership and nature of business or control of decisionmaking for the land. It encompasses all types of legal entities having ownership interest in the land, whether public or private.

Pasture. Includes any pasture land other than cropland and woodland pasture. It can include lands that have had lime fertilizer or seed applied, or that had been improved by irrigation, drainage, or control of weeds and brush.

Poletimber stand. A stand-size class of forest land that is at least 10 percent stocked with live trees with half or more of such stocking in poletimber or sawtimber trees or both, and in which the stocking of poletimber exceeds that of sawtimber.

Poletimber tree. A live tree of commercial species meeting regional specifications of soundness and form and at least 5.0 inches in d.b.h., but smaller than a sawtimber tree.

Preferred tree. A high-quality tree, from a lumber viewpoint, that would be favored in cultural operations. General characteristics include grade



1 butt log (if sawtimber size), good form, good vigor, and freedom from serious damage.

Recreation site. Parks, campgrounds, playing fields, tracks, etc.

Relative stand density. A stocking classification procedure that reflects species, stage of development, and the characteristics of the trees present in a stand.

Removals. The net growing-stock volume harvested or killed in logging, cultural operations (such as timber stand improvement) or land clearing, and the net growing-stock volume neither harvested nor killed but growing on land that was reclassified from timberland to noncommercial forest land or nonforest land during the period between surveys. This volume is divided by the number of growing seasons to produce average annual removals.

Reserved productive forest land. Forest land sufficiently productive to qualify as timberland but withdrawn from timber utilization through statute or administrative designation.

Rights-of-way. Highways, pipelines, powerlines, canals.

Rotten tree. A live tree of commercial species that does not contain at least one 12-foot sawlog or two noncontiguous sawlogs, each 8 feet or longer, now or prospectively, and does not meet regional specifications for freedom from defect primarily because of rot; that is, more than 50 percent of the cull volume in the tree is rotten.

Rough tree. (a) The same as a rotten tree except that a rough tree does not meet regional specifications for freedom from defect primarily because of roughness or poor form; also (b) a live tree of noncommercial species.

Salvable dead tree. A tree at least 5 inches d.b.h. that has died recently and still has intact bark; may be standing, fallen, windthrown, knocked down, or broken off.

Sampling error. A measure of the reliability of an estimate, expressed as a percentage of the estimate. The sampling errors given in this report correspond to one standard error and are calculated as the square root of the variance, divided by the estimate, and multiplied by 100. Indicated in statistical tables as "SE".

Sapling. All live trees 1 through 4.9 inches d.b.h.

Sapling/seedling stand. A stand-size class of forest land that is at least 10 percent stocked with live trees with half or more of such stocking in saplings or seedlings or both.

Sawlog. A log meeting regional standards of diameter, length, and freedom from defect, including a minimum 8-foot length and a minimum top diameter inside bark of 6 inches for softwoods and 8 inches for hardwoods. (See specifications under Tree-Grade Classification.)

Sawlog length (portion). The length of a tree stem from a 1-foot stump to a 1) point above which no physical log, whether or not merchantable, can be produced because of excessive limbs, forks or crooks; 2) minimum sawlog top; or 3) point of a break on broken-off trees. Recorded to the nearest foot on all live and sound dead sawtimber trees.

Sawlog top. The point on the bole of a sawtimber tree above which a sawlog cannot be produced. The minimum sawlog top is 7 inches diameter outside bark (d.o.b.) for softwoods and 9 inches d.o.b. for hardwoods.

Sawtimber stand. A stand-size class of forest land that is at least 10 percent stocked with live trees with half or more of such stocking in poletimber or sawtimber trees or both, and in which the stocking of sawtimber is at least equal to that of poletimber.

Sawtimber tree. A live tree of commercial species at least 9 inches d.b.h. for softwoods or 11 inches for hardwoods, containing at least one 12-foot sawlog or two noncontiguous 8-foot sawlogs, and meeting regional specifications for freedom from defect.

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

SE. See Sampling error.

Seedling. A live tree less than 1.0 inch d.b.h. and at least 1 foot tall.

Single-family house. House sheltering one family and immediately adjacent managed land.

Snag. Standing dead tree with most or all of its bark missing that is at least 5.0 inches d.b.h. and at least 4.5 feet tall (does not include salvable dead).

Soft hardwoods. Hardwood species with an average specific gravity of 0.50 or less.

Softwoods. Coniferous trees, usually evergreen and having needles or scalelike leaves.

Sound cull. Defects that are due to form: sweep, crook, limbs, and forks.

Species. A class of individuals having common attributes and designated by a common name.

Stand. A group of forest trees growing on forest land.

Stand origin. An indication of how the measured stand originated: 100 percent natural, 100 percent artificial, or a combination of both.

Stand-size class. A classification of forest land based on the size class (that is, seedlings, saplings, poletimber, or sawtimber) of the stocking of all live trees in the area.

Standard cord. A unit of measure for stacked bolts of wood, encompassing 128 cubic feet of wood, bark, and air space. Fuelwood cord estimates can be derived from cubic-foot estimates of growing stock by applying an average factor of 80 cubic feet of solid wood per cord. For pulpwood, a conversion of 85 cubic feet of solid wood per cord is used because pulpwood is more uniform.

State lands. Lands owned by the state or leased to the state for 50 years or more.

Stocking. The degree of occupancy of land by trees relative to the growth potential utilized by a site. It is expressed as a percent of the "normal" value presented in yield tables and stocking guides. Two categories of stocking are used in this report: all live trees and growing-stock trees. The relationships between the classes and the percentage of the stocking standard are: nonstocked (0 to 9); poorly stocked (10 to 34); moderately stocked (35 to 59); fully stocked (60 to 100); and overstocked (greater than 100).

Strip mine. Area devoid of vegetation due to current or recent general excavation.

Stump. The main stem of a tree from ground level to 1 foot above ground level, including the wood and bark.

Timberland. Forest land producing or capable of producing crops of industrial wood (more than 20 cubic feet per acre per year) and not withdrawn from timber utilization (formerly known as commercial forest land).

Timber products. Roundwood (round timber) products and manufacturing plant by-products harvested from growing-stock trees on timberland; from other sources, such as cull trees, salvable dead trees, limbs, tops, and saplings; and from trees on noncommercial forest and nonforest lands.

Timber removals. The growing-stock or sawtimber volume of trees removed from the inventory for roundwood products, plus logging residues, volume destroyed during land clearing, and volume of standing trees on land that was reclassified from timberland to noncommercial forest land.

Top. The wood and bark of a tree above the merchantable height (or above the point on the stem 4 inches in diameter outside bark); generally includes the uppermost stem, branches, and twigs of the tree, but not the foliage.

Total length. The length from a 1-foot stump to the apical meristem, to the nearest foot on all live and dead poletimber and sawtimber trees.

Tract/multiple family housing. Multiple individual residential units or attached units (e.g., apartment buildings and condominiums) and immediately adjacent managed land.

Transportation right-of-way. Land associated with highways and railroads.

Tree class. A classification of the quality or condition of trees for sawlog production. Tree class for sawtimber trees is based on their current condition. Tree class for poletimber trees is a prospective determination--a forecast of their potential quality when they reach sawtimber size (11 inches d.b.h. for hardwoods, 9 inches d.b.h. for softwoods).

Tree condition. A classification for all live and dead trees 5 inches d.b.h or greater that indicates the status of the top of the tree, whether broken or intact.

Tree grade. A classification of sawtimber quality based on guidelines for tree grades for hardwoods, white pine, and southern pine. (Note: Red pine was graded using the guidelines for southern pine. All specifications are shown under Tree-Grade Classification.)

Tree history. A classification for all trees 5 inches d.b.h. or greater, either currently or previously, that indicates the status of the tree (accretion, ingrowth, mortality, removals).

Trees. Woody plants that have well-developed stems and that usually are more than 12 feet tall at maturity.

Unproductive forest land. See Other forest land.

Upper-stem portion. That part of the main stem or fork of a sawtimber tree above the sawlog top to a diameter of 4 inches outside bark, or to the point where the main stem or fork breaks into limbs.

Urban forest land. Forest land sufficiently productive to qualify as timberland that is completely surrounded by or nearly surrounded by urban development (not parks), whether commercial, industrial, or residential.

Utility right-of-way. Land associated with pipeline or electric transmission lines; identified only if vegetative cover differs from adjacent land use.

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## Species Groups of Maryland

| Species group      | Scientific name  | Common name(s)  |
|--------------------|--|---|
| White/red pine     | <i>Pinus resinosa</i><br><i>Pinus strobus</i>  | red pine<br>eastern white pine  |
| Loblolly pine      | <i>Pinus echinata</i><br><i>Pinus serotina</i><br><i>Pinus taeda</i>   | shortleaf pine<br>pond pine<br>loblolly pine  |
| Virginia pine      | <i>Pinus virginiana</i>  | Virginia pine   |
| Other yellow pines | <i>Pinus pungens</i><br><i>Pinus rigida</i><br><i>Pinus sylvestris</i>   | Table Mountain pine<br>pitch pine<br>Scotch pine  |
| Other pine         | <i>Chamaecyparis thyoides</i><br><i>Juniperus virginiana</i><br><i>Picea abies</i><br><i>Taxodium distichum</i><br><i>Tsuga canadensis</i> | Atlantic white-cedar<br>eastern redcedar<br>Norway spruce<br>baldcypress<br>eastern hemlock |
| Red maple          | <i>Acer rubrum</i><br><i>Acer saccharinum</i>  | red maple<br>silver maple   |
| Sugar maple        | <i>Acer saccharum</i>  | sugar maple   |
| Hickory            | <i>Carya sp.</i><br><i>Carya cordiformis</i><br><i>Carya glabra</i><br><i>Carya ovata</i><br><i>Carya tomentosa</i>                        | hickory<br>bitternut hickory<br>pignut hickory<br>shagbark hickory<br>mockernut hickory     |
| Beech              | <i>Fagus grandifolia</i>   | American beech  |
| Sweetgum           | <i>Liquidambar styraciflua</i>   | sweetgum  |
| Yellow-poplar      | <i>Liriodendron tulipifera</i>   | yellow-poplar   |
| Blackgum           | <i>Nyssa aquatica</i><br><i>Nyssa sylvatica</i>  | water tupelo<br>blackgum  |
| Ash/walnut/cherry  | <i>Fraxinus americana</i><br><i>Fraxinus nigra</i><br><i>Fraxinus pennsylvanica</i><br><i>Juglans nigra</i><br><i>Prunus serotina</i>      | white ash<br>black ash<br>green ash<br>black walnut<br>black cherry                         |
| Select white oaks  | <i>Quercus alba</i><br><i>Quercus bicolor</i><br><i>Quercus michauxii</i>  | white oak<br>swamp white oak<br>swamp chestnut oak  |
| Select red oaks    | <i>Quercus falcata</i> var. <i>pagodaefolia</i><br><i>Quercus rubra</i>  | cherrybark oak, swamp red oak<br>northern red oak   |
| Other white oaks   | <i>Quercus lyrata</i><br><i>Quercus prinus</i><br><i>Quercus stellata</i>  | overcup oak<br>chestnut oak<br>post oak   |
| Other red oaks     | <i>Quercus coccinea</i>  | scarlet oak   |

## Species Groups of Maryland (continued)

| Species group   | Scientific name                            | Common name                |
|-----------------|--|----------------------------|
|                 | <i>Quercus ellipsoidalis</i>               | northern pin oak           |
|                 | <i>Quercus falcata</i> var. <i>falcata</i> | southern red oak           |
|                 | <i>Quercus imbricaria</i>                  | shingle oak                |
|                 | <i>Quercus nigra</i>                       | water oak                  |
|                 | <i>Quercus palustris</i>                   | pin oak                    |
|                 | <i>Quercus phellos</i>                     | willow oak                 |
|                 | <i>Quercus velutina</i>                    | black oak                  |
| Black locust    | <i>Robinia pseudoacacia</i>                | black locust               |
| Other hardwoods | <i>Acer negundo</i>                        | boxelder                   |
|                 | <i>Acer pensylvanicum</i>                  | striped maple              |
|                 | <i>Acer platanoides</i>                    | Norway maple               |
|                 | <i>Ailanthus altissima</i>                 | ailanthus                  |
|                 | <i>Amelanchier</i> sp.                     | serviceberry               |
|                 | <i>Asimina triloba</i>                     | pawpaw                     |
|                 | <i>Betula alleghaniensis</i>               | yellow birch               |
|                 | <i>Betula lenta</i>                        | sweet birch                |
|                 | <i>Betula nigra</i>                        | river birch                |
|                 | <i>Carpinus caroliniana</i>                | American hornbeam          |
|                 | <i>Castanea dentata</i>                    | American chestnut          |
|                 | <i>Catalpa</i> sp.                         | catalpa                    |
|                 | <i>Celtis occidentalis</i>                 | hackberry                  |
|                 | <i>Cercis canadensis</i>                   | eastern redbud             |
|                 | <i>Cornus florida</i>                      | flowering dogwood          |
|                 | <i>Crataegus</i> sp.                       | hawthorn                   |
|                 | <i>Diospyros virginiana</i>                | common persimmon           |
|                 | <i>Fraxinus profunda</i>                   | pumpkin ash                |
|                 | <i>Gleditsia triacanthos</i>               | honeylocust                |
|                 | <i>Ilex opaca</i>                          | American holly             |
|                 | <i>Juglans cinerea</i>                     | butternut                  |
|                 | <i>Maclura pomifera</i>                    | Osage-orange               |
|                 | <i>Magnolia acuminata</i>                  | cucumbertree               |
|                 | <i>Magnolia virginiana</i>                 | sweetbay                   |
|                 | <i>Malus</i> sp.                           | apple                      |
|                 | <i>Morus</i> sp.                           | mulberry                   |
|                 | <i>Morus alba</i>                          | white mulberry             |
|                 | <i>Morus rubra</i>                         | red mulberry               |
|                 | <i>Ostrya virginiana</i>                   | eastern hophornbeam        |
|                 | <i>Oxydendrum arboreum</i>                 | sourwood                   |
|                 | <i>Paulownia tomentosa</i>                 | Paulownia                  |
|                 | <i>Platanus occidentalis</i>               | sycamore                   |
|                 | <i>Populus deltoides</i>                   | eastern cottonwood         |
|                 | <i>Populus grandidentata</i>               | bigtooth aspen             |
|                 | <i>Populus tremuloides</i>                 | quaking aspen              |
|                 | <i>Prunus</i> sp.                          | cherry, plum               |
|                 | <i>Prunus pensylvanica</i>                 | pin cherry                 |
|                 | <i>Prunus virginiana</i>                   | chokecherry                |
|                 | <i>Quercus</i> sp.                         | oak                        |
|                 | <i>Quercus ilicifolia</i>                  | bear oak, scrub oak        |
|                 | <i>Quercus marilandica</i>                 | blackjack oak              |
|                 | <i>Salix</i> sp.                           | willow                     |
|                 | <i>Salix nigra</i>                         | black willow               |
|                 | <i>Sassafras albidum</i>                   | sassafras                  |
|                 | <i>Tilia americana</i>                     | American basswood          |
|                 | <i>Ulmus</i> sp.                           | elm                        |
|                 | <i>Ulmus americana</i>                     | American elm               |
|                 | <i>Ulmus rubra</i>                         | slippery elm               |
|                 | unknown                                    | unknown or not listed tree |

## Tree Species of Maryland (as encountered on field plots)

| Scientific name ***                          | Common name(s)       | Occurrence** |
|--|----------------------|--------------|
| <b>Softwoods</b>                             |                      |              |
| <i>Chamaecyparis thyoides</i> (L.) B.S.P.    | Atlantic white-cedar | r            |
| <i>Juniperus virginiana</i> L.               | eastern redcedar     | r            |
| <i>Picea abies</i> (L.) Karst.               | Norway spruce        | r            |
| <i>Pinus echinata</i> Mill.                  | shortleaf pine       | vr           |
| <i>Pinus pungens</i> Lamb.                   | Table Mountain pine  | vr           |
| <i>Pinus resinosa</i> Ait.                   | red pine             | c            |
| <i>Pinus rigida</i> Mill.                    | pitch pine           | vr           |
| <i>Pinus serotina</i> Michx.                 | pond pine            | vr           |
| <i>Pinus strobus</i> L.                      | eastern white pine   | c            |
| <i>Pinus sylvestris</i> L.                   | Scotch pine          | r            |
| <i>Pinus taeda</i> L.                        | loblolly pine        | vc           |
| <i>Pinus virginiana</i> Mill.                | Virginia pine        | c            |
| <i>Taxodium distichum</i> (L.) Rich.         | baldcypress          | vr           |
| <i>Tsuga canadensis</i> (L.) Carr.           | eastern hemlock      | r            |
| <b>Hardwoods</b>                             |                      |              |
| <i>Acer negundo</i> L. *                     | boxelder             | c            |
| <i>Acer pensylvanicum</i> L. *               | striped maple        | vr           |
| <i>Acer rubrum</i> L.                        | red maple            | vc           |
| <i>Acer saccharinum</i> L.                   | silver maple         | r            |
| <i>Acer saccharum</i> Marsh.                 | sugar maple          | c            |
| <i>Acer platanoides</i> L.                   | Norway maple         | vr           |
| <i>Ailanthus altissima</i> (Mill.) Swingle * | ailanthus            | r            |
| <i>Amelanchier</i> sp. Medic. *              | serviceberry         | r            |
| <i>Asimina triloba</i> (L.) Dunal *          | pawpaw               | vr           |
| <i>Betula alleghaniensis</i> Britton         | yellow birch         | r            |
| <i>Betula lenta</i> L.                       | sweet birch          | c            |
| <i>Betula nigra</i> L.                       | river birch          | r            |
| <i>Carpinus caroliniana</i> Walt. *          | American hornbeam    | r            |
| <i>Carya cordiformis</i> (Wangenh.) K. Koch  | bitternut hickory    | r            |
| <i>Carya glabra</i> (Mill.) Sweet            | pignut hickory       | c            |
| <i>Carya ovata</i> (Mill.) K. Koch           | shagbark hickory     | r            |
| <i>Carya tomentosa</i> (Poir.) Nutt.         | mockernut hickory    | c            |
| <i>Castanea dentata</i> (Marsh.) Borkh. *    | American chestnut    | vr           |
| <i>Catalpa</i> sp. Scop. *                   | catalpa              | vr           |
| <i>Celtis occidentalis</i> L.                | hackberry            | r            |
| <i>Cercis canadensis</i> L. *                | eastern redbud       | vr           |
| <i>Cornus florida</i> L. *                   | flowering dogwood    | r            |
| <i>Crataegus</i> sp. L. *                    | hawthorn             | vr           |
| <i>Diospyros virginiana</i> L.               | common persimmon     | c            |
| <i>Fagus grandifolia</i> Ehrh.               | American beech       | c            |
| <i>Fraxinus americana</i> L.                 | white ash            | c            |
| <i>Fraxinus nigra</i> Marsh.                 | black ash            | vr           |
| <i>Fraxinus pennsylvanica</i> Marsh.         | green ash            | r            |
| <i>Fraxinus profunda</i> (Bush) Bush         | pumpkin ash          | vr           |
| <i>Gleditsia triacanthos</i> L.              | honeylocust          | vr           |
| <i>Ilex opaca</i> Ait.                       | American holly       | c            |
| <i>Juglans cinerea</i> L.                    | butternut            | vr           |
| <i>Juglans nigra</i> L.                      | black walnut         | r            |
| <i>Liquidambar styraciflua</i> L.            | sweetgum             | vc           |
| <i>Liriodendron tulipifera</i> L.            | yellow-poplar        | vc           |
| <i>Maclura pomifera</i> (Raf.) Schneid. *    | Osage-orange         | r            |

## Tree Species of Maryland (continued)

| Scientific name ***  | Common name(s)                | Occurrence** |
|--|-------------------------------|--------------|
| <i>Magnolia acuminata</i> L.                                   | cucumbertree                  | vr           |
| <i>Magnolia virginiana</i> L.                                  | sweetbay                      | r            |
| <i>Malus</i> sp. Mill. *                                       | apple                         | r            |
| <i>Morus alba</i> L. *   | white mulberry                | vr           |
| <i>Morus rubra</i> L. *  | red mulberry                  | vr           |
| <i>Nyssa aquatica</i> L.                                       | water tupelo                  | vr           |
| <i>Nyssa sylvatica</i> Marsh.                                  | blackgum                      | c            |
| <i>Ostrya virginiana</i> (Mill.) K. Koch *                     | eastern hophornbeam           | r            |
| <i>Paulownia tomentosa</i> (Thunb.)<br>Sieb. & Zucc. ex Steud. | Paulownia                     | vr           |
| <i>Platanus occidentalis</i> L.                                | sycamore                      | c            |
| <i>Populus deltoides</i> Bartr. ex Marsh.                      | eastern cottonwood            | r            |
| <i>Populus grandidentata</i> Michx.                            | bigtooth aspen                | r            |
| <i>Populus tremuloides</i> Michx.                              | quaking aspen                 | vr           |
| <i>Prunus</i> sp. L.   | cherry, plum                  | vr           |
| <i>Prunus pensylvanica</i> L. f. *                             | pin cherry                    | r            |
| <i>Prunus serotina</i> Ehrh.                                   | black cherry                  | c            |
| <i>Prunus virginiana</i> L. *                                  | chokecherry                   | vr           |
| <i>Quercus</i> sp. L. *  | oak                           | vr           |
| <i>Quercus alba</i> L.   | white oak                     | vc           |
| <i>Quercus bicolor</i> Willd.                                  | swamp white oak               | r            |
| <i>Quercus coccinea</i> Muenchh.                               | scarlet oak                   | c            |
| <i>Quercus ellipsoidalis</i> E. J. Hill                        | northern pin oak              | vr           |
| <i>Quercus falcata</i> var. <i>falcata</i> Michx.              | southern red oak              | c            |
| <i>Quercus falcata</i> var. <i>pagodaefolia</i> Ell.           | cherrybark oak, swamp red oak | r            |
| <i>Quercus ilicifolia</i> Wangenh.                             | bear oak, scrub oak           | vr           |
| <i>Quercus imbricaria</i> Michx.                               | shingle oak                   | vr           |
| <i>Quercus lyrata</i> Walt.                                    | overcup oak                   | vr           |
| <i>Quercus marilandica</i> Muenchh. *                          | blackjack oak                 | vr           |
| <i>Quercus michauxii</i> Nutt.                                 | swamp chestnut oak            | r            |
| <i>Quercus nigra</i> L.  | water oak                     | r            |
| <i>Quercus palustris</i> Muenchh.                              | pin oak                       | r            |
| <i>Quercus phellos</i> L.                                      | willow oak                    | c            |
| <i>Quercus prinus</i> L.                                       | chestnut oak                  | c            |
| <i>Quercus rubra</i> L.  | northern red oak              | c            |
| <i>Quercus stellata</i> Wangenh.                               | post oak                      | r            |
| <i>Quercus velutina</i> Lam.                                   | black oak                     | c            |
| <i>Robinia pseudoacacia</i> L.                                 | black locust                  | c            |
| <i>Salix</i> sp. L. *  | willow                        | vr           |
| <i>Salix nigra</i> Marsh.                                      | black willow                  | r            |
| <i>Sassafras albidum</i> (Nutt.) Nees *                        | sassafras                     | c            |
| <i>Tilia americana</i> L.                                      | American basswood             | r            |
| <i>Ulmus</i> sp. L.  | elm                           | vr           |
| <i>Ulmus americana</i> L.                                      | American elm                  | r            |
| <i>Ulmus rubra</i> Muhl.                                       | slippery elm                  | r            |
| *  | unknown or not listed tree    | vr           |

\*\*\* Names according to: Little, Elbert L., Jr. 1979. Checklist of United States Trees (native and naturalized). Agric. Handb. 541. Washington, DC: U.S Department of Agriculture. 375 p.

\*\* Occurrence is based on the proportion of the species among all live trees 5 inches d.b.h. or greater encountered on forest survey field plots: vr = very rare (<0.05%), r = rare (0.05 to 0.49%), c = common (0.5 to 4.9%), and vc = very common (>5.0%).

\* Noncommercial species.

## Tree-Grade Classification

### HARDWOOD TREE GRADES

| GRADING FACTOR  | TREE GRADE 1          | TREE GRADE 2       | TREE GRADE 3 |
|---|-----------------------|--------------------|--------------|
| Length of grading zone (feet)   | Butt 16               | Butt 16            | Butt 16      |
| Length of grading section <sup>a</sup> (feet)   | Best 12               | Best 12            | Best 12      |
| Minimum d.b.h. (inches)   | 16 <sup>b</sup>       | 13                 | 11           |
| Minimum diameter inside bark at top of grading section (inches)                                   | 13 <sup>b</sup> 16 20 | 11 <sup>c</sup> 12 | 8            |
| Clear cuttings on 3rd best face <sup>d</sup>  |                       |                    |              |
| minimum length (feet)   | 7 5 3                 | 3 3                | 2            |
| number on face (maximum)  | 2                     | 2 3                | unlimited    |
| yield in face length (minimum)  | 5/6                   | 4/6                | 3/6          |
| Cull deduction, including crook and sweep but excluding shake, maximum within grading section (%) | 9                     | 9 <sup>e</sup>     | 50           |

- <sup>a</sup> Whenever a 14- or 16-foot section of the butt 16-foot log is better than the best 12-foot section, the grade of the longer section will become the grade of the tree. This longer section, when used, is the basis for determining the grading factors, such as diameter and cull deduction.
- <sup>b</sup> In basswood and ash, diameter inside bark at the top of the grading section may be 12 inches and d.b.h. may be 15 inches.
- <sup>c</sup> Grade 2 trees can be 10 inches diameter inside bark at the top of the grading section if otherwise meeting surface requirements for small grade 1's.
- <sup>d</sup> A clear cutting is a portion of a face free of defects, extending the width of the face. A face is one-fourth of the surface of the grading section as divided lengthwise.
- <sup>e</sup> Fifteen percent crook and sweep, or 40 percent total cull deduction are permitted in grade 2 if size and surface of grading section qualify as grade 1. If rot shortens the required clear cuttings to the extent of dropping the butt log to grade 2, do not drop the tree's grade to 3 unless the cull deduction for rot is greater than 40 percent.



## Tree-Grade Classification (continued)

### TIE AND TIMBER GRADE

| GRADE FACTORS                                    | SPECIFICATIONS  |
|--|---|
| Position in tree                                 | Butts and uppers  |
| Scaling diameter (inches)                        | 8 inches d.i.b. and larger  |
| Length, without trim (feet)                      | 12 feet and larger  |
| Clear cuttings                                   | no requirements: not graded on cutting basis  |
| Maximum sweep allowance                          | One-fourth d.i.b. of small end for half logs, and one-half d.i.b. for logs 16 feet long   |
| Sound surface defects permitted<br>Single knots  | Any number, if none has an average collar <sup>a</sup> diameter that is more than one third of the log diameter at the point of occurrence  |
| Sound surface defects permitted<br>Whorled knots | Any number, provided the sum of the collar diameters does not exceed one third the log diameter at the point of occurrence  |
| Sound surface defects permitted<br>Knots         | Any number not exceeding knot specifications, if they do not extend more than 3 inches into the contained tie or timber   |
| Unsound surface defects permitted <sup>b</sup>   | Any number and size if they do not extend into contained tie or timber. If they extend into the contained tie or timber, they shall not exceed size, number, and depth of limits for sound defects. |

<sup>a</sup> Knot collar is the average of the vertical and horizontal diameters of the limb, or knot swelling, as measured flush with the surface of the log.

<sup>b</sup> Interior defects are not visible in standing trees. They are considered in grading cut logs. No interior defects are permitted except one shake not more than one-third the width of the contained tie or timber, and one split not more than 5 inches long.

## Tree-Grade Classification (continued)

### EASTERN WHITE PINE TREE GRADE SPECIFICATIONS

| GRADING FACTOR   | TREE GRADE 1  | TREE GRADE 2   | TREE GRADE 3  | TREE GRADE 4  |
|--|---|--|---|---|
| (1) Minimum d.b.h. (inches)  | 9   | 9  | 9   | 9   |
| (2) Maximum weevil injury in butt 16 ft section (number)             | None  | None   | 2 injuries  | No limit  |
| (3) Minimum face requirements on butt 16 ft section                  | Two full length or four 50% length good faces <sup>1</sup> ( In addition, knots on balance of faces shall not exceed size limitations for grade 2 sections) | NO GOOD FACES REQUIRED. Maximum diameter of knots on three best faces: <b>SOUND RED KNOTS</b> not to exceed 1/6 of scaling dia. or 3 inch maximum <sup>2</sup> <b>DEAD OR BLACK KNOTS</b> , including overgrown knots, not to exceed 1/12 scaling dia. and 1-1/2 inch max. | NO GOOD FACES REQUIRED. Maximum diameter of knots on three best faces: <b>SOUND RED KNOTS</b> not to exceed 1/3 of scaling diameter or 5 inch maximum <sup>2</sup> <b>DEAD OR BLACK KNOTS</b> , including overgrown knots, not to exceed 1/6 scaling dia. and 2-1/2 inch max. | Includes all trees not qualifying for grade 3 or better and judged to have at least 1/3 of their gross volume in sound wood suitable for manufacture into standard lumber |
| (4) Maximum sweep or crook in butt 16 ft section (percent)           | 20  | 30   | 40  | No limit  |
| (5) Maximum total scaling deduction in butt 16 ft. section (percent) | 50  | 50   | 50  | No limit  |

After the tentative grade of the section is established from face examination, the section will be reduced one grade whenever the following defects are evident:

**CONKS, PUNK KNOTS, AND PINE BORER DAMAGE ON THE SURFACE OF THE SECTION<sup>3</sup>**  
 Degrade one grade if present on one face. Degrade two grades if present on two faces. Degrade three grades if present on three or four faces.

(7) If the final grade of the grading section is 1, 2, or 3, examine the tree for weevil injuries in the merchantable stem *above* 16 ft. If the total apparent weevil injuries exceed three, degrade the tree one grade below the section grade<sup>3</sup>. Otherwise the tree grade equals the final section grade.

<sup>1</sup> Trees under 16 inches d.b.h. require four full length good faces.

<sup>2</sup> Scaling diameter is estimated at the top of the 16-foot grading section.

<sup>3</sup> No tree will be designated below Grade 4 unless net tree scale is less than one-third of gross tree scale.

## Tree-Grade Classification (continued)

### SOUTHERN PINE TREE GRADES

**Grade 1** - trees with 3 or 4 clear faces on the 16-foot grading section.

**Grade 2** - trees with 1 or 2 clear faces on the 16-foot grading section.

**Grade 3** - trees with no clear faces on the 16-foot grading section.

After the tentative grade is established, the tree will be reduced one grade for each of the following:

(1) **Sweep.** Degrade any tentative Grade 1 or 2 tree one grade if sweep in the lower 12 feet of the grading section amounts to 3 or more inches and equals or exceeds one-fourth the diameter at breast height.

(2) **Heart rot.** Degrade any tentative Grade 1 or 2 tree one grade if conks, punk knots, or other evidence of advanced heart rot is found anywhere on the tree stem.

**NOTE:** No tree can be degraded below Grade 3, provided the total scaling deductions for sweep and/or rot do not exceed two-thirds the gross scale of the tree. Trees with total scaling deductions in excess of two-thirds are classified as cull.

A face is one-fourth the circumference of the 16-foot grading section and extends the full length of the grading section. Clear faces are those free from knots measuring more than 1/2 inch in diameter, overgrown knots of any size, and holes more than 1/4 inch in diameter. Faces may be rotated, if necessary, to obtain the maximum number of clear faces on the grading section.

One-log trees are graded by using the Southern Pine Log Grades. This is recommended because the entire merchantable volume of the tree is contained in the graded section. The log grading system gives a more accurate prediction of the lumber grade-yields for such trees than would the tree grading system.

### SPRUCE, FIR, CEDAR, TAMARACK, AND HEMLOCK LOGS

| Minimum Merchantability Specifications for Grade One Logs |                               |                 |                 |   |
|---|-------------------------------|-----------------|-----------------|---|
| D.I.B. <sup>1</sup>                                       | LENGTH <sup>2</sup>           | TOTAL DEDUCTION | SWEEP PERMITTED | OTHER REQUIREMENTS  |
| 6" - 12"  | 12' - 16' in 2 foot multiples | 50 %            | 25 %            | Sound knots not over 2" in diameter permitted. Shake permitted up to 20 % of gross scale if not combined with other serious defect. |
| 13"+  | 12' - 16' in 2 foot multiples | 50 %            | 25 %            | Sound knots not over 3" in diameter permitted. Shake permitted up to 20 % of gross scale if not combined with other serious defect. |

<sup>1</sup> ...at small end of log.

<sup>2</sup> ...without trim.

### TREE GRADE 5 (ALL SPECIES)

Any tree which does not make tree grade 1,2, or 3 (or 4) but is still a merchantable tree.

## **Data-Quality Standards for Plots**

A quality assurance (QA) program ensures that a final product will meet the desired level of accuracy and precision. Within the quality assurance program, quality control (QC) procedures are designed to maintain data quality within an acceptable range. There are three basic aspects of a QA program: error prevention, assessment and appraisal, and correction.

Error prevention is achieved by developing standardized methods, establishing measurement quality objectives and data quality standards, and applying calibration techniques and training. Assessment and appraisal are accomplished by performing audits, debriefings and data validation and verification; soliciting field personnel feedback; and a remeasurement program for QC data collection. Correction uses all of the information from the prevention and assessment and appraisal components to make improvements in the measurement system.

Our periodic resource inventories are designed to satisfy specified precision objectives. Much of our resource information comes from a statistically sound but small sample of actual ground conditions that were selected to satisfy the precision objectives. While there is no guarantee that the data are error free, it is obvious that field errors must be kept to a minimum. Establishing and adhering to a QA program can accomplish this objective. By setting standards and monitoring fieldwork, we can detect and correct, prevent, or eliminate the repetition of most errors.

After the initial training period for crew members, field supervisors periodically inspect fieldwork. The number of errors detected will be used to determine frequency of inspections. All instances of error are analyzed and discussed with the crew. Supervisors monitor progress and goals, and minimum acceptable performance levels are adjusted as conditions warrant. In addition, a percentage of all plots are subjected to a second measurement as part of the QC program.

Tolerance levels are set depending on the type of data item. When an item is obtained by measurements that can be repeated with uniform results by several individuals, narrow tolerance limits that define acceptable data are set. Some items require subjective evaluation; the breadth of the tolerance limits depends on the degree of subjectivity. When an item requires an objective answer, crews are expected to complete the item as best they can, based on their training, instructions received, and observation on the plot, with zero tolerance for error.

## **Quality Control Remeasurement Program**

The following procedures were followed to obtain the QC tree-data results.

### *Sample Size*

- \* Four percent random sample of all plots in state is selected.

### *Data Collection*

- \* Crew 1 visits a plot.
- \* The plot is identified as QC by field supervisor.
- \* Crew 2 visits the same plot.

### *Compilation*

- \* Trees from both data sets (Crew 1 and 2) are extracted from forested subplots.
- \* Trees are matched between sets based on the following criteria:
  - 1) Tree numbers for all remeasure trees.
  - 2) Distance, azimuth, and species for all new or ingrowth trees.

*Comparison*

- \* Tolerance limits from state field instructions are used to compare the tree data between Crew 1 and Crew 2.
- \* Four tree-data item classes are grouped prior to applying tolerance.
  - 1) Six condition classes are reduced to three: live, dead, or snag.
  - 2) Six tree grades are reduced to four: merchantable, tie and timber, cull, and dead.
  - 3) Six tree classes are reduced to five: preferred and acceptable, rough, rotten, dead, and snag.

4) Three merchantability classes are reduced to two: sound and unsound.

- \* Values are within tolerance (1x) or exceed tolerance by a factor of 2, 3 or 4 times (2x, 3x, or 4x).

*Results*

Tree-data items are presented as:

- \* Percentage of data within tolerance limits.
- \* Number of times data exceeded tolerance limits.

**Delaware and Maryland QA Tree-Data Results from 83 Subplots\***

| Tree-data item        | Tolerance          | Percentage of data within tolerance |     |      |     | Number of times data exceeded tolerance |     |     |     | Records |
|-----------------------|--------------------|-------------------------------------|-----|------|-----|---|-----|-----|-----|---------|
|                       |                    | @1x                                 | @2x | @3x  | @4x | @1x                                     | @2x | @3x | @4x |         |
| Species               | No tolerance       | 93%                                 |     |      |     | 42                                      |     |     |     | 635     |
| Trees (missed)        | No tolerance       | 98%                                 |     |      |     | (10)                                    |     |     |     | 645     |
| Horizontal distance   | ± 0.2 feet         | 78%                                 | 92% | 96%  |     | 142                                     | 53  | 27  |     | 635     |
| Azimuth               | ± 2 degrees        | 57%                                 | 79% | 90%  |     | 272                                     | 132 | 66  |     | 635     |
| Tree history          | No tolerance       | 98%                                 |     |      |     | 3                                       |     |     |     | 147     |
| Diameter              | ± 0.1 inch         | 90%                                 | 93% | 95%  |     | 64                                      | 41  | 30  |     | 622     |
| Ecotype               | No tolerance       | 99%                                 |     |      |     | 5                                       |     |     |     | 635     |
| Condition             | No tolerance**     | 92%                                 |     |      |     | 48                                      |     |     |     | 622     |
| Tree grade            | No tolerance**     | 90%                                 |     |      |     | 18                                      |     |     |     | 181     |
| Saw length            | ± 4 feet           | 44%                                 | 62% | 77%  | 92% | 102                                     | 69  | 42  | 15  | 181     |
| Bole length           | ± 4 feet           | 47%                                 | 76% | 88%  | 94% | 307                                     | 138 | 69  | 33  | 576     |
| Total length          | ± 10 feet          | 83%                                 | 98% | 100% |     | 106                                     | 12  | 3   |     | 622     |
| Board foot cull       | ± 10%              | 80%                                 | 92% | 96%  | 97% | 36                                      | 15  | 8   | 6   | 181     |
| Board foot soundness  | ± 1 class          | 88%                                 | 91% | 92%  | 93% | 21                                      | 17  | 15  | 13  | 181     |
| Cubic foot cull       | ± 10%              | 78%                                 | 93% | 97%  | 98% | 124                                     | 41  | 19  | 14  | 576     |
| Cubic foot soundness  | ± 1 class          | 92%                                 | 93% | 94%  | 95% | 47                                      | 43  | 37  | 30  | 576     |
| Crown ratio           | ± 1 class          | 91%                                 | 99% |      |     | 50                                      | 8   |     |     | 576     |
| Crown class           | No tolerance       | 71%                                 |     |      |     | 166                                     |     |     |     | 576     |
| General damage        | Variable tolerance | 94%                                 |     |      |     | 32                                      |     |     |     | 576     |
| Special damage        | Variable tolerance | 87%                                 |     |      |     | 154                                     |     |     |     | 1,152   |
| Tree class            | No tolerance**     | 94%                                 |     |      |     | 35                                      |     |     |     | 622     |
| Merchantability class | No tolerance**     | 94%                                 |     |      |     | 35                                      |     |     |     | 576     |

\* Because of the small number of samples, Delaware and Maryland data cannot be reported individually. Twenty-four plots visited with forest land

\*\* Item codes have been grouped for comparison

## Metric Equivalents

1 acre = 4,046.86 square meters  
1 acre = 0.404686 hectares  
1,000 acres = 404.686 hectares  
1,000,000 acres = 404,686 hectares  
1 board foot = 0.00348 cubic meters  
1 board foot = 3,480 cubic centimeters  
1,000 board feet = 3.48 cubic meters  
1,000,000 board feet = 3,480 cubic meters  
1 cubic foot = 0.028317 cubic meters  
1,000 cubic feet = 28.317 cubic meters  
1,000,000 cubic feet = 28,317 cubic meters  
1 cord (wood, bark, and air space) = 3.6246 cubic meters  
1 cord (solid wood, pulpwood) = 2.4069 cubic meters  
1 cord (solid wood, other than pulpwood) = 2.2654 cubic meters  
1,000 cords (pulpwood) = 2,406.9 cubic meters  
1,000 cords (other products) = 2,265.4 cubic meters  
1 inch = 2.54 centimeters or 0.0254 meters  
1 foot = 30.48 centimeters or 0.3048 meters  
1 mile = 1.609 kilometers  
1 square foot = 929.03 square centimeters  
1 square foot = 0.0929 square meters  
1 square foot per acre basal area = 0.229568 square meters per hectare  
1 cubic foot per acre = 0.0699 cubic meters per hectare  
1 ton = 907.1848 kilograms  
1,000 tons = 907.1848 metric tons  
Breast height = 1.4 meters above ground level

Although 1,000 board feet are theoretically equivalent to 2.36 cubic meters, this is true only when a board foot is actually a piece of wood with a volume 1/12 of a cubic foot. The International 1/4-inch log rule is used by the USDA Forest Service in the East to estimate the product potential in board feet. The reliability of the estimate obtained by conversion will vary with the size of the log measure. The conversion given here, 3.48 cubic meters, is based on the cubic volume of a log 16 feet long and 15 inches in diameter inside bark (d.i.b.) at the small end. This conversion could be used for average comparisons when accuracy of 10 percent is acceptable. Because the board foot unit is not a true measure of wood volume and because products other than dimension lumber are becoming important, this unit may eventually be phased out and replaced by the cubic meter.

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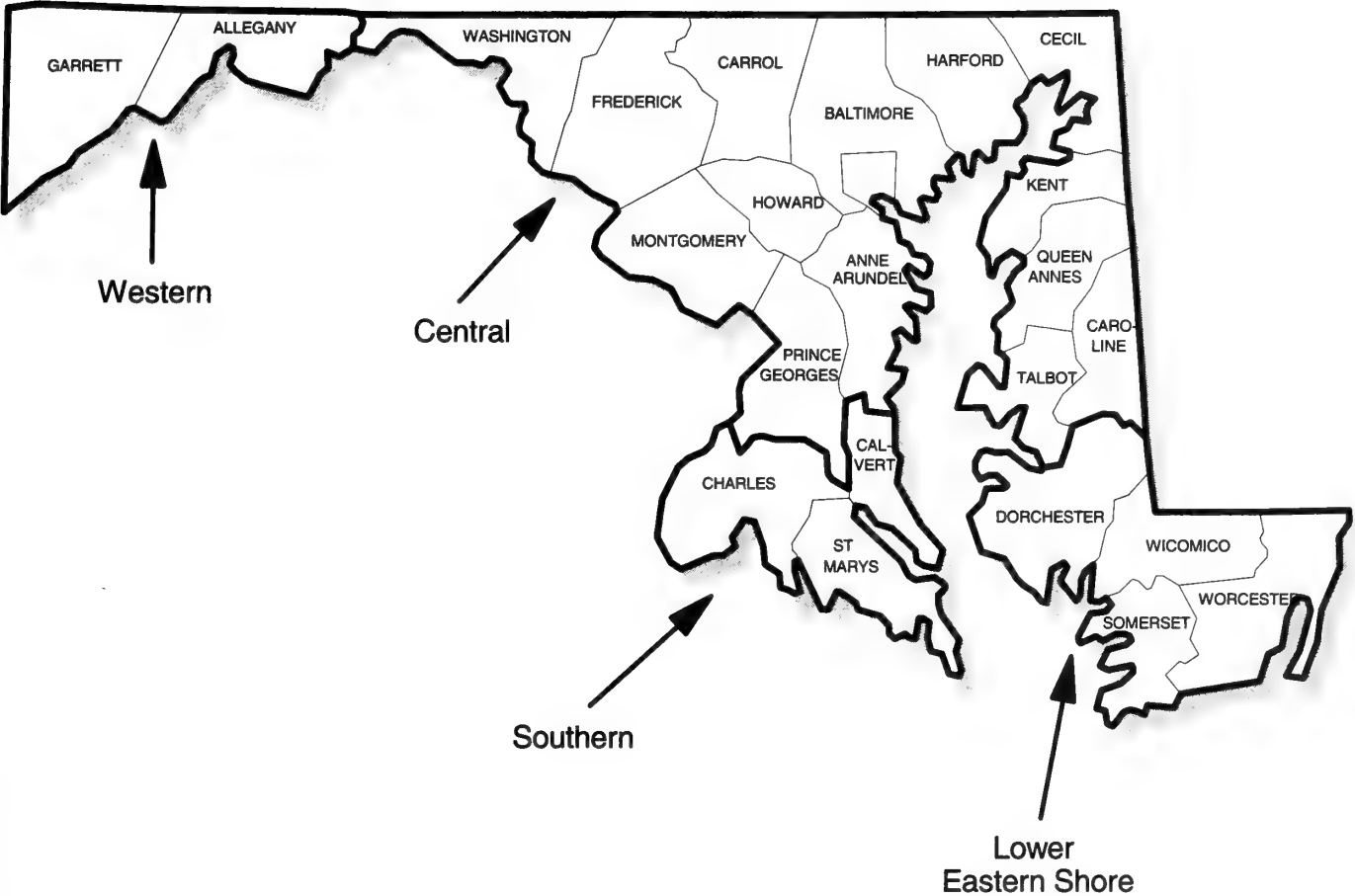
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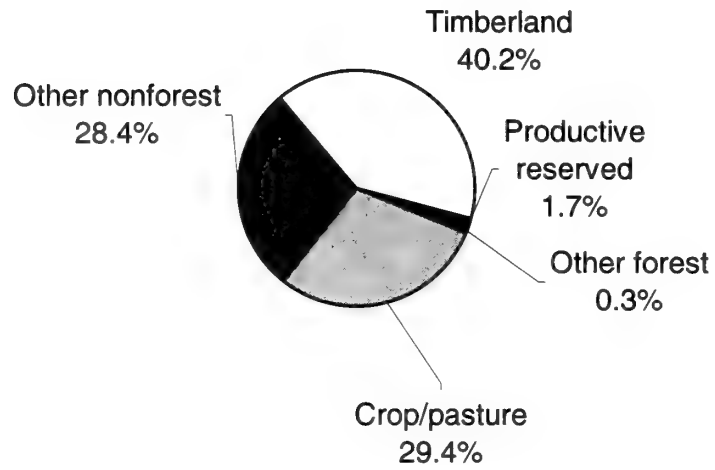
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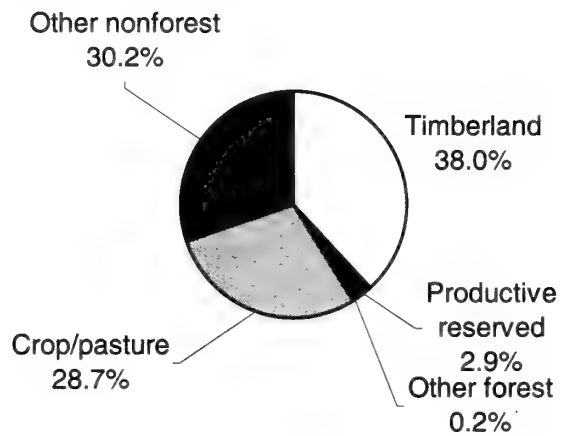
# MARYLAND STATE TABLES



# Area by land class, Maryland, 1986 and 1999



**1986**



**1999**

# Area of forest land by forest-type group, Maryland, 1999

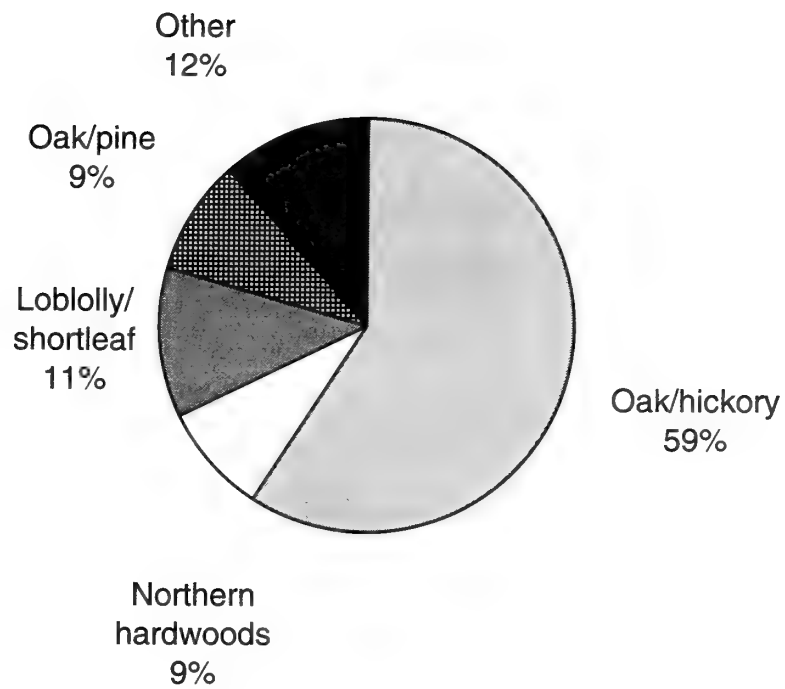


Table 1.--Land area by land class, Maryland, 1999<sup>a</sup>

(In thousands of acres)<sup>b</sup>

| Land class                         | Area           |            |                |            |
|------------------------------------|----------------|------------|----------------|------------|
|                                    | 1986           | Percent    | 1999           | Percent    |
| <b>Timberland:</b>                 |                |            |                |            |
| Rural                              | 2,421.7        | 39         | 2,233.5        | 36         |
| Urban                              | 100.5          | 1          | 138.5          | 2          |
| <b>Total timberland</b>            | <b>2,522.2</b> | <b>40</b>  | <b>2,371.9</b> | <b>38</b>  |
| <b>Forested land:</b>              |                |            |                |            |
| Productive reserved                | 104.3          | 2          | 179.8          | 3          |
| Other forest land <sup>c</sup>     | 18.9           | <1         | 14.1           | <1         |
| <b>Total forest land</b>           | <b>2,645.3</b> | <b>42</b>  | <b>2,565.8</b> | <b>41</b>  |
| <b>Nonforest land:</b>             |                |            |                |            |
| Cropland                           | 1,502.4        | 24         | 1,575.7        | 25         |
| Pasture                            | 334.1          | 5          | 225.6          | 4          |
| Other                              | 1,726.2        | 28         | 1,875.8        | 30         |
| Noncensus water                    | 47.7           | 1          | 12.8           | <1         |
| <b>Total nonforest land</b>        | <b>3,610.4</b> | <b>58</b>  | <b>3,690.0</b> | <b>59</b>  |
| <b>Total land area<sup>d</sup></b> | <b>6,255.8</b> | <b>100</b> | <b>6,255.8</b> | <b>100</b> |

<sup>a</sup> In this and other tables, a zero indicates that the data are negligible or the condition was not encountered in the sample. A dash indicates that the condition is not possible under current Forest Service definitions.

<sup>b</sup> Rows and columns in all tables may not sum due to rounding.

<sup>c</sup> "Other forest land" formerly known as unproductive forest land.

<sup>d</sup> Source: 1990 United States Department of Commerce, Bureau of Census.

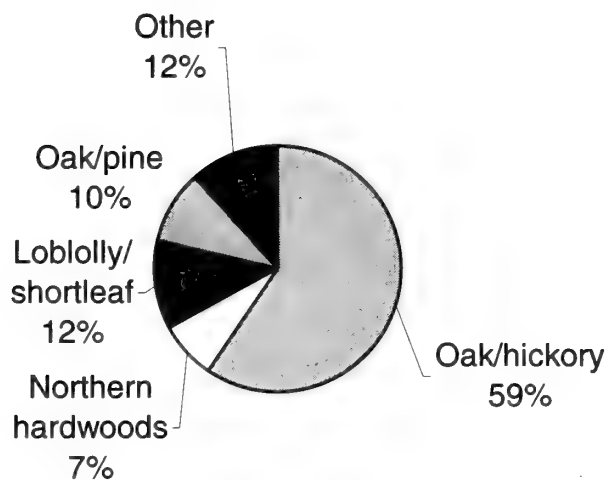


Table 2.--Area of all forest land by forest type group and forest land class, Maryland, 1999

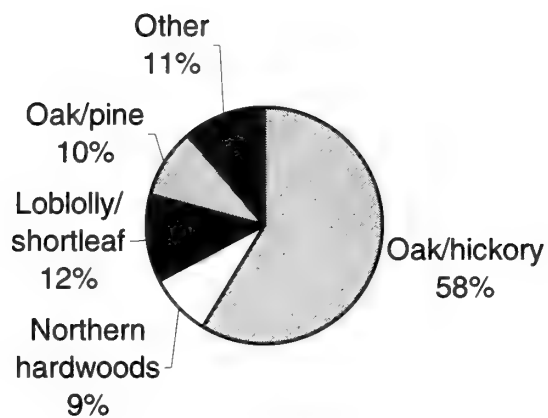
(In thousands of acres)

| Forest-type group        | Land class     |              |                  |                     |                       |                   | Total forest   | SE         |
|--------------------------|----------------|--------------|------------------|---------------------|-----------------------|-------------------|----------------|------------|
|                          | Rural          | Urban        | Total timberland | Productive reserved | Unproductive reserved | Other forest land |                |            |
| White/red pine           | 21.8           | 2.9          | 24.7             | .0                  | .0                    | .0                | 24.7           | 42.3       |
| Spruce/fir               | 3.2            | .0           | 3.2              | 1.2                 | .0                    | .0                | 4.4            | 78.2       |
| Loblolly/shortleaf       | 271.5          | 11.1         | 282.6            | 12.0                | .0                    | .0                | 294.6          | 10.9       |
| Oak/pine                 | 225.1          | 4.5          | 229.6            | .0                  | .0                    | .0                | 229.6          | 14.4       |
| Oak/hickory              | 1,294.9        | 93.0         | 1,387.9          | 130.5               | .0                    | .0                | 1,518.4        | 3.8        |
| Oak/gum/cypress          | 124.8          | .0           | 124.8            | .0                  | .0                    | 7.5               | 132.3          | 19.4       |
| Elm/ash/red maple        | 95.4           | 12.8         | 108.2            | 21.1                | .0                    | 6.6               | 135.8          | 19.8       |
| Northern hardwoods       | 194.9          | 14.2         | 209.1            | 15.1                | .0                    | .0                | 224.2          | 14.8       |
| Aspen/birch              | 1.8            | .0           | 1.8              | .0                  | .0                    | .0                | 1.8            | 100.0      |
| <b>Total, all groups</b> | <b>2,233.5</b> | <b>138.5</b> | <b>2,371.9</b>   | <b>179.8</b>        | <b>.0</b>             | <b>14.1</b>       | <b>2,565.8</b> | <b>1.5</b> |
| SE                       | 2.2            | 17.9         | 1.9              | 16.6                | .0                    | 64.6              | 1.5            |            |

# Area of timberland by forest-type group, Maryland, 1986 and 1999

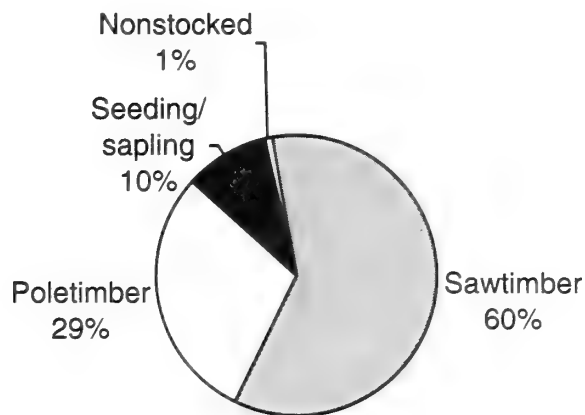


**1986**

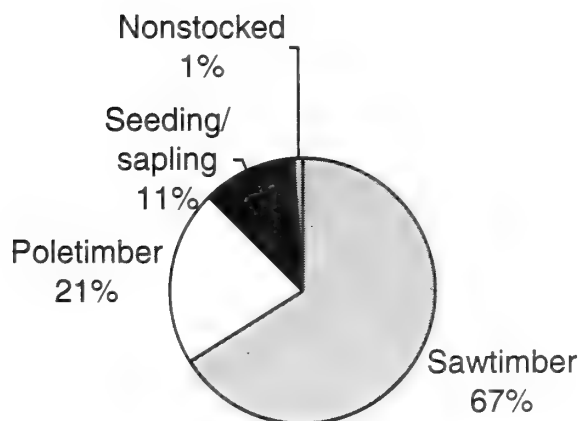


**1999**

# Area of timberland by stand-size class, Maryland, 1986 and 1999



**1986**



**1999**

Table 3.--Area of timberland by forest type, forest-type group, and stand-size class, Maryland, 1986

(In thousands of acres)

| Forest type                    | Stand-size class |             |                      |             | All classes | SE    |
|--------------------------------|------------------|-------------|----------------------|-------------|-------------|-------|
|                                | Saw-timber       | Pole-timber | Sapling and seedling | Non-stocked |             |       |
| Red pine                       | 3.0              | 9.9         | 4.4                  | .0          | 17.3        | 45.5  |
| White pine                     | 4.4              | 8.0         | .0                   | .0          | 12.4        | 57.9  |
| Hemlock                        | 6.9              | .0          | .0                   | .0          | 6.9         | 71.0  |
| Scotch pine                    | .0               | .0          | .0                   | 12.9        | 12.9        | 100.0 |
| White/red pine group           | 14.3             | 17.9        | 4.4                  | 12.9        | 49.5        | 35.2  |
| Loblolly pine                  | 95.8             | 78.6        | 11.9                 | .0          | 186.4       | 13.1  |
| Virginia pine                  | 52.4             | 48.4        | 4.9                  | .0          | 105.8       | 19.5  |
| Loblolly/shortleaf group       | 148.3            | 127.1       | 16.8                 | .0          | 292.2       | 10.8  |
| Virginia pine/oak              | 53.1             | 26.7        | 5.9                  | .0          | 85.7        | 20.6  |
| Loblolly pine/hardwood         | 100.0            | 21.6        | 30.2                 | .0          | 151.8       | 16.5  |
| Other oak/pine                 | 5.9              | .0          | .0                   | .0          | 5.9         | 100.0 |
| Oak/pine group                 | 159.0            | 48.3        | 36.2                 | .0          | 243.4       | 12.7  |
| Post, black, or bear oak       | 5.4              | 3.5         | .0                   | .0          | 8.9         | 68.5  |
| Chestnut oak                   | 56.4             | 10.3        | .0                   | .0          | 66.8        | 23.8  |
| White oak/red oak/hickory      | 80.7             | 57.6        | .0                   | .0          | 138.3       | 16.5  |
| White oak                      | 26.9             | 47.5        | .0                   | .0          | 74.4        | 23.9  |
| Northern red oak               | 13.0             | .0          | .0                   | .0          | 13.0        | 50.9  |
| Y-poplar/wh. oak/no.red oak    | 22.9             | 14.1        | .0                   | .0          | 37.0        | 34.3  |
| Black locust                   | 5.1              | 24.0        | 11.9                 | .0          | 41.0        | 31.3  |
| Sweetgum/yellow-poplar         | 41.4             | 21.6        | 8.5                  | .0          | 71.6        | 23.9  |
| Black walnut                   | 3.0              | .0          | .0                   | .0          | 3.0         | 100.0 |
| Yellow-poplar                  | 53.7             | 2.9         | .0                   | .0          | 56.6        | 36.8  |
| Scarlet oak                    | 16.7             | .0          | .0                   | .0          | 16.7        | 46.5  |
| Sassafras/persimmon            | .0               | 10.4        | 14.9                 | .0          | 25.4        | 48.8  |
| Red maple/central hardwood     | 21.3             | 19.1        | 6.5                  | .0          | 46.9        | 26.3  |
| Mixed central hardwoods        | 622.7            | 212.8       | 67.3                 | .0          | 902.8       | 5.8   |
| Oak/hickory group              | 969.2            | 423.9       | 109.2                | .0          | 1,502.3     | 3.7   |
| Swamp chsnt oak/cherrybark oak | 13.9             | 21.6        | .0                   | .0          | 35.4        | 36.6  |
| Sweetgm/nuttall oak/willow oak | 41.8             | 18.0        | 13.4                 | .0          | 73.2        | 21.0  |
| Baldcypress/water tupelo       | 4.2              | 3.4         | .0                   | .0          | 7.6         | 71.1  |
| Sweetbay/swamp tupelo/red mple | 17.7             | 3.0         | 10.6                 | .0          | 31.3        | 32.8  |
| Oak/gum/cypress group          | 77.5             | 46.0        | 24.0                 | .0          | 147.6       | 15.1  |
| Black ash/Amer. elm/red maple  | 29.3             | 5.6         | 4.1                  | .0          | 39.0        | 32.8  |

Table 3.--continued

(In thousands of acres)

| Forest type                    | Stand-size class |             |                      |             | All classes | SE    |
|--------------------------------|------------------|-------------|----------------------|-------------|-------------|-------|
|                                | Saw-timber       | Pole-timber | Sapling and seedling | Non-stocked |             |       |
| Red maple(lowland)             | 8.0              | 3.4         | 8.8                  | .0          | 20.2        | 55.3  |
| Red maple(upland)              | 3.1              | .0          | .0                   | .0          | 3.1         | 100.0 |
| River birch/sycamore           | 22.7             | .0          | .0                   | .0          | 22.7        | 49.8  |
| Willow                         | .0               | 1.7         | .0                   | .0          | 1.7         | 100.0 |
| Sycamore/pecan/American elm    | 7.2              | 1.5         | .0                   | .0          | 8.8         | 61.8  |
| Elm/ash/red maple group        | 70.4             | 12.3        | 12.9                 | .0          | 95.6        | 22.3  |
| Sugar maple/beech/yellow birch | 34.4             | 13.3        | 3.5                  | .0          | 51.1        | 25.6  |
| Black Cherry                   | 3.0              | 17.2        | 18.1                 | 4.8         | 43.1        | 26.2  |
| Red maple/northern hardwoods   | .0               | 9.0         | .0                   | .0          | 9.0         | 59.0  |
| Pin cherry/reverting field     | .0               | .0          | 8.2                  | .0          | 8.2         | 72.7  |
| Mixed northern hardwoods       | 35.8             | 22.7        | 18.8                 | .0          | 77.2        | 24.7  |
| Northern hardwoods group       | 73.2             | 62.2        | 48.5                 | 4.8         | 188.7       | 13.7  |
| Aspen                          | .0               | 3.0         | .0                   | .0          | 3.0         | 100.0 |
| Aspen/birch group              | .0               | 3.0         | .0                   | .0          | 3.0         | 100.0 |
| All forest types               | 1,511.9          | 740.7       | 252.0                | 17.7        | 2,522.2     | 2.0   |
| SE                             | 3.9              | 6.3         | 12.9                 | 77.8        | 2.0         |       |

Table 4.--Area of timberland by forest type, forest-type group, and stand-size class, Maryland, 1999

(In thousands of acres)

| Forest type                    | Stand-size class |             |                      |             | All classes | SE    |
|--------------------------------|------------------|-------------|----------------------|-------------|-------------|-------|
|                                | Saw-timber       | Pole-timber | Sapling and seedling | Non-stocked |             |       |
| Red pine                       | 6.1              | 8.5         | .0                   | .0          | 14.6        | 57.5  |
| White pine                     | 9.2              | .0          | .9                   | .0          | 10.0        | 61.4  |
| White/red pine group           | 15.2             | 8.5         | .9                   | .0          | 24.7        | 42.3  |
| Norway spruce                  | 3.2              | .0          | .0                   | .0          | 3.2         | 100.0 |
| Spruce/fir group               | 3.2              | .0          | .0                   | .0          | 3.2         | 100.0 |
| Loblolly pine                  | 123.0            | 66.7        | 55.4                 | .0          | 245.1       | 11.8  |
| Virginia pine                  | 19.8             | 17.7        | .0                   | .0          | 37.4        | 30.9  |
| Loblolly/shortleaf group       | 142.8            | 84.4        | 55.4                 | .0          | 282.6       | 10.9  |
| Eastern redcedar/hardwood      | 5.4              | .0          | 12.6                 | .0          | 18.0        | 58.4  |
| Shortleaf pine/oak             | .0               | .0          | 1.8                  | .0          | 1.8         | 100.0 |
| Virginia pine/oak              | 36.4             | 10.3        | .0                   | .0          | 46.7        | 31.6  |
| Loblolly pine/hardwood         | 91.1             | 60.1        | 11.9                 | .0          | 163.1       | 17.3  |
| Oak/pine group                 | 132.9            | 70.4        | 26.3                 | .0          | 229.6       | 14.4  |
| Post, black, or bear oak       | 10.4             | 2.3         | .0                   | .0          | 12.7        | 58.4  |
| Chestnut oak                   | 31.8             | 15.6        | .0                   | .0          | 47.4        | 32.0  |
| White oak/red oak/hickory      | 112.6            | 14.9        | .0                   | 6.4         | 133.9       | 20.2  |
| White oak                      | 53.4             | 19.5        | .0                   | .0          | 72.8        | 28.9  |
| Northern red oak               | 28.2             | .0          | .0                   | .0          | 28.2        | 47.8  |
| Y-poplar/wh. oak/no.red oak    | 50.3             | .0          | .0                   | .0          | 50.3        | 32.4  |
| Black locust                   | 13.8             | 7.5         | 16.7                 | .0          | 38.0        | 34.5  |
| Sweetgum/yellow-poplar         | 46.6             | 13.7        | 12.3                 | .0          | 72.6        | 26.8  |
| Black walnut                   | .0               | 1.1         | .0                   | 1.2         | 2.2         | 70.4  |
| Yellow-poplar                  | 55.5             | 1.4         | 2.9                  | 1.5         | 61.3        | 25.4  |
| Hawthorn/reverting field       | .0               | .0          | .3                   | 1.9         | 2.1         | 88.9  |
| Scarlet oak                    | 22.3             | .0          | .0                   | .0          | 22.3        | 46.2  |
| Sassafras/persimmon            | .0               | 5.7         | 10.5                 | .0          | 16.3        | 53.2  |
| Red maple/central hardwood     | 32.9             | 12.1        | .0                   | .0          | 45.0        | 34.6  |
| Mixed central hardwoods        | 550.5            | 149.2       | 75.1                 | 7.9         | 782.7       | 7.0   |
| Oak/hickory group              | 1,008.4          | 242.9       | 117.8                | 18.8        | 1,387.9     | 4.3   |
| Swamp chsnt oak/cherrybark oak | 18.8             | 3.2         | 3.2                  | .0          | 25.2        | 40.1  |
| Sweetgm/nuttall oak/willow oak | 44.3             | 6.8         | 12.0                 | .0          | 63.1        | 28.4  |
| Baldcypress/water tupelo       | 7.0              | 2.5         | .0                   | .0          | 9.4         | 57.8  |
| Sweetbay/swamp tupelo/red mple | 25.5             | 1.6         | .0                   | .0          | 27.1        | 44.8  |

Table 4.--continued

(In thousands of acres)

| Forest type                    | Stand-size class |             |                      |             | All classes | SE    |
|--------------------------------|------------------|-------------|----------------------|-------------|-------------|-------|
|                                | Saw-timber       | Pole-timber | Sapling and seedling | Non-stocked |             |       |
| Oak/gum/cypress group          | 95.6             | 14.1        | 15.2                 | .0          | 124.8       | 19.6  |
| Black ash/Amer. elm/red maple  | 19.7             | 11.9        | .0                   | .0          | 31.6        | 47.0  |
| Red maple(lowland)             | 13.4             | .0          | 7.9                  | 2.8         | 24.2        | 45.9  |
| Red maple(upland)              | 14.6             | 1.8         | .0                   | .0          | 16.4        | 54.7  |
| River birch/sycamore           | 12.5             | 8.7         | 4.1                  | .0          | 25.4        | 49.0  |
| Willow                         | .0               | .0          | 1.3                  | .0          | 1.3         | 100.0 |
| Sycamore/pecan/American elm    | 5.2              | .0          | .0                   | .0          | 5.2         | 89.1  |
| American elm/green ash         | 1.8              | 2.3         | .0                   | .0          | 4.0         | 71.2  |
| Elm/ash/red maple group        | 67.2             | 24.8        | 13.4                 | 2.8         | 108.2       | 22.7  |
| Sugar maple/beech/yellow birch | 51.2             | 4.9         | 6.0                  | .0          | 62.2        | 32.8  |
| Black cherry                   | 10.9             | 25.2        | 13.1                 | .0          | 49.2        | 32.3  |
| Red maple/northern hardwoods   | 11.3             | 18.0        | .0                   | .9          | 30.2        | 46.9  |
| Pin cherry/reverting field     | .0               | .0          | 3.0                  | .0          | 3.0         | 81.1  |
| Mixed northern hardwoods       | 36.1             | 11.0        | 17.4                 | .0          | 64.5        | 28.2  |
| Northern hardwoods group       | 109.6            | 59.1        | 39.5                 | .9          | 209.1       | 15.5  |
| Aspen                          | .0               | 1.8         | .0                   | .0          | 1.8         | 100.0 |
| Aspen/birch group              | .0               | 1.8         | .0                   | .0          | 1.8         | 100.0 |
| All forest types               | 1,575.0          | 506.1       | 268.4                | 22.5        | 2,371.9     | 1.9   |
| SE                             | 3.6              | 9.5         | 13.1                 | 37.9        | 1.9         |       |

Table 5.--Area of timberland by forest-type group and ownership class, Maryland, 1999

(In thousands of acres)

| Forest-type group  | Ownership class |              |                 |               | All classes | SE    |
|--------------------|-----------------|--------------|-----------------|---------------|-------------|-------|
|                    | National Forest | Other public | Forest industry | Other private |             |       |
| White/red pine     | .0              | .0           | .0              | 24.7          | 24.7        | 42.3  |
| Spruce/fir         | .0              | 3.2          | .0              | .0            | 3.2         | 100.0 |
| Loblolly/shortleaf | .0              | 34.6         | 57.3            | 190.7         | 282.6       | 10.9  |
| Oak/pine           | .0              | 21.5         | 10.8            | 197.3         | 229.6       | 14.4  |
| Oak/hickory        | .0              | 281.5        | 9.9             | 1,096.5       | 1,387.9     | 4.3   |
| Oak/gum/cypress    | .0              | 8.5          | 7.4             | 108.9         | 124.8       | 19.6  |
| Elm/ash/red maple  | .0              | 32.0         | 2.6             | 73.5          | 108.2       | 22.7  |
| Northern hardwoods | .0              | 40.3         | .0              | 168.8         | 209.1       | 15.5  |
| Aspen/birch        | .0              | .0           | .0              | 1.8           | 1.8         | 100.0 |
| All groups         | .0              | 421.6        | 88.0            | 1,862.3       | 2,371.9     | 1.9   |
| SE                 | .0              | 10.7         | 24.6            | 3.2           | 1.9         |       |

Table 6.--Area of timberland by forest-type group and stand-size class, Maryland, 1999

(In thousands of acres)

| Forest-type group  | Stand-size class |             |                      |             | All classes | SE    |
|--------------------|------------------|-------------|----------------------|-------------|-------------|-------|
|                    | Saw-timber       | Pole-timber | Sapling and seedling | Non-stocked |             |       |
| White/red pine     | 15.2             | 8.5         | .9                   | .0          | 24.7        | 42.3  |
| Spruce/fir         | 3.2              | .0          | .0                   | .0          | 3.2         | 100.0 |
| Loblolly/shortleaf | 142.8            | 84.4        | 55.4                 | .0          | 282.6       | 10.9  |
| Oak/pine           | 132.9            | 70.4        | 26.3                 | .0          | 229.6       | 14.4  |
| Oak/hickory        | 1,008.4          | 242.9       | 117.8                | 18.8        | 1,387.9     | 4.3   |
| Oak/gum/cypress    | 95.6             | 14.1        | 15.2                 | .0          | 124.8       | 19.6  |
| Elm/ash/red maple  | 67.2             | 24.8        | 13.4                 | 2.8         | 108.2       | 22.7  |
| Northern hardwoods | 109.6            | 59.1        | 39.5                 | .9          | 209.1       | 15.5  |
| Aspen/birch        | .0               | 1.8         | .0                   | .0          | 1.8         | 100.0 |
| All groups         | 1,575.0          | 506.1       | 268.4                | 22.5        | 2,371.9     | 1.9   |
| SE                 | 3.6              | 9.5         | 13.1                 | 37.9        | 1.9         |       |



Table 7.--Area of timberland by board-foot stand-volume class and ownership class, Maryland, 1999

(In thousands of acres)

| Stand-volume class | Ownership class |              |                 |               | All classes | SE   |
|--------------------|-----------------|--------------|-----------------|---------------|-------------|------|
|                    | National Forest | Other public | Forest industry | Other private |             |      |
| 0 - 1,999          | .0              | 96.0         | 57.8            | 439.9         | 593.8       | 7.9  |
| 2000 - 3,999       | .0              | 72.8         | 5.2             | 290.1         | 368.1       | 11.9 |
| 4000 - 5,999       | .0              | 54.0         | 6.1             | 261.3         | 321.4       | 12.6 |
| 6000 - 7,999       | .0              | 64.2         | 2.2             | 236.7         | 303.1       | 12.7 |
| 8000 - 9,999       | .0              | 23.8         | .0              | 154.8         | 178.6       | 17.5 |
| 10000+             | .0              | 110.8        | 16.6            | 479.6         | 607.0       | 7.6  |
| All classes        | .0              | 421.6        | 88.0            | 1,862.3       | 2,371.9     | 1.9  |
| SE                 | .0              | 10.7         | 24.6            | 3.2           | 1.9         |      |

Table 8. Area of timberland by ownership class and stocking class of growing-stock trees, Maryland, 1999

(In thousands of acres)

| Ownership class | Stocking class |                |                    |               |              | All classes | SE   |
|-----------------|----------------|----------------|--------------------|---------------|--------------|-------------|------|
|                 | Nonstocked     | Poorly stocked | Moderately stocked | Fully stocked | Over-stocked |             |      |
| Other public    | 6.3            | 81.2           | 114.3              | 203.6         | 16.3         | 421.6       | 10.7 |
| Forest industry | .0             | 11.2           | 28.3               | 33.9          | 14.6         | 88.0        | 24.6 |
| Other private   | 29.0           | 169.1          | 576.3              | 981.4         | 106.6        | 1,862.3     | 3.2  |
| All classes     | 35.2           | 261.5          | 718.9              | 1,218.9       | 137.5        | 2,371.9     | 1.9  |
| SE              | 30.1           | 14.2           | 7.4                | 5.0           | 16.6         | 1.9         |      |

Table 9.--Area of timberland by forest-type group and cubic-foot stand-volume class, Maryland, 1999

(In thousands of acres)

| Forest-type group  | Stand-volume class (cubic feet per acre) |         |           |           |           |       | All classes | SE    |
|--------------------|--|---------|-----------|-----------|-----------|-------|-------------|-------|
|                    | 0-499                                    | 500-999 | 1000-1499 | 1500-1999 | 2000-2499 | 2500+ |             |       |
| White/red pine     | .9                                       | .0      | 6.3       | 6.1       | .0        | 11.4  | 24.7        | 42.3  |
| Spruce/fir         | .0                                       | .0      | .0        | .0        | .0        | 3.2   | 3.2         | 100.0 |
| Loblolly/shortleaf | 61.9                                     | 24.8    | 32.3      | 47.3      | 35.5      | 80.8  | 282.6       | 10.9  |
| Oak/pine           | 31.0                                     | 10.6    | 26.6      | 38.7      | 44.5      | 78.2  | 229.6       | 14.4  |
| Oak/hickory        | 123.9                                    | 142.0   | 146.0     | 228.7     | 208.9     | 538.4 | 1,387.9     | 4.3   |
| Oak/gum/cypress    | 12.5                                     | 14.9    | 7.3       | 19.2      | 11.9      | 59.1  | 124.8       | 19.6  |
| Elm/ash/red maple  | 16.8                                     | 26.1    | 11.7      | 20.1      | 1.5       | 32.1  | 108.2       | 22.7  |
| Northern hardwoods | 48.8                                     | 25.6    | 46.7      | 17.1      | 30.9      | 39.9  | 209.1       | 15.5  |
| Aspen/birch        | .0                                       | .0      | .0        | .0        | 1.8       | .0    | 1.8         | 100.0 |
| All groups         | 295.7                                    | 244.0   | 276.8     | 377.2     | 335.1     | 843.2 | 2,371.9     | 1.9   |
| SE                 | 12.1                                     | 14.3    | 13.6      | 11.1      | 12.5      | 6.3   | 1.9         |       |

Table 10.--Area of timberland by forest-type group and board-foot stand-volume class, Maryland, 1999

(In thousands of acres)

| Forest-type group  | Stand-volume class (board feet per acre) |           |           |           |           |        | All classes | SE    |
|--------------------|--|-----------|-----------|-----------|-----------|--------|-------------|-------|
|                    | 0-1999                                   | 2000-3999 | 4000-5999 | 6000-7999 | 8000-9999 | 10000+ |             |       |
| White/red pine     | .9                                       | 5.3       | 11.4      | 4.3       | .0        | 2.9    | 24.7        | 42.3  |
| Spruce/fir         | .0                                       | .0        | .0        | .0        | .0        | 3.2    | 3.2         | 100.0 |
| Loblolly/shortleaf | 125.1                                    | 28.3      | 37.0      | 28.1      | 14.8      | 49.4   | 282.6       | 10.9  |
| Oak/pine           | 50.0                                     | 43.2      | 35.7      | 49.2      | 10.9      | 40.7   | 229.6       | 14.4  |
| Oak/hickory        | 283.5                                    | 185.5     | 205.7     | 171.7     | 142.8     | 398.7  | 1,387.9     | 4.3   |
| Oak/gum/cypress    | 22.1                                     | 16.4      | 5.5       | 13.7      | 8.3       | 58.9   | 124.8       | 19.6  |
| Elm/ash/red maple  | 39.3                                     | 15.0      | 12.6      | 9.6       | 1.9       | 29.8   | 108.2       | 22.7  |
| Northern hardwoods | 72.9                                     | 72.6      | 13.6      | 26.6      | .0        | 23.5   | 209.1       | 15.5  |
| Aspen/birch        | .0                                       | 1.8       | .0        | .0        | .0        | .0     | 1.8         | 100.0 |
| All groups         | 593.8                                    | 368.1     | 321.4     | 303.1     | 178.6     | 607.0  | 2,371.9     | 1.9   |
| SE                 | 7.9                                      | 11.9      | 12.6      | 12.7      | 17.5      | 7.6    | 1.9         |       |

Table 11.--Area of timberland by forest-type group and stocking class of all live trees, Maryland, 1986

(In thousands of acres)

| Forest-type group  | Stocking class |                |                    |               |              | All classes | SE    |
|--------------------|----------------|----------------|--------------------|---------------|--------------|-------------|-------|
|                    | Nonstocked     | Poorly stocked | Moderately stocked | Fully stocked | Over-stocked |             |       |
| White/red pine     | 12.9           | 6.8            | 15.0               | 7.3           | 7.5          | 49.5        | 35.2  |
| Loblolly/shortleaf | .0             | 8.2            | 89.2               | 170.2         | 24.5         | 292.2       | 10.8  |
| Oak/pine           | .0             | 11.1           | 69.9               | 162.4         | .0           | 243.4       | 12.7  |
| Oak/hickory        | .0             | 91.3           | 472.7              | 865.7         | 72.7         | 1,502.3     | 3.7   |
| Oak/gum/cypress    | .0             | 17.1           | 52.4               | 56.4          | 21.7         | 147.6       | 15.1  |
| Elm/ash/red maple  | .0             | 12.4           | 45.1               | 35.5          | 2.6          | 95.6        | 22.3  |
| Northern hardwoods | 4.8            | 41.6           | 52.5               | 74.9          | 14.8         | 188.7       | 13.7  |
| Aspen/birch        | .0             | .0             | 3.0                | .0            | .0           | 3.0         | 100.0 |
| All groups         | 17.7           | 188.6          | 799.7              | 1,372.5       | 143.8        | 2,522.2     | 2.0   |
| SE                 | 77.8           | 16.2           | 6.5                | 4.0           | 16.3         | 2.0         |       |

Table 12.--Area of timberland by forest-type group and stocking class of all live trees, Maryland, 1999

(In thousands of acres)

| Forest-type group  | Stocking class |                |                    |               |              | All classes | SE    |
|--------------------|----------------|----------------|--------------------|---------------|--------------|-------------|-------|
|                    | Nonstocked     | Poorly stocked | Moderately stocked | Fully stocked | Over-stocked |             |       |
| White/red pine     | .0             | 6.3            | 9.8                | 4.3           | 4.3          | 24.7        | 42.3  |
| Spruce/fir         | .0             | .0             | 3.2                | .0            | .0           | 3.2         | 100.0 |
| Loblolly/shortleaf | .0             | 9.5            | 65.4               | 152.5         | 55.3         | 282.6       | 10.9  |
| Oak/pine           | .0             | 10.4           | 42.5               | 153.9         | 22.9         | 229.6       | 14.4  |
| Oak/hickory        | 18.8           | 77.8           | 396.3              | 815.4         | 79.5         | 1,387.9     | 4.3   |
| Oak/gum/cypress    | .0             | 14.1           | 23.6               | 76.2          | 11.0         | 124.8       | 19.6  |
| Elm/ash/red maple  | 2.8            | 12.1           | 43.4               | 41.0          | 8.9          | 108.2       | 22.7  |
| Northern hardwoods | .9             | 49.9           | 57.5               | 93.7          | 7.1          | 209.1       | 15.5  |
| Aspen/birch        | .0             | .0             | .0                 | .0            | 1.8          | 1.8         | 100.0 |
| All groups         | 22.5           | 180.2          | 641.6              | 1,336.9       | 190.7        | 2,371.9     | 1.9   |
| SE                 | 37.9           | 17.2           | 8.3                | 4.6           | 14.8         | 1.9         |       |

Table 13.--Area of timberland by forest-type group and stocking class of growing-stock trees, Maryland, 1986

(In thousands of acres)

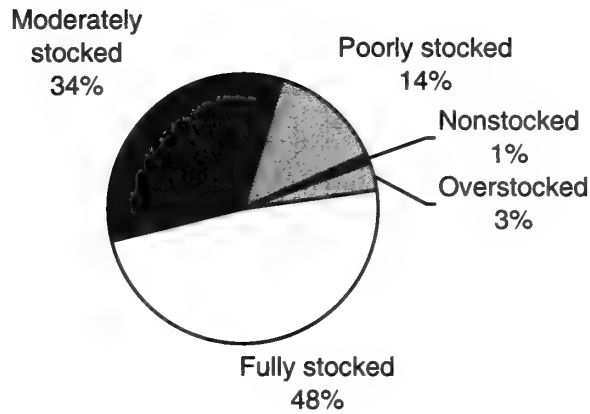
| Forest-type group  | Stocking class |                |                    |               |              | All classes | SE    |
|--------------------|----------------|----------------|--------------------|---------------|--------------|-------------|-------|
|                    | Nonstocked     | Poorly stocked | Moderately stocked | Fully stocked | Over-stocked |             |       |
| White/red pine     | 12.9           | 11.2           | 14.3               | 3.6           | 7.5          | 49.5        | 35.2  |
| Loblolly/shortleaf | .0             | 16.3           | 84.5               | 166.8         | 24.5         | 292.2       | 10.8  |
| Oak/pine           | .0             | 22.8           | 72.9               | 147.7         | .0           | 243.4       | 12.7  |
| Oak/hickory        | 3.0            | 169.8          | 537.7              | 754.8         | 37.1         | 1,502.3     | 3.7   |
| Oak/gum/cypress    | .0             | 21.6           | 58.9               | 56.8          | 10.3         | 147.6       | 15.1  |
| Elm/ash/red maple  | .0             | 29.3           | 36.7               | 29.6          | .0           | 95.6        | 22.3  |
| Northern hardwoods | 11.7           | 72.4           | 42.0               | 58.9          | 3.6          | 188.7       | 13.7  |
| Aspen/birch        | .0             | 3.0            | .0                 | .0            | .0           | 3.0         | 100.0 |
| All groups         | 27.6           | 346.5          | 846.9              | 1,218.2       | 83.0         | 2,522.2     | 2.0   |
| SE                 | 54.2           | 11.1           | 6.3                | 4.5           | 20.5         | 2.0         |       |

Table 14.--Area of timberland by forest-type group and stocking class of growing-stock trees, Maryland, 1999

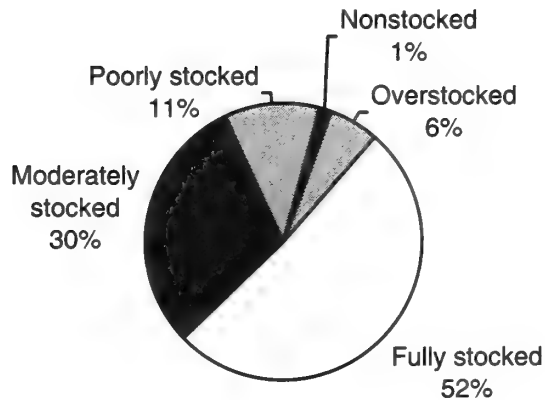
(In thousands of acres)

| Forest-type group  | Stocking class |                |                    |               |              | All classes | SE    |
|--------------------|----------------|----------------|--------------------|---------------|--------------|-------------|-------|
|                    | Nonstocked     | Poorly stocked | Moderately stocked | Fully stocked | Over-stocked |             |       |
| White/red pine     | .0             | 6.3            | 9.8                | 4.3           | 4.3          | 24.7        | 42.3  |
| Spruce/fir         | .0             | .0             | 3.2                | .0            | .0           | 3.2         | 100.0 |
| Loblolly/shortleaf | .0             | 11.9           | 63.0               | 158.4         | 49.3         | 282.6       | 10.9  |
| Oak/pine           | .0             | 10.4           | 45.4               | 159.2         | 14.6         | 229.6       | 14.4  |
| Oak/hickory        | 24.5           | 134.6          | 476.2              | 707.0         | 45.7         | 1,387.9     | 4.3   |
| Oak/gum/cypress    | .0             | 21.0           | 19.6               | 76.2          | 8.0          | 124.8       | 19.6  |
| Elm/ash/red maple  | 2.8            | 30.1           | 25.4               | 43.2          | 6.7          | 108.2       | 22.7  |
| Northern hardwoods | 7.9            | 47.3           | 76.2               | 70.6          | 7.1          | 209.1       | 15.5  |
| Aspen/birch        | .0             | .0             | .0                 | .0            | 1.8          | 1.8         | 100.0 |
| All groups         | 35.2           | 261.5          | 718.9              | 1,218.9       | 137.5        | 2,371.9     | 1.9   |
| SE                 | 30.1           | 14.2           | 7.4                | 5.0           | 16.6         | 1.9         |       |

# Area of timberland by stocking class of growing-stock trees, Maryland, 1986 and 1999



**1986**



**1999**

Table 15.--Area of timberland by stand-size class, forest-type group, and basal-area class (all live trees), Maryland, 1999

(In thousands of acres)

| Forest-type group        | Basal area class (square feet per acre) |       |         |         |         |         | All classes | SE      |       |
|--------------------------|---|-------|---------|---------|---------|---------|-------------|---------|-------|
|                          | 0-49                                    | 50-99 | 100-149 | 150-199 | 200-249 | 250-299 |             |         | 300+  |
| <b>Sawtimber:</b>        |   |       |         |         |         |         |             |         |       |
| White/red pine           | .0                                      | 12.4  | .0      | 2.9     | .0      | .0      | .0          | 15.2    | 56.5  |
| Spruce/fir               | .0                                      | .0    | 3.2     | .0      | .0      | .0      | .0          | 3.2     | 100.0 |
| Loblolly/shortleaf       | 5.7                                     | 25.1  | 53.7    | 41.7    | 15.1    | 1.5     | .0          | 142.8   | 16.4  |
| Oak/pine                 | .0                                      | 8.3   | 76.8    | 43.1    | 2.2     | 1.3     | 1.1         | 132.9   | 19.2  |
| Oak/hickory              | 20.0                                    | 290.9 | 484.5   | 150.4   | 51.1    | 9.3     | 2.2         | 1,008.4 | 5.5   |
| Oak/gum/cypress          | .0                                      | 9.2   | 50.4    | 25.9    | 7.1     | .7      | 2.2         | 95.6    | 23.1  |
| Elm/ash/red maple        | .6                                      | 24.0  | 23.3    | 14.1    | 1.8     | 3.4     | .0          | 67.2    | 26.9  |
| Northern hardwoods       | 5.4                                     | 55.7  | 39.8    | 8.8     | .0      | .0      | .0          | 109.6   | 23.0  |
| All type groups          | 31.7                                    | 425.5 | 731.8   | 286.8   | 77.3    | 16.2    | 5.5         | 1,575.0 | 3.6   |
| <b>Poletimber:</b>       |   |       |         |         |         |         |             |         |       |
| White/red pine           | .0                                      | .0    | .0      | 4.3     | .0      | 4.3     | .0          | 8.5     | 68.1  |
| Loblolly/shortleaf       | .0                                      | 18.9  | 45.1    | 15.4    | 5.1     | .0      | .0          | 84.4    | 24.5  |
| Oak/pine                 | 10.8                                    | 9.8   | 34.7    | 15.0    | .0      | .0      | .0          | 70.4    | 27.7  |
| Oak/hickory              | 9.1                                     | 135.7 | 77.8    | 20.2    | .0      | .0      | .0          | 242.9   | 14.6  |
| Oak/gum/cypress          | 1.6                                     | 5.7   | 4.3     | .0      | 2.5     | .0      | .0          | 14.1    | 51.4  |
| Elm/ash/red maple        | 1.8                                     | 20.7  | .0      | 2.3     | .0      | .0      | .0          | 24.8    | 60.8  |
| Northern hardwoods       | 13.3                                    | 10.4  | 26.2    | 8.8     | .0      | .3      | .0          | 59.1    | 31.2  |
| Aspen/birch              | .0                                      | .0    | 1.8     | .0      | .0      | .0      | .0          | 1.8     | 100.0 |
| All type groups          | 36.7                                    | 201.2 | 190.0   | 66.0    | 7.6     | 4.6     | .0          | 506.1   | 9.5   |
| <b>Seedling/sapling:</b> |   |       |         |         |         |         |             |         |       |
| White/red pine           | .9                                      | .0    | .0      | .0      | .0      | .0      | .0          | .9      | 100.0 |
| Loblolly/shortleaf       | 35.6                                    | 12.3  | 7.4     | .0      | .0      | .0      | .0          | 55.4    | 26.8  |
| Oak/pine                 | 25.5                                    | .0    | .8      | .0      | .0      | .0      | .0          | 26.3    | 43.2  |
| Oak/hickory              | 67.4                                    | 42.8  | 2.5     | 5.1     | .0      | .0      | .0          | 117.8   | 22.1  |
| Oak/gum/cypress          | 6.8                                     | 5.2   | 3.2     | .0      | .0      | .0      | .0          | 15.2    | 60.1  |
| Elm/ash/red maple        | 3.6                                     | 8.3   | 1.5     | .0      | .0      | .0      | .0          | 13.4    | 49.2  |
| Northern hardwoods       | 28.6                                    | 10.9  | .0      | .0      | .0      | .0      | .0          | 39.5    | 35.6  |
| All type groups          | 168.3                                   | 79.5  | 15.5    | 5.1     | .0      | .0      | .0          | 268.4   | 13.1  |
| <b>Nonstocked:</b>       |   |       |         |         |         |         |             |         |       |
| Oak/hickory              | 18.8                                    | .0    | .0      | .0      | .0      | .0      | .0          | 18.8    | 42.5  |
| Elm/ash/red maple        | 2.8                                     | .0    | .0      | .0      | .0      | .0      | .0          | 2.8     | 100.0 |
| Northern hardwoods       | .9                                      | .0    | .0      | .0      | .0      | .0      | .0          | .9      | 100.0 |
| All type groups          | 22.5                                    | .0    | .0      | .0      | .0      | .0      | .0          | 22.5    | 37.9  |
| All classes              | 259.2                                   | 706.3 | 937.3   | 357.9   | 84.9    | 20.8    | 5.5         | 2,371.9 | 1.9   |
| SE                       | 13.2                                    | 7.7   | 6.3     | 10.8    | 19.6    | 41.7    | 52.8        | 1.9     |       |

Table 16.--Number of live trees on forest land by species and diameter group,  
Maryland, 1999

(In thousands of trees)

| Species                        | Diameter         |                |                |               | All Classes      |
|--------------------------------|------------------|----------------|----------------|---------------|------------------|
|                                | 1.0-4.9          | 5.0-10.9       | 11.0-20.9      | 21+           |                  |
| White/red pine                 | 2,152            | 6,683          | 941            | 32            | 9,808            |
| Loblolly pine                  | 84,631           | 39,894         | 11,624         | 212           | 136,361          |
| Virginia pine                  | 14,282           | 13,751         | 4,138          | 36            | 32,208           |
| Other yellow pines             | 0                | 227            | 207            | 0             | 434              |
| Other softwoods                | 11,674           | 3,454          | 880            | 100           | 16,108           |
| <b>Total softwoods</b>         | <b>112,740</b>   | <b>64,010</b>  | <b>17,789</b>  | <b>381</b>    | <b>194,920</b>   |
| Red maple                      | 203,466          | 43,271         | 12,945         | 1,819         | 261,501          |
| Sugar maple                    | 16,429           | 5,096          | 1,113          | 170           | 22,808           |
| Hickory                        | 27,731           | 8,549          | 3,153          | 274           | 39,707           |
| Beech                          | 32,791           | 7,304          | 2,393          | 315           | 42,804           |
| Sweetgum                       | 110,969          | 26,133         | 9,305          | 563           | 146,969          |
| Yellow-poplar                  | 41,163           | 10,672         | 10,706         | 2,476         | 65,017           |
| Blackgum                       | 73,008           | 12,905         | 2,617          | 138           | 88,668           |
| Ash-walnut-cherry              | 79,533           | 20,846         | 5,019          | 465           | 105,863          |
| Select white oaks              | 16,795           | 16,621         | 9,666          | 1,137         | 44,219           |
| Select red oaks                | 14,899           | 3,665          | 4,502          | 701           | 23,767           |
| Other white oaks               | 11,058           | 9,746          | 5,483          | 307           | 26,595           |
| Other red oaks                 | 33,084           | 14,526         | 12,498         | 1,500         | 61,608           |
| Blacklocust                    | 14,111           | 6,350          | 1,299          | 218           | 21,978           |
| Other hardwoods                | 161,672          | 23,554         | 4,287          | 855           | 190,369          |
| <b>Noncommercial hardwoods</b> | <b>168,812</b>   | <b>12,466</b>  | <b>1,397</b>   | <b>33</b>     | <b>182,708</b>   |
| <b>Total hardwoods</b>         | <b>1,005,521</b> | <b>221,706</b> | <b>86,384</b>  | <b>10,973</b> | <b>1,324,584</b> |
| <b>All species</b>             | <b>1,118,261</b> | <b>285,715</b> | <b>104,173</b> | <b>11,353</b> | <b>1,519,503</b> |

Table 17.--Number of live trees (1.0+ inches d.b.h.) on timberland by species and diameter class, Maryland, 1999

| Species                 | Diameter class (inches at breast height) |         |         |         |          |           |           |           |  |  |
|-------------------------|--|---------|---------|---------|----------|-----------|-----------|-----------|--|--|
|                         | 1.0-2.9                                  | 3.0-4.9 | 5.0-6.9 | 7.0-8.9 | 9.0-10.9 | 11.0-12.9 | 13.0-14.9 | 15.0-16.9 |  |  |
| (In thousands of trees) |  |         |         |         |          |           |           |           |  |  |
| White/red pine          | 1,243                                    | 909     | 2,129   | 2,881   | 1,545    | 560       | 191       | 101       |  |  |
| Loblolly pine           | 56,953                                   | 27,678  | 17,925  | 13,333  | 8,601    | 5,454     | 2,888     | 1,803     |  |  |
| Virginia pine           | 8,620                                    | 5,663   | 5,255   | 4,665   | 3,065    | 1,971     | 871       | 728       |  |  |
| Other yellow pines      | 0  | 0       | 80      | 118     | 29       | 29        | 69        | 0         |  |  |
| Other softwoods         | 7,976                                    | 3,032   | 1,672   | 1,039   | 613      | 283       | 300       | 86        |  |  |
| Total softwoods         | 74,792                                   | 37,281  | 27,061  | 22,037  | 13,854   | 8,297     | 4,319     | 2,717     |  |  |
| Red maple               | 148,917                                  | 42,821  | 21,501  | 12,064  | 7,892    | 5,037     | 3,494     | 1,644     |  |  |
| Sugar maple             | 11,311                                   | 4,026   | 2,109   | 1,569   | 834      | 776       | 166       | 115       |  |  |
| Hickory                 | 17,419                                   | 5,303   | 3,419   | 2,332   | 1,763    | 1,253     | 808       | 393       |  |  |
| Beech                   | 19,770                                   | 8,250   | 3,716   | 1,820   | 1,081    | 825       | 586       | 429       |  |  |
| Sweetgum                | 78,539                                   | 30,628  | 13,055  | 7,149   | 5,494    | 4,126     | 2,705     | 1,493     |  |  |
| Yellow-poplar           | 27,737                                   | 11,253  | 4,339   | 3,175   | 2,426    | 2,603     | 1,960     | 1,872     |  |  |
| Blackgum                | 53,877                                   | 12,899  | 7,128   | 2,725   | 2,101    | 986       | 636       | 428       |  |  |
| Ash-walnut-cherry       | 52,172                                   | 26,501  | 10,307  | 6,410   | 3,846    | 2,240     | 998       | 647       |  |  |
| Select white oaks       | 10,062                                   | 6,282   | 4,743   | 4,727   | 5,144    | 3,246     | 2,406     | 1,515     |  |  |
| Select red oaks         | 13,153                                   | 1,745   | 1,118   | 1,342   | 911      | 1,561     | 889       | 764       |  |  |
| Other white oaks        | 6,258                                    | 4,800   | 2,756   | 3,097   | 2,694    | 1,441     | 1,615     | 712       |  |  |
| Other red oaks          | 22,821                                   | 9,130   | 5,956   | 3,720   | 3,867    | 3,557     | 3,134     | 2,306     |  |  |
| Blacklocust             | 7,977                                    | 4,209   | 2,334   | 2,356   | 1,213    | 586       | 515       | 81        |  |  |
| Other hardwoods         | 126,627                                  | 31,605  | 13,688  | 5,827   | 2,873    | 1,530     | 948       | 401       |  |  |
| Noncommercial hardwoods | 128,495                                  | 26,025  | 7,336   | 2,554   | 867      | 780       | 174       | 69        |  |  |
| Total hardwoods         | 725,137                                  | 225,479 | 103,506 | 60,869  | 43,009   | 30,547    | 21,032    | 12,869    |  |  |
| All species             | 799,929                                  | 262,760 | 130,567 | 82,906  | 56,862   | 38,844    | 25,351    | 15,586    |  |  |
| SE                      | 5.7                                      | 6.1     | 4.3     | 4.7     | 4.5      | 4.3       | 5.0       | 6.0       |  |  |



Table 17.--continued

(In thousands of trees)

| Species                 | Diameter class (inches at breast height) |               |               |       |         |             | Total | 5.0+ | All classes |  |
|-------------------------|--|---------------|---------------|-------|---------|-------------|-------|------|-------------|--|
|                         | 17.0-<br>18.9                            | 19.0-<br>20.9 | 21.0-<br>28.9 | 29.0+ | 5.0+    | All classes |       |      |             |  |
| White/red pine          | 88                                       | 0             | 32            | 0     | 7,528   | 9,680       | 42.0  |      |             |  |
| Loblolly pine           | 893                                      | 533           | 212           | 0     | 51,641  | 136,272     | 16.4  |      |             |  |
| Virginia pine           | 84                                       | 0             | 36            | 0     | 16,676  | 30,958      | 25.8  |      |             |  |
| Other yellow pines      | 0  | 0             | 0             | 0     | 326     | 326         | 74.2  |      |             |  |
| Other softwoods         | 93                                       | 60            | 54            | 21    | 4,221   | 15,229      | 26.8  |      |             |  |
| Total softwoods         | 1,157                                    | 593           | 334           | 21    | 80,392  | 192,466     | 12.7  |      |             |  |
| Red maple               | 1,240                                    | 805           | 1,302         | 362   | 55,341  | 247,079     | 8.2   |      |             |  |
| Sugar maple             | 57                                       | 0             | 72            | 73    | 5,771   | 21,107      | 24.6  |      |             |  |
| Hickory                 | 235                                      | 102           | 260           | 14    | 10,580  | 33,302      | 14.3  |      |             |  |
| Beech                   | 214                                      | 127           | 147           | 58    | 9,003   | 37,023      | 14.0  |      |             |  |
| Sweetgum                | 630                                      | 263           | 523           | 39    | 35,478  | 144,645     | 10.5  |      |             |  |
| Yellow-poplar           | 2,170                                    | 1,307         | 1,888         | 289   | 22,029  | 61,019      | 19.3  |      |             |  |
| Blackgum                | 205                                      | 128           | 138           | 0     | 14,476  | 81,253      | 10.5  |      |             |  |
| Ash-walnut-cherry       | 461                                      | 173           | 355           | 109   | 25,548  | 104,221     | 12.9  |      |             |  |
| Select white oaks       | 1,142                                    | 919           | 838           | 227   | 24,907  | 41,251      | 11.2  |      |             |  |
| Select red oaks         | 317                                      | 197           | 378           | 148   | 7,626   | 22,525      | 26.6  |      |             |  |
| Other white oaks        | 721                                      | 232           | 160           | 0     | 13,427  | 24,485      | 18.7  |      |             |  |
| Other red oaks          | 1,423                                    | 1,039         | 1,033         | 314   | 26,351  | 58,301      | 11.5  |      |             |  |
| Blacklocust             | 0  | 81            | 133           | 0     | 7,299   | 19,484      | 23.5  |      |             |  |
| Other hardwoods         | 338                                      | 240           | 398           | 101   | 26,344  | 184,577     | 8.9   |      |             |  |
| Noncommercial hardwoods | 21                                       | 0             | 0             | 0     | 11,801  | 166,321     | 10.2  |      |             |  |
| Total hardwoods         | 9,175                                    | 5,613         | 7,626         | 1,735 | 295,980 | 1,246,596   | 4.2   |      |             |  |
| All species             | 10,332                                   | 6,207         | 7,960         | 1,756 | 376,372 | 1,439,062   | 4.1   |      |             |  |
| SE                      | 7.5                                      | 9.3           | 8.5           | 17.7  | 3.0     | 4.1         |       |      |             |  |

Table 18.--Number of live trees on timberland by diameter class, tree class,  
and species group, Maryland, 1999

(In thousands of trees)

| Diameter class        | Growing stock |           | Cull      |           | All classes | SE   |
|-----------------------|---------------|-----------|-----------|-----------|-------------|------|
|                       | Softwoods     | Hardwoods | Softwoods | Hardwoods |             |      |
| Seedlings             | 204,024       | 4,792,738 | 0         | 1,471,153 | 6,467,915   | 6.0  |
| 1.0 - 2.9             | 74,792        | 596,641   | 0         | 128,495   | 799,929     | 5.7  |
| 3.0 - 4.9             | 37,281        | 199,454   | 0         | 26,025    | 262,760     | 6.1  |
| Total saplings        | 112,074       | 796,095   | 0         | 154,520   | 1,062,689   | 5.1  |
| 5.0 - 6.9             | 26,665        | 89,802    | 396       | 13,704    | 130,567     | 4.3  |
| 7.0 - 8.9             | 22,011        | 54,973    | 26        | 5,896     | 82,906      | 4.7  |
| 9.0 - 10.9            | 0             | 40,493    | 0         | 2,516     | 43,009      | 5.0  |
| Total poletimber      | 48,677        | 185,267   | 421       | 22,117    | 256,482     | 3.7  |
| 9.0 - 10.9            | 13,167        | 0         | 686       | 0         | 13,854      | 11.3 |
| 11.0 - 12.9           | 8,297         | 27,421    | 0         | 3,125     | 38,844      | 4.3  |
| 13.0 - 14.9           | 4,261         | 19,532    | 58        | 1,500     | 25,351      | 5.0  |
| Total small sawtimber | 25,726        | 46,953    | 744       | 4,625     | 78,049      | 3.9  |
| 15.0 - 16.9           | 2,636         | 12,205    | 81        | 664       | 15,586      | 6.0  |
| 17.0 - 18.9           | 1,125         | 8,785     | 32        | 389       | 10,332      | 7.5  |
| 19.0 - 20.9           | 593           | 5,449     | 0         | 164       | 6,207       | 9.3  |
| 21.0 - 28.9           | 334           | 7,435     | 0         | 190       | 7,960       | 8.5  |
| 29.0 and larger       | 21            | 1,611     | 0         | 123       | 1,756       | 17.7 |
| Total large sawtimber | 4,709         | 35,487    | 114       | 1,531     | 41,841      | 4.5  |
| All classes           | 395,210       | 5,856,541 | 1,279     | 1,653,946 | 7,906,977   | 5.2  |
| SE                    | 14.2          | 5.6       | 22.3      | 9.8       | 5.2         |      |

## Number of trees by tree class on timberland, top 5 species, Maryland 1999

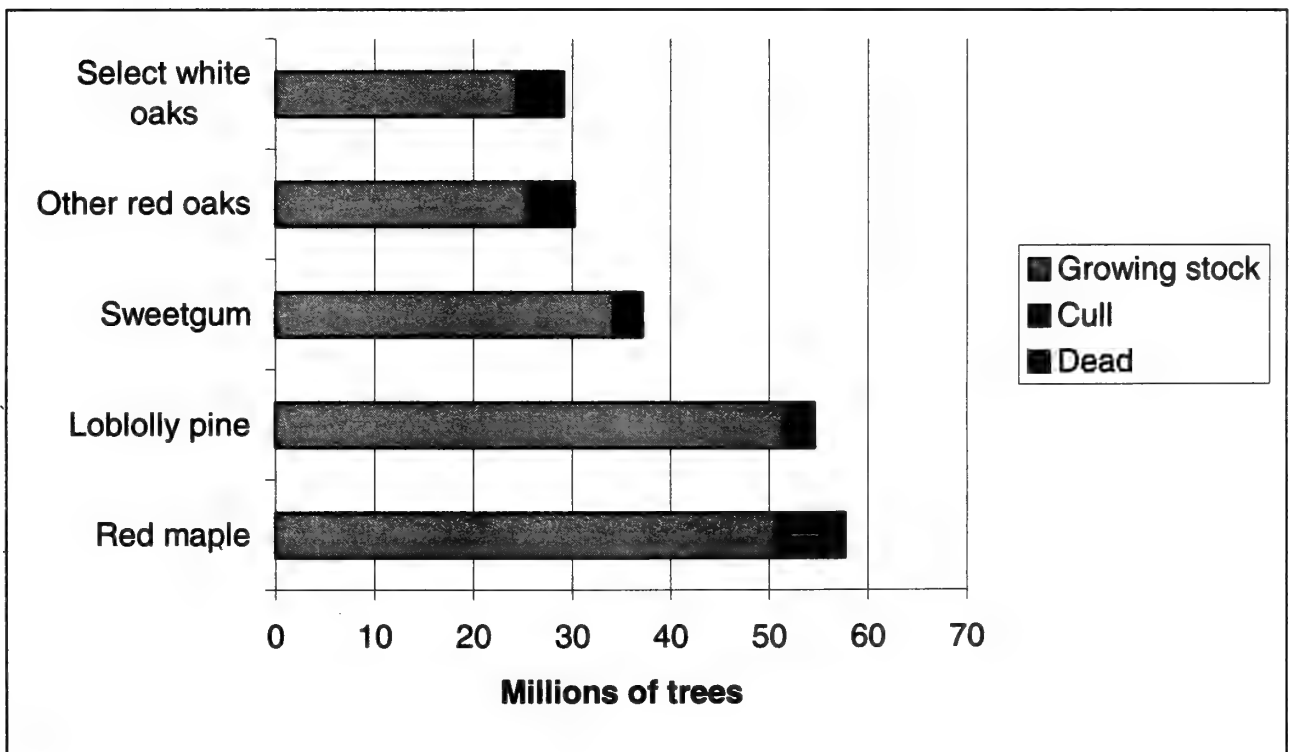
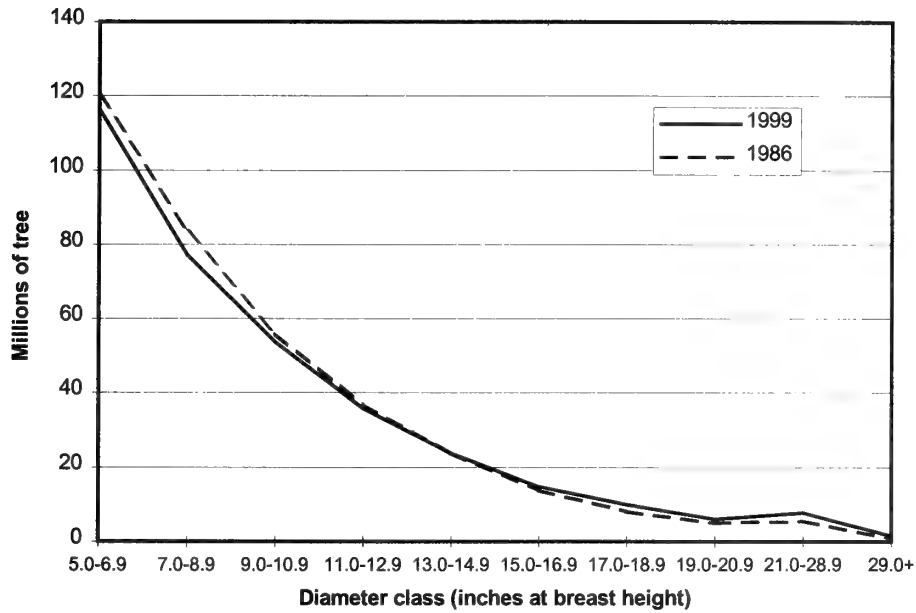


Table 19.--Number of trees (5.0+ inches d.b.h.) on timberland by species and tree class, Maryland, 1999  
(In thousands of trees)

| Species                        | Tree class   |                |                   |               |              |                | All classes  | SE             |               |
|--------------------------------|--------------|----------------|-------------------|---------------|--------------|----------------|--------------|----------------|---------------|
|                                | Preferred    | Acceptable     | All growing stock | Rough cull    | Rotten cull  | All live       |              |                | Salvable dead |
| White/red pine                 | 0            | 7,446          | 7,446             | 57            | 25           | 7,528          | 346          | 8,232          | 48.2          |
| Loblolly pine                  | 2,422        | 48,884         | 51,306            | 221           | 114          | 51,641         | 2,285        | 54,571         | 11.3          |
| Virginia pine                  | 39           | 16,140         | 16,179            | 357           | 140          | 16,676         | 552          | 19,091         | 15.8          |
| Other yellow pines-            | 0            | 305            | 305               | 21            | 0            | 326            | 0            | 392            | 70.9          |
| Other softwoods                | 75           | 3,802          | 3,877             | 293           | 51           | 4,221          | 311          | 4,857          | 22.7          |
| <b>Total softwoods</b>         | <b>2,535</b> | <b>76,577</b>  | <b>79,112</b>     | <b>951</b>    | <b>329</b>   | <b>80,392</b>  | <b>1,866</b> | <b>87,143</b>  | <b>9.2</b>    |
| Red maple                      | 105          | 50,451         | 50,555            | 3,236         | 1,550        | 55,341         | 337          | 57,671         | 6.1           |
| Sugar maple                    | 85           | 5,366          | 5,451             | 254           | 66           | 5,771          | 0            | 5,807          | 20.8          |
| Hickory                        | 202          | 10,230         | 10,432            | 102           | 46           | 10,580         | 156          | 11,231         | 11.8          |
| Beech                          | 0            | 8,309          | 8,309             | 286           | 407          | 9,003          | 201          | 9,233          | 13.4          |
| Sweetgum                       | 606          | 33,598         | 34,203            | 1,032         | 242          | 35,478         | 248          | 37,124         | 10.7          |
| Yellow-poplar                  | 1,646        | 19,753         | 21,399            | 199           | 431          | 22,029         | 100          | 22,699         | 9.5           |
| Blackgum                       | 28           | 13,696         | 13,723            | 525           | 227          | 14,476         | 68           | 15,391         | 8.6           |
| Ash-walnut-cherry              | 180          | 22,424         | 22,604            | 2,375         | 569          | 25,548         | 453          | 27,235         | 12.1          |
| Select white oaks              | 770          | 23,661         | 24,431            | 379           | 96           | 24,907         | 456          | 29,141         | 9.2           |
| Select red oaks                | 287          | 7,215          | 7,502             | 67            | 57           | 7,626          | 126          | 9,574          | 15.5          |
| Other white oaks               | 64           | 12,801         | 12,865            | 425           | 136          | 13,427         | 115          | 15,386         | 16.2          |
| Other red oaks                 | 928          | 24,462         | 25,391            | 488           | 472          | 26,351         | 657          | 30,221         | 8.4           |
| Blacklocust                    | 0            | 6,215          | 6,215             | 616           | 468          | 7,299          | 251          | 9,278          | 20.2          |
| Other hardwoods                | 150          | 24,474         | 24,624            | 1,461         | 259          | 26,344         | 356          | 27,796         | 9.5           |
| <b>Noncommercial hardwoods</b> | <b>0</b>     | <b>0</b>       | <b>0</b>          | <b>10,861</b> | <b>940</b>   | <b>11,801</b>  | <b>1,072</b> | <b>16,836</b>  | <b>11.9</b>   |
| <b>Total hardwoods</b>         | <b>5,052</b> | <b>262,655</b> | <b>267,707</b>    | <b>22,306</b> | <b>5,967</b> | <b>295,980</b> | <b>4,599</b> | <b>324,623</b> | <b>3.1</b>    |
| <b>All species</b>             | <b>7,587</b> | <b>339,232</b> | <b>346,819</b>    | <b>23,257</b> | <b>6,296</b> | <b>376,372</b> | <b>6,465</b> | <b>411,766</b> | <b>2.9</b>    |
| SE                             | 12.6         | 3.2            | 3.1               | 8.0           | 9.9          | 3.0            | 12.4         | 7.0            | 2.9           |

## Number of growing-stock trees on timberland, Maryland, 1986 and 1999



## Number of growing-stock trees on timberland, top 5 species, Maryland, 1986 and 1999

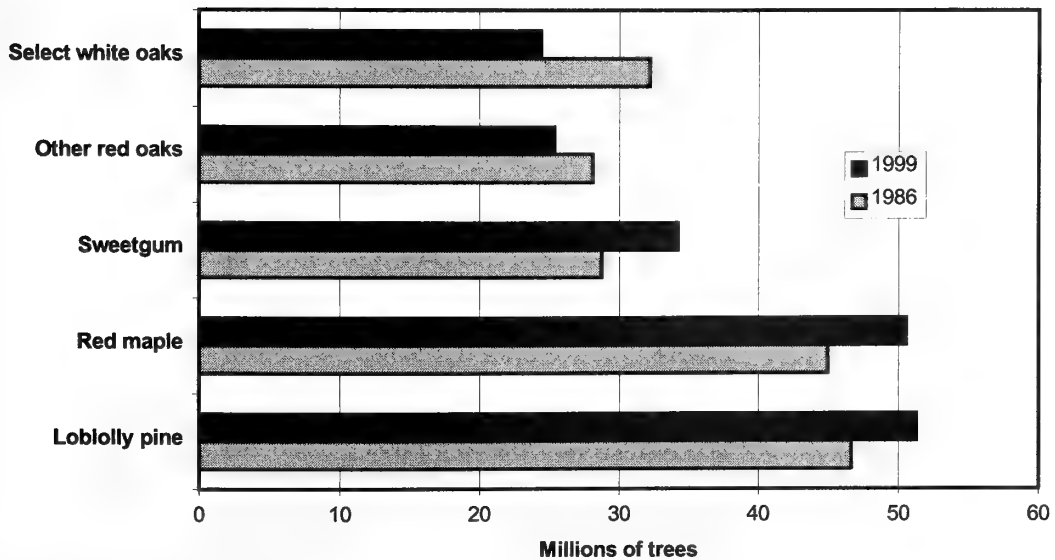


Table 20.--Number of growing-stock trees (5.0+ inches d.b.h.) on timberland by species and diameter class, Maryland, 1986  
(In thousands of trees)

| Species                | Diameter class (inches at breast height) |               |               |               |               |               |              |              |              |            |            |            |            |            | All classes | SE         |            |            |            |            |                |            |
|------------------------|--|---------------|---------------|---------------|---------------|---------------|--------------|--------------|--------------|------------|------------|------------|------------|------------|-------------|------------|------------|------------|------------|------------|----------------|------------|
|                        | 5.0-6.9                                  |               | 7.0-8.9       |               | 9.0-10.9      |               | 11.0-12.9    |              | 13.0-14.9    |            | 15.0-16.9  |            | 17.0-18.9  |            |             |            | 19.0-20.9  |            | 21.0-28.9  |            | 29.0+          |            |
|                        |  |               |               |               |               |               |              |              |              |            |            |            |            |            |             |            |            |            |            |            |                |            |
| White/red pine         | 4,609                                    | 2,464         | 698           | 514           | 205           | 38            | 30           | 18           | 0            | 0          | 0          | 0          | 0          | 0          | 0           | 0          | 0          | 0          | 0          | 0          | 8,577          | 40.3       |
| Loblolly pine          | 17,135                                   | 11,181        | 7,546         | 5,256         | 3,029         | 1,457         | 694          | 217          | 119          | 0          | 0          | 0          | 0          | 0          | 0           | 0          | 0          | 0          | 0          | 0          | 46,633         | 11.4       |
| Virginia pine          | 7,868                                    | 7,915         | 5,187         | 2,933         | 1,409         | 331           | 28           | 0            | 5            | 0          | 0          | 0          | 0          | 0          | 0           | 0          | 0          | 0          | 0          | 0          | 25,675         | 14.8       |
| Other yellow pines     | 724                                      | 462           | 415           | 202           | 69            | 39            | 9            | 0            | 0            | 0          | 0          | 0          | 0          | 0          | 0           | 0          | 0          | 0          | 0          | 0          | 1,921          | 34.0       |
| Other softwoods        | 991                                      | 1,036         | 407           | 307           | 208           | 139           | 121          | 72           | 56           | 4          | 4          | 4          | 4          | 4          | 4           | 4          | 4          | 4          | 4          | 4          | 3,343          | 22.8       |
| <b>Total softwoods</b> | <b>31,328</b>                            | <b>23,058</b> | <b>14,254</b> | <b>9,212</b>  | <b>4,920</b>  | <b>2,004</b>  | <b>883</b>   | <b>307</b>   | <b>180</b>   | <b>4</b>   | <b>4</b>   | <b>4</b>   | <b>4</b>   | <b>4</b>   | <b>4</b>    | <b>4</b>   | <b>4</b>   | <b>4</b>   | <b>4</b>   | <b>4</b>   | <b>86,149</b>  | <b>8.7</b> |
| Red maple              | 18,421                                   | 10,456        | 6,283         | 4,179         | 2,400         | 1,259         | 813          | 472          | 581          | 95         | 95         | 95         | 95         | 95         | 95          | 95         | 95         | 95         | 95         | 95         | 44,958         | 6.0        |
| Sugar maple            | 2,027                                    | 1,264         | 644           | 404           | 241           | 203           | 43           | 83           | 43           | 9          | 9          | 9          | 9          | 9          | 9           | 9          | 9          | 9          | 9          | 9          | 4,961          | 16.3       |
| Hickory                | 3,776                                    | 3,048         | 1,850         | 969           | 641           | 467           | 297          | 100          | 70           | 8          | 8          | 8          | 8          | 8          | 8           | 8          | 8          | 8          | 8          | 8          | 11,226         | 10.4       |
| Beech                  | 3,157                                    | 1,518         | 1,294         | 878           | 722           | 406           | 280          | 220          | 224          | 40         | 40         | 40         | 40         | 40         | 40          | 40         | 40         | 40         | 40         | 40         | 8,739          | 13.7       |
| Sweetgum               | 10,866                                   | 7,097         | 4,007         | 2,885         | 1,916         | 1,091         | 461          | 212          | 200          | 27         | 27         | 27         | 27         | 27         | 27          | 27         | 27         | 27         | 27         | 27         | 28,762         | 8.6        |
| Yellow-poplar          | 4,858                                    | 3,660         | 3,151         | 2,702         | 2,206         | 1,576         | 1,398        | 1,017        | 1,487        | 238        | 238        | 238        | 238        | 238        | 238         | 238        | 238        | 238        | 238        | 238        | 22,296         | 11.0       |
| Blackgum               | 6,018                                    | 2,565         | 2,151         | 950           | 728           | 536           | 203          | 123          | 105          | 0          | 0          | 0          | 0          | 0          | 0           | 0          | 0          | 0          | 0          | 0          | 13,379         | 8.7        |
| Ash-walnut-cherry      | 5,521                                    | 4,161         | 2,647         | 1,292         | 1,090         | 515           | 286          | 122          | 81           | 33         | 33         | 33         | 33         | 33         | 33          | 33         | 33         | 33         | 33         | 33         | 15,748         | 11.4       |
| Select white oaks      | 9,541                                    | 7,791         | 6,083         | 3,408         | 2,013         | 1,336         | 873          | 445          | 635          | 83         | 83         | 83         | 83         | 83         | 83          | 83         | 83         | 83         | 83         | 83         | 32,223         | 8.3        |
| Select red oaks        | 2,018                                    | 2,248         | 2,220         | 1,982         | 1,636         | 986           | 517          | 442          | 557          | 89         | 89         | 89         | 89         | 89         | 89          | 89         | 89         | 89         | 89         | 89         | 12,696         | 8.0        |
| Other white oaks       | 3,361                                    | 4,726         | 3,820         | 2,283         | 1,698         | 923           | 601          | 238          | 361          | 23         | 23         | 23         | 23         | 23         | 23          | 23         | 23         | 23         | 23         | 23         | 18,034         | 10.9       |
| Other red oaks         | 7,695                                    | 5,529         | 3,808         | 3,919         | 2,457         | 1,753         | 1,127        | 851          | 846          | 132        | 132        | 132        | 132        | 132        | 132         | 132        | 132        | 132        | 132        | 132        | 28,118         | 7.4        |
| Black locust           | 2,617                                    | 1,738         | 1,156         | 358           | 292           | 139           | 79           | 36           | 9            | 0          | 0          | 0          | 0          | 0          | 0           | 0          | 0          | 0          | 0          | 0          | 6,424          | 19.7       |
| Other hardwoods        | 8,893                                    | 4,481         | 2,474         | 1,443         | 838           | 565           | 201          | 251          | 194          | 27         | 27         | 27         | 27         | 27         | 27          | 27         | 27         | 27         | 27         | 27         | 19,368         | 9.2        |
| <b>Total hardwoods</b> | <b>88,768</b>                            | <b>60,282</b> | <b>41,590</b> | <b>27,653</b> | <b>18,879</b> | <b>11,756</b> | <b>7,179</b> | <b>4,613</b> | <b>5,393</b> | <b>819</b> | <b>819</b> | <b>819</b> | <b>819</b> | <b>819</b> | <b>819</b>  | <b>819</b> | <b>819</b> | <b>819</b> | <b>819</b> | <b>819</b> | <b>266,932</b> | <b>2.9</b> |
| <b>All species</b>     | <b>120,095</b>                           | <b>83,339</b> | <b>55,844</b> | <b>36,865</b> | <b>23,799</b> | <b>13,760</b> | <b>8,063</b> | <b>4,919</b> | <b>5,573</b> | <b>823</b> | <b>823</b> | <b>823</b> | <b>823</b> | <b>823</b> | <b>823</b>  | <b>823</b> | <b>823</b> | <b>823</b> | <b>823</b> | <b>823</b> | <b>353,081</b> | <b>2.8</b> |
| SE                     | 4.5                                      | 4.0           | 3.7           | 3.6           | 3.7           | 4.4           | 5.8          | 6.9          | 6.8          | 12.7       | 12.7       | 12.7       | 12.7       | 12.7       | 12.7        | 12.7       | 12.7       | 12.7       | 12.7       | 12.7       | 2.8            |            |

Table 21.--Number of growing-stock trees (5.0+ inches d.b.h.) on timberland by species and diameter class, Maryland, 1999

| Species                | (In thousands of trees)                  |               |               |               |               |               |               |               |               |              |                |            | All classes | SE |
|------------------------|--|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|--------------|----------------|------------|-------------|----|
|                        | Diameter class (inches at breast height) |               |               |               |               |               |               |               |               |              |                |            |             |    |
|                        | 5.0-<br>6.9                              | 7.0-<br>8.9   | 9.0-<br>10.9  | 11.0-<br>12.9 | 13.0-<br>14.9 | 15.0-<br>16.9 | 17.0-<br>18.9 | 19.0-<br>20.9 | 21.0-<br>28.9 | 29.0+        |                |            |             |    |
| White/red pine         | 2,073                                    | 2,881         | 1,519         | 560           | 191           | 101           | 88            | 0             | 32            | 0            | 7,446          | 49.0       |             |    |
| Loblolly pine          | 17,784                                   | 13,333        | 8,445         | 5,454         | 2,888         | 1,764         | 893           | 533           | 212           | 0            | 51,306         | 11.7       |             |    |
| Virginia pine          | 5,077                                    | 4,665         | 2,821         | 1,971         | 871           | 685           | 51            | 0             | 36            | 0            | 16,179         | 16.8       |             |    |
| Other yellow pines     | 59                                       | 118           | 29            | 29            | 69            | 0             | 0             | 0             | 0             | 0            | 305            | 79.0       |             |    |
| Other softwoods        | 1,672                                    | 1,013         | 353           | 283           | 242           | 86            | 93            | 60            | 54            | 21           | 3,877          | 24.0       |             |    |
| <b>Total softwoods</b> | <b>26,665</b>                            | <b>22,011</b> | <b>13,167</b> | <b>8,297</b>  | <b>4,261</b>  | <b>2,636</b>  | <b>1,125</b>  | <b>593</b>    | <b>334</b>    | <b>21</b>    | <b>79,112</b>  | <b>9.7</b> |             |    |
| Red maple              | 20,005                                   | 11,006        | 7,540         | 3,927         | 3,262         | 1,480         | 1,058         | 787           | 1,231         | 260          | 50,555         | 6.1        |             |    |
| Sugar maple            | 1,992                                    | 1,533         | 723           | 750           | 166           | 85            | 57            | 0             | 72            | 73           | 5,451          | 20.8       |             |    |
| Hickory                | 3,383                                    | 2,254         | 1,763         | 1,253         | 775           | 393           | 235           | 102           | 260           | 14           | 10,432         | 12.3       |             |    |
| Beech                  | 3,534                                    | 1,761         | 1,049         | 703           | 421           | 376           | 175           | 127           | 127           | 36           | 8,309          | 13.4       |             |    |
| Sweetgum               | 12,151                                   | 7,005         | 5,454         | 3,993         | 2,652         | 1,493         | 630           | 263           | 523           | 39           | 34,203         | 10.5       |             |    |
| Yellow-poplar          | 4,172                                    | 3,083         | 2,347         | 2,529         | 1,849         | 1,872         | 2,090         | 1,307         | 1,860         | 289          | 21,399         | 9.4        |             |    |
| Blackgum               | 6,698                                    | 2,616         | 1,926         | 965           | 618           | 428           | 205           | 128           | 138           | 0            | 13,723         | 8.9        |             |    |
| Ash-walnut-cherry      | 9,461                                    | 5,588         | 3,587         | 1,783         | 746           | 473           | 435           | 103           | 319           | 109          | 22,604         | 13.2       |             |    |
| Select white oaks      | 4,598                                    | 4,671         | 5,080         | 3,113         | 2,341         | 1,501         | 1,142         | 919           | 838           | 227          | 24,431         | 9.8        |             |    |
| Select red oaks        | 1,089                                    | 1,342         | 884           | 1,561         | 697           | 697           | 317           | 197           | 378           | 148          | 7,502          | 14.8       |             |    |
| Other white oaks       | 2,588                                    | 2,965         | 2,589         | 1,402         | 1,546         | 712           | 721           | 182           | 160           | 0            | 12,865         | 17.1       |             |    |
| Other red oaks         | 5,539                                    | 3,624         | 3,795         | 3,460         | 2,976         | 2,264         | 1,381         | 1,039         | 997           | 314          | 25,391         | 8.4        |             |    |
| Black locust           | 1,895                                    | 2,111         | 941           | 515           | 458           | 81            | 0             | 81            | 133           | 0            | 6,215          | 24.3       |             |    |
| Other hardwoods        | 12,696                                   | 5,414         | 2,813         | 1,467         | 833           | 348           | 338           | 215           | 398           | 101          | 24,624         | 9.8        |             |    |
| <b>Total hardwoods</b> | <b>89,802</b>                            | <b>54,973</b> | <b>40,493</b> | <b>27,421</b> | <b>19,532</b> | <b>12,205</b> | <b>8,785</b>  | <b>5,449</b>  | <b>7,435</b>  | <b>1,611</b> | <b>267,707</b> | <b>3.2</b> |             |    |
| <b>All species</b>     | <b>116,467</b>                           | <b>76,984</b> | <b>53,660</b> | <b>35,719</b> | <b>23,793</b> | <b>14,841</b> | <b>9,910</b>  | <b>6,043</b>  | <b>7,770</b>  | <b>1,632</b> | <b>346,819</b> | <b>3.1</b> |             |    |
| <b>SE</b>              | <b>4.5</b>                               | <b>4.9</b>    | <b>4.6</b>    | <b>4.5</b>    | <b>5.2</b>    | <b>6.1</b>    | <b>7.6</b>    | <b>9.5</b>    | <b>8.7</b>    | <b>17.7</b>  | <b>3.1</b>     |            |             |    |

Table 22.--Number of seedlings on timberland by species and stand-size class,  
Maryland, 1999

(In thousands of stems)

| Species              | Stand-size class |             |                      |             | All classes | SE    |
|----------------------|------------------|-------------|----------------------|-------------|-------------|-------|
|                      | Saw-timber       | Pole-timber | Sapling and seedling | Non-stocked |             |       |
| Atlantic white-cedar | 2,424            | 0           | 0                    | 0           | 2,424       | 100.0 |
| eastern redcedar     | 12,005           | 765         | 6,782                | 0           | 19,551      | 37.7  |
| Norway spruce        | 0                | 0           | 3,025                | 0           | 3,025       | 100.0 |
| shortleaf pine       | 0                | 0           | 1,221                | 0           | 1,221       | 100.0 |
| eastern white pine   | 1,081            | 0           | 0                    | 0           | 1,081       | 100.0 |
| loblolly pine        | 18,240           | 36,722      | 97,862               | 0           | 152,825     | 28.9  |
| Virginia pine        | 19,560           | 1,719       | 1,536                | 0           | 22,815      | 62.3  |
| eastern hemlock      | 1,081            | 0           | 0                    | 0           | 1,081       | 100.0 |
| boxelder             | 121,970          | 0           | 6,702                | 0           | 128,672     | 60.4  |
| striped maple        | 64,556           | 5,406       | 0                    | 0           | 69,963      | 36.5  |
| red maple            | 512,448          | 171,702     | 247,857              | 0           | 932,007     | 12.4  |
| silver maple         | 1,267            | 0           | 0                    | 0           | 1,267       | 100.0 |
| sugar maple          | 26,580           | 24,021      | 10,653               | 0           | 61,255      | 32.2  |
| Norway maple         | 4,462            | 0           | 0                    | 0           | 4,462       | 71.7  |
| ailanthus            | 25,587           | 0           | 6,195                | 0           | 31,782      | 52.7  |
| serviceberry         | 66,537           | 34,951      | 9,215                | 0           | 110,704     | 23.4  |
| rawpaw               | 349,842          | 2,534       | 11,105               | 0           | 363,481     | 20.5  |
| yellow birch         | 6,144            | 9,075       | 0                    | 0           | 15,219      | 64.2  |
| sweet birch          | 14,467           | 7,204       | 48,625               | 0           | 70,296      | 67.8  |
| river birch          | 7,105            | 0           | 0                    | 0           | 7,105       | 68.2  |
| American hornbeam    | 151,644          | 79,547      | 0                    | 0           | 231,191     | 24.8  |
| hickory              | 1,536            | 0           | 12,100               | 0           | 13,636      | 89.4  |
| bitternut hickory    | 28,966           | 0           | 1,525                | 0           | 30,491      | 38.9  |
| pignut hickory       | 52,182           | 7,598       | 3,072                | 0           | 62,852      | 22.2  |
| mockernut hickory    | 47,508           | 10,483      | 1,536                | 0           | 59,527      | 29.0  |
| American chestnut    | 25,907           | 6,487       | 6,050                | 0           | 38,445      | 40.6  |
| catalpa              | 1,861            | 0           | 0                    | 0           | 1,861       | 100.0 |
| hackberry            | 13,005           | 6,619       | 1,340                | 0           | 20,964      | 69.9  |
| eastern redbud       | 31,786           | 14,728      | 0                    | 0           | 46,514      | 42.6  |
| flowering dogwood    | 63,020           | 4,894       | 10,040               | 0           | 77,954      | 25.9  |
| hawthorn             | 45,975           | 19,809      | 6,863                | 0           | 72,647      | 37.3  |
| common persimmon     | 0                | 0           | 5,705                | 0           | 5,705       | 75.0  |
| American beech       | 135,905          | 16,717      | 13,068               | 0           | 165,691     | 21.6  |
| ash                  | 3,802            | 0           | 0                    | 0           | 3,802       | 100.0 |
| white ash            | 218,352          | 20,158      | 19,384               | 0           | 257,895     | 28.2  |
| black ash            | 2,315            | 0           | 0                    | 0           | 2,315       | 100.0 |
| green ash            | 3,445            | 7,561       | 0                    | 0           | 11,007      | 75.5  |
| American holly       | 229,483          | 104,870     | 68,893               | 0           | 403,246     | 12.7  |
| black walnut         | 0                | 1,286       | 0                    | 0           | 1,286       | 100.0 |
| sweetgum             | 255,817          | 153,821     | 217,440              | 0           | 627,079     | 15.6  |
| yellow-poplar        | 131,242          | 45,386      | 9,897                | 0           | 186,525     | 35.0  |
| cucumber tree        | 20,290           | 0           | 0                    | 0           | 20,290      | 68.0  |
| sweetbay             | 20,555           | 22,184      | 1,637                | 0           | 44,377      | 37.4  |



Table 22.--continued

(In thousands of stems)

| Species                       | Stand-size class |             |                      |             | All classes | SE    |
|-------------------------------|------------------|-------------|----------------------|-------------|-------------|-------|
|                               | Saw-timber       | Pole-timber | Sapling and seedling | Non-stocked |             |       |
| apple                         | 0                | 1,081       | 0                    | 0           | 1,081       | 100.0 |
| mulberry                      | 2,238            | 2,213       | 8,043                | 0           | 12,494      | 69.1  |
| blackgum                      | 149,142          | 31,063      | 79,225               | 0           | 259,430     | 22.6  |
| eastern hophornbeam           | 22,875           | 0           | 0                    | 0           | 22,875      | 43.7  |
| bigtooth aspen                | 1,157            | 0           | 1,719                | 0           | 2,876       | 72.0  |
| quaking aspen                 | 1,861            | 0           | 0                    | 0           | 1,861       | 100.0 |
| pin cherry                    | 2,163            | 15,641      | 1,776                | 0           | 19,579      | 55.3  |
| black cherry                  | 577,597          | 134,795     | 95,445               | 0           | 807,837     | 14.5  |
| chokecherry                   | 16,807           | 0           | 0                    | 0           | 16,807      | 45.4  |
| white oak                     | 74,780           | 60,982      | 3,717                | 0           | 139,480     | 23.3  |
| scarlet oak                   | 19,735           | 7,651       | 10,210               | 0           | 37,597      | 36.2  |
| northern pin oak              | 1,802            | 0           | 0                    | 0           | 1,802       | 100.0 |
| southern red oak              | 9,003            | 920         | 3,603                | 0           | 13,526      | 38.9  |
| cherrybark oak, swamp red oak | 8,110            | 0           | 0                    | 0           | 8,110       | 100.0 |
| bear oak, scrub oak           | 0                | 1,340       | 0                    | 0           | 1,340       | 100.0 |
| blackjack oak                 | 2,534            | 0           | 0                    | 0           | 2,534       | 100.0 |
| swamp chestnut oak            | 5,502            | 0           | 0                    | 0           | 5,502       | 58.7  |
| water oak                     | 10,726           | 0           | 808                  | 0           | 11,534      | 38.0  |
| pin oak                       | 569              | 0           | 0                    | 0           | 569         | 100.0 |
| willow oak                    | 23,186           | 0           | 5,910                | 0           | 29,097      | 28.4  |
| chestnut oak                  | 150,881          | 18,463      | 2,757                | 0           | 172,101     | 30.1  |
| northern red oak              | 38,348           | 31,559      | 4,608                | 0           | 74,516      | 37.3  |
| black oak                     | 88,398           | 47,373      | 2,762                | 0           | 138,533     | 25.9  |
| black locust                  | 22,323           | 1,536       | 13,003               | 0           | 36,862      | 32.2  |
| willow                        | 1,995            | 0           | 0                    | 0           | 1,995       | 100.0 |
| sassafras                     | 107,252          | 61,614      | 43,938               | 0           | 212,804     | 18.0  |
| American elm                  | 13,258           | 1,898       | 0                    | 0           | 15,155      | 55.2  |
| slippery elm                  | 23,484           | 4,566       | 0                    | 0           | 28,050      | 75.3  |
| unknown tree                  | 5,859            | 0           | 569                  | 0           | 6,428       | 53.6  |
| Total seedlings               | 4,121,544        | 1,238,948   | 1,107,422            | 0           | 6,467,915   | 6.0   |
| SE                            | 7.7              | 15.6        | 18.9                 | .0          | 6.0         |       |

Table 23.--Number of saplings on timberland by species and stand-size class,  
Maryland, 1999

(In thousands of stems)

| Species            | Stand-size class |             |                      |             | All classes | SE    |
|--------------------|------------------|-------------|----------------------|-------------|-------------|-------|
|                    | Saw-timber       | Pole-timber | Sapling and seedling | Non-stocked |             |       |
| eastern redcedar   | 3,453            | 886         | 2,736                | 0           | 7,075       | 42.9  |
| Norway spruce      | 320              | 2,568       | 0                    | 0           | 2,888       | 61.5  |
| pond pine          | 0                | 168         | 0                    | 0           | 168         | 100.0 |
| eastern white pine | 397              | 320         | 1,435                | 0           | 2,152       | 54.3  |
| loblolly pine      | 3,452            | 31,367      | 49,643               | 0           | 84,463      | 23.8  |
| Virginia pine      | 3,413            | 9,505       | 1,364                | 0           | 14,282      | 42.6  |
| eastern hemlock    | 405              | 640         | 0                    | 0           | 1,045       | 72.5  |
| boxelder           | 2,489            | 655         | 0                    | 0           | 3,145       | 45.2  |
| striped maple      | 3,936            | 451         | 2,712                | 0           | 7,099       | 46.3  |
| red maple          | 103,396          | 56,076      | 32,265               | 0           | 191,738     | 10.0  |
| sugar maple        | 7,664            | 5,419       | 2,253                | 0           | 15,337      | 29.9  |
| Norway maple       | 257              | 0           | 0                    | 0           | 257         | 100.0 |
| ailanthus          | 851              | 0           | 1,784                | 0           | 2,635       | 55.8  |
| serviceberry       | 3,903            | 0           | 0                    | 0           | 3,903       | 37.2  |
| rawpaw             | 21,962           | 0           | 0                    | 0           | 21,962      | 35.1  |
| yellow birch       | 1,217            | 320         | 0                    | 0           | 1,537       | 81.9  |
| sweet birch        | 7,209            | 3,609       | 15,510               | 0           | 26,329      | 33.1  |
| river birch        | 0                | 1,311       | 0                    | 0           | 1,311       | 100.0 |
| American hornbeam  | 16,706           | 3,995       | 0                    | 0           | 20,701      | 23.3  |
| bitternut hickory  | 1,102            | 0           | 0                    | 0           | 1,102       | 100.0 |
| pignut hickory     | 7,742            | 551         | 361                  | 0           | 8,654       | 26.4  |
| shagbark hickory   | 0                | 305         | 0                    | 0           | 305         | 100.0 |
| mockernut hickory  | 9,929            | 1,873       | 859                  | 0           | 12,661      | 24.2  |
| American chestnut  | 4,234            | 320         | 0                    | 0           | 4,554       | 44.1  |
| hackberry          | 642              | 0           | 397                  | 0           | 1,039       | 72.6  |
| eastern redbud     | 795              | 0           | 1,364                | 0           | 2,159       | 67.5  |
| flowering dogwood  | 24,102           | 3,669       | 4,278                | 0           | 32,049      | 15.6  |
| hawthorn           | 2,177            | 5,475       | 1,577                | 0           | 9,229       | 62.3  |
| common persimmon   | 0                | 0           | 3,307                | 0           | 3,307       | 68.2  |
| American beech     | 22,850           | 2,917       | 2,253                | 0           | 28,020      | 16.5  |
| white ash          | 8,373            | 3,863       | 1,713                | 0           | 13,948      | 31.4  |
| black ash          | 297              | 0           | 0                    | 0           | 297         | 100.0 |
| green ash          | 0                | 1,128       | 0                    | 0           | 1,128       | 72.2  |
| honeylocust        | 0                | 0           | 3,183                | 0           | 3,183       | 75.6  |
| American holly     | 66,345           | 26,504      | 5,461                | 0           | 98,309      | 12.1  |
| black walnut       | 1,687            | 1,142       | 0                    | 0           | 2,829       | 54.3  |
| sweetgum           | 47,056           | 41,735      | 20,377               | 0           | 109,167     | 12.4  |
| yellow-poplar      | 17,954           | 11,596      | 9,441                | 0           | 38,990      | 29.2  |
| cucumbertree       | 1,889            | 0           | 0                    | 0           | 1,889       | 75.0  |
| sweetbay           | 7,175            | 4,000       | 0                    | 0           | 11,176      | 27.6  |
| apple              | 455              | 2,367       | 0                    | 0           | 2,821       | 62.5  |
| mulberry           | 551              | 0           | 1,092                | 0           | 1,643       | 61.6  |
| blackgum           | 46,562           | 11,824      | 8,391                | 0           | 66,777      | 12.2  |

Table 23.--continued

(In thousands of stems)

| Species                       | Stand-size class |             |                      |             | All classes | SE    |
|-------------------------------|------------------|-------------|----------------------|-------------|-------------|-------|
|                               | Saw-timber       | Pole-timber | Sapling and seedling | Non-stocked |             |       |
| eastern hophornbeam           | 2,809            | 0           | 0                    | 0           | 2,809       | 45.0  |
| sycamore                      | 1,335            | 0           | 1,559                | 0           | 2,894       | 52.9  |
| bigtooth aspen                | 655              | 0           | 655                  | 0           | 1,311       | 67.8  |
| pin cherry                    | 455              | 0           | 0                    | 0           | 455         | 100.0 |
| black cherry                  | 36,727           | 14,767      | 8,978                | 0           | 60,472      | 19.0  |
| chokecherry                   | 2,781            | 0           | 0                    | 0           | 2,781       | 60.3  |
| white oak                     | 7,772            | 7,017       | 1,555                | 0           | 16,344      | 22.7  |
| scarlet oak                   | 1,792            | 2,216       | 3,482                | 0           | 7,490       | 45.8  |
| southern red oak              | 3,519            | 0           | 895                  | 0           | 4,413       | 35.7  |
| cherrybark oak, swamp red oak | 480              | 0           | 0                    | 0           | 480         | 100.0 |
| water oak                     | 3,466            | 1,518       | 2,871                | 0           | 7,855       | 43.6  |
| pin oak                       | 0                | 0           | 455                  | 0           | 455         | 100.0 |
| willow oak                    | 1,366            | 2,052       | 519                  | 0           | 3,938       | 34.8  |
| chestnut oak                  | 3,935            | 2,269       | 4,547                | 0           | 10,751      | 31.0  |
| northern red oak              | 4,071            | 5,373       | 4,974                | 0           | 14,418      | 41.7  |
| post oak                      | 0                | 0           | 307                  | 0           | 307         | 100.0 |
| black oak                     | 4,731            | 2,285       | 784                  | 0           | 7,801       | 26.6  |
| black locust                  | 4,089            | 3,487       | 4,609                | 0           | 12,186      | 33.2  |
| willow                        | 394              | 0           | 0                    | 0           | 394         | 100.0 |
| sassafras                     | 14,411           | 7,021       | 12,397               | 0           | 33,829      | 32.8  |
| American basswood             | 642              | 0           | 0                    | 0           | 642         | 100.0 |
| American elm                  | 2,220            | 0           | 455                  | 0           | 2,675       | 53.4  |
| slippery elm                  | 1,031            | 1,346       | 0                    | 0           | 2,377       | 52.6  |
| unknown tree                  | 562              | 1,791       | 0                    | 0           | 2,353       | 53.8  |
| Total saplings                | 552,189          | 287,704     | 222,797              | 0           | 1,062,689   | 5.1   |
| SE                            | 5.8              | 12.7        | 20.1                 | .0          | 5.1         |       |

Table 24.--Number of shrubs on timberland by species and stand-size class, Maryland, 1999

(In thousands of stems)

| Species                  | Stand-size class |             |                      |             | All classes | SE    |
|--------------------------|------------------|-------------|----------------------|-------------|-------------|-------|
|                          | Saw-timber       | Pole-timber | Sapling and seedling | Non-stocked |             |       |
| alder                    | 3,445            | 0           | 0                    | 0           | 3,445       | 100.0 |
| speckled alder           | 0                | 21,543      | 0                    | 0           | 21,543      | 100.0 |
| Hercules club            | 46,545           | 20,262      | 38,129               | 0           | 104,936     | 28.8  |
| barberry                 | 147,077          | 60,986      | 9,215                | 0           | 217,278     | 38.5  |
| buttonbush               | 17,489           | 0           | 0                    | 0           | 17,489      | 100.0 |
| sweet pepperbush         | 2,169,423        | 848,960     | 530,743              | 0           | 3,549,127   | 15.7  |
| alternate-leaved dogwood | 16,437           | 0           | 2,251                | 0           | 18,687      | 56.0  |
| silky dogwood            | 10,417           | 0           | 0                    | 0           | 10,417      | 100.0 |
| gray-stemmed dogwood     | 0                | 2,534       | 0                    | 0           | 2,534       | 100.0 |
| American hazelnut        | 1,861            | 0           | 0                    | 0           | 1,861       | 100.0 |
| beaked hazelnut          | 0                | 2,601       | 0                    | 0           | 2,601       | 100.0 |
| autumn olive             | 3,167            | 22,971      | 32,043               | 0           | 58,181      | 61.0  |
| huckleberry              | 1,159,060        | 352,843     | 116,719              | 0           | 1,628,622   | 22.6  |
| witch-hazel              | 213,592          | 34,925      | 19,151               | 0           | 267,668     | 24.5  |
| winterberry holly        | 1,632            | 5,355       | 4,575                | 14,676      | 26,239      | 62.2  |
| sheep laurel             | 8,643            | 10,794      | 4,664                | 0           | 24,102      | 47.5  |
| mountain laurel          | 226,018          | 104,925     | 19,967               | 0           | 350,910     | 36.3  |
| swamp laurel             | 14,391           | 0           | 0                    | 0           | 14,391      | 100.0 |
| common spicebush         | 908,511          | 121,663     | 0                    | 0           | 1,030,175   | 16.6  |
| bush honeysuckle         | 60,859           | 2,251       | 0                    | 0           | 63,110      | 49.9  |
| wax myrtle               | 17,186           | 32,154      | 68,631               | 0           | 117,971     | 65.9  |
| bayberry                 | 19,921           | 0           | 1,236                | 0           | 21,157      | 71.1  |
| buckthorn                | 3,617            | 0           | 0                    | 0           | 3,617       | 71.1  |
| rhododendron (evergreen) | 1,650            | 0           | 0                    | 0           | 1,650       | 74.0  |
| azalea (deciduous)       | 59,674           | 10,500      | 0                    | 0           | 70,174      | 46.0  |
| winged sumac             | 2,332            | 0           | 23,218               | 0           | 25,550      | 79.5  |
| smooth sumac             | 0                | 0           | 2,073                | 0           | 2,073       | 100.0 |
| staghorn sumac           | 0                | 8,593       | 13,566               | 0           | 22,159      | 93.3  |
| currant, gooseberry      | 3,887            | 8,872       | 0                    | 0           | 12,758      | 60.9  |
| rose                     | 815,169          | 345,545     | 168,951              | 3,795       | 1,333,460   | 16.3  |
| brier, bramble, dewberry | 1,358,574        | 404,457     | 601,421              | 24,399      | 2,388,851   | 13.3  |
| American elderberry      | 13,905           | 0           | 0                    | 0           | 13,905      | 100.0 |
| spirea                   | 2,055            | 0           | 15,980               | 0           | 18,035      | 89.3  |
| blueberry                | 1,238,405        | 1,091,298   | 217,495              | 0           | 2,547,198   | 21.3  |
| viburnum                 | 39,142           | 16,985      | 0                    | 0           | 56,127      | 41.7  |
| maple-leaved viburnum    | 308,721          | 9,850       | 0                    | 0           | 318,571     | 31.6  |
| wild raisin, withe-rod   | 18,903           | 0           | 0                    | 0           | 18,903      | 100.0 |
| arrowwood                | 171,083          | 27,674      | 45,581               | 1,048       | 245,386     | 22.1  |
| nannyberry               | 1,797            | 0           | 0                    | 0           | 1,797       | 100.0 |
| blackhaw                 | 98,240           | 12,861      | 54,108               | 0           | 165,209     | 36.9  |
| common prickly-ash       | 186,995          | 3,072       | 0                    | 0           | 190,067     | 98.4  |
| unknown deciduous shrub  | 66,657           | 93,888      | 24,759               | 0           | 185,303     | 46.3  |
| unknown evergreen shrub  | 5,757            | 8,635       | 0                    | 0           | 14,391      | 68.0  |
| Total shrubs             | 9,442,241        | 3,686,994   | 2,014,478            | 43,919      | 15,187,632  | 6.8   |
| SE                       | 8.4              | 18.9        | 19.2                 | 58.2        | 6.8         |       |

Table 25.--Number of standing dead trees (5.0+ inches d.b.h.) on timberland by species, condition class, and diameter class, Maryland, 1999

| Species                        | (In thousands of trees) |               |              |              |               |              |               |               |              |                    | SE            |             |
|--------------------------------|-------------------------|---------------|--------------|--------------|---------------|--------------|---------------|---------------|--------------|--------------------|---------------|-------------|
|                                | Intact top              |               |              |              |               | Broken top   |               |               |              |                    |               |             |
|                                | 5.0-<br>10.9            | 11.0-<br>14.9 | 15+<br>Total | 5.0-<br>10.9 | 11.0-<br>14.9 | 15+<br>Total | 5.0-<br>10.9  | 11.0-<br>14.9 | 15+<br>Total | Total<br>all trees |               |             |
| White/red pine                 | 230                     | 0             | 0            | 230          | 474           | 0            | 474           | 0             | 0            | 0                  | 704           | 64.7        |
| Loblolly pine                  | 677                     | 144           | 0            | 821          | 1,763         | 217          | 2,012         | 31            | 31           | 31                 | 2,833         | 26.4        |
| Virginia pine                  | 721                     | 118           | 0            | 839          | 1,304         | 212          | 1,576         | 60            | 60           | 60                 | 2,415         | 17.9        |
| Other yellow pines             | 0                       | 0             | 0            | 0            | 29            | 37           | 66            | 0             | 0            | 0                  | 66            | 71.1        |
| Other softwoods                | 159                     | 0             | 0            | 159          | 367           | 84           | 477           | 26            | 26           | 26                 | 636           | 37.9        |
| <b>Total softwoods</b>         | <b>1,787</b>            | <b>262</b>    | <b>0</b>     | <b>2,049</b> | <b>3,939</b>  | <b>550</b>   | <b>4,605</b>  | <b>117</b>    | <b>117</b>   | <b>117</b>         | <b>6,655</b>  | <b>14.8</b> |
| Red maple                      | 599                     | 22            | 26           | 647          | 1,325         | 110          | 1,683         | 248           | 248          | 248                | 2,330         | 16.0        |
| Sugar maple                    | 0                       | 0             | 0            | 0            | 0             | 36           | 36            | 0             | 0            | 0                  | 36            | 100.0       |
| Hickory                        | 49                      | 0             | 52           | 101          | 280           | 233          | 550           | 37            | 37           | 37                 | 652           | 34.5        |
| Beech                          | 27                      | 29            | 0            | 57           | 135           | 39           | 173           | 0             | 0            | 0                  | 230           | 53.3        |
| Sweetgum                       | 169                     | 0             | 0            | 169          | 1,233         | 147          | 1,477         | 97            | 97           | 97                 | 1,646         | 20.7        |
| Yellow-poplar                  | 41                      | 0             | 0            | 41           | 503           | 126          | 629           | 0             | 0            | 0                  | 670           | 26.0        |
| Blackgum                       | 125                     | 24            | 0            | 149          | 616           | 126          | 766           | 24            | 24           | 24                 | 915           | 27.7        |
| Ash-walnut-cherry              | 370                     | 95            | 0            | 465          | 979           | 158          | 1,222         | 85            | 85           | 85                 | 1,687         | 15.4        |
| Select white oaks              | 441                     | 372           | 159          | 971          | 2,351         | 663          | 3,263         | 249           | 249          | 249                | 4,234         | 15.4        |
| Select red oaks                | 351                     | 158           | 104          | 614          | 1,149         | 98           | 1,333         | 87            | 87           | 87                 | 1,947         | 28.7        |
| Other white oaks               | 119                     | 26            | 0            | 145          | 1,471         | 211          | 1,813         | 131           | 131          | 131                | 1,959         | 28.0        |
| Other red oaks                 | 888                     | 265           | 125          | 1,278        | 1,803         | 351          | 2,592         | 438           | 438          | 438                | 3,870         | 15.1        |
| Blacklocust                    | 411                     | 37            | 0            | 447          | 1,456         | 27           | 1,532         | 49            | 49           | 49                 | 1,979         | 26.3        |
| Other hardwoods                | 390                     | 69            | 0            | 459          | 715           | 231          | 992           | 46            | 46           | 46                 | 1,451         | 24.1        |
| <b>Noncommercial hardwoods</b> | <b>814</b>              | <b>62</b>     | <b>21</b>    | <b>898</b>   | <b>3,299</b>  | <b>596</b>   | <b>4,137</b>  | <b>242</b>    | <b>242</b>   | <b>242</b>         | <b>5,035</b>  | <b>16.8</b> |
| <b>Total hardwoods</b>         | <b>4,794</b>            | <b>1,160</b>  | <b>487</b>   | <b>6,441</b> | <b>17,314</b> | <b>3,155</b> | <b>22,201</b> | <b>1,731</b>  | <b>1,731</b> | <b>1,731</b>       | <b>28,642</b> | <b>7.1</b>  |
| <b>All species</b>             | <b>6,580</b>            | <b>1,423</b>  | <b>487</b>   | <b>8,491</b> | <b>21,253</b> | <b>3,705</b> | <b>26,806</b> | <b>1,848</b>  | <b>1,848</b> | <b>1,848</b>       | <b>35,297</b> | <b>6.3</b>  |
| <b>SE</b>                      | <b>10.6</b>             | <b>17.7</b>   | <b>27.9</b>  | <b>9.7</b>   | <b>7.5</b>    | <b>12.1</b>  | <b>6.7</b>    | <b>15.6</b>   | <b>15.6</b>  | <b>15.6</b>        | <b>6.3</b>    |             |

Table 26.--Net volume of all trees on timberland by class of timber and species group, Maryland, 1999

(In millions of cubic feet)

| Class of timber             | Species group |                 |                |                | All species    | SE          |
|-----------------------------|---------------|-----------------|----------------|----------------|----------------|-------------|
|                             | Pines         | Other softwoods | Soft hardwoods | Hard hardwoods |                |             |
| <b>Sawtimber trees:</b>     |               |                 |                |                |                |             |
| Sawlog portion              | 489.7         | 26.3            | 1,364.2        | 1,292.3        | 3,172.6        | 4.0         |
| Upper stem portion          | 65.2          | 2.9             | 291.2          | 278.9          | 638.2          | 3.8         |
| <b>Total</b>                | <b>554.9</b>  | <b>29.2</b>     | <b>1,655.4</b> | <b>1,571.2</b> | <b>3,810.8</b> | <b>3.9</b>  |
| <b>Poletimber trees</b>     | <b>207.0</b>  | <b>9.9</b>      | <b>584.1</b>   | <b>460.5</b>   | <b>1,261.4</b> | <b>4.1</b>  |
| <b>Total growing stock</b>  | <b>761.9</b>  | <b>39.1</b>     | <b>2,239.5</b> | <b>2,031.7</b> | <b>5,072.2</b> | <b>3.3</b>  |
| <b>Rough trees:</b>         |               |                 |                |                |                |             |
| Sawtimber size              | 3.0           | 1.2             | 45.6           | 22.7           | 72.6           | 12.2        |
| Poletimber size             | .5            | .1              | 38.4           | 16.2           | 55.1           | 10.2        |
| <b>Total</b>                | <b>3.5</b>    | <b>1.3</b>      | <b>84.0</b>    | <b>38.9</b>    | <b>127.7</b>   | <b>8.9</b>  |
| <b>Rotten trees:</b>        |               |                 |                |                |                |             |
| Sawtimber size              | 1.4           | .2              | 15.6           | 10.6           | 27.8           | 17.0        |
| Poletimber size             | .1            | .0              | 1.8            | 2.5            | 4.5            | 19.0        |
| <b>Total</b>                | <b>1.5</b>    | <b>.2</b>       | <b>17.5</b>    | <b>13.1</b>    | <b>32.3</b>    | <b>15.1</b> |
| <b>Salvable dead trees:</b> |               |                 |                |                |                |             |
| Sawtimber size              | 3.6           | .9              | 1.7            | 3.8            | 10.1           | 28.8        |
| Poletimber size             | 3.2           | .3              | 3.5            | 4.0            | 10.9           | 16.5        |
| <b>Total</b>                | <b>6.8</b>    | <b>1.2</b>      | <b>5.2</b>     | <b>7.8</b>     | <b>20.9</b>    | <b>16.6</b> |
| <b>Total, all trees</b>     | <b>773.8</b>  | <b>41.7</b>     | <b>2,346.2</b> | <b>2,091.5</b> | <b>5,253.2</b> | <b>3.2</b>  |
| <b>SE</b>                   | <b>9.1</b>    | <b>25.3</b>     | <b>5.4</b>     | <b>4.9</b>     | <b>3.2</b>     |             |

Table 27.--Net volume of all live, growing-stock, and sawtimber trees on timberland by species group and ownership class, Maryland, 1999

(In millions of cubic feet)

| Species group            | Ownership class |                |                 |                 | All classes     | SE         |
|--------------------------|-----------------|----------------|-----------------|-----------------|-----------------|------------|
|                          | National Forest | Other public   | Forest industry | Other private   |                 |            |
| <b>All live:</b>         |                 |                |                 |                 |                 |            |
| Softwoods                | .0              | 113.8          | 59.5            | 634.2           | 807.5           | 8.7        |
| Hardwoods                | .0              | 801.8          | 53.7            | 3,569.2         | 4,424.7         | 3.7        |
| <b>Total, all groups</b> | <b>.0</b>       | <b>915.5</b>   | <b>113.2</b>    | <b>4,203.4</b>  | <b>5,232.2</b>  | <b>3.2</b> |
| <b>Growing stock:</b>    |                 |                |                 |                 |                 |            |
| Softwoods                | .0              | 112.8          | 59.4            | 628.8           | 801.0           | 8.7        |
| Hardwoods                | .0              | 776.5          | 53.1            | 3,441.6         | 4,271.2         | 3.8        |
| <b>Total, all groups</b> | <b>.0</b>       | <b>889.3</b>   | <b>112.5</b>    | <b>4,070.4</b>  | <b>5,072.2</b>  | <b>3.3</b> |
| <b>Sawtimber:</b>        |                 |                |                 |                 |                 |            |
| Softwoods                | .0              | 413.9          | 110.6           | 1,839.2         | 2,363.7         | 10.0       |
| Hardwoods                | .0              | 2,455.1        | 183.3           | 11,159.5        | 13,797.8        | 4.8        |
| <b>Total, all groups</b> | <b>.0</b>       | <b>2,869.0</b> | <b>293.9</b>    | <b>12,998.7</b> | <b>16,161.5</b> | <b>4.2</b> |
| <b>SE</b>                | <b>.0</b>       | <b>14.1</b>    | <b>32.9</b>     | <b>5.2</b>      | <b>4.2</b>      |            |

Table 28.--Net volume of all live trees on timberland by species and diameter class, Maryland, 1986

| Species                        | (In millions of cubic feet)              |              |              |              |              |              |              |              |              |              |              |              | All classes    | SE          |
|--------------------------------|--|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|----------------|-------------|
|                                | Diameter class (inches at breast height) |              |              |              |              |              |              |              |              |              |              |              |                |             |
|                                | 5.0-6.9                                  | 7.0-8.9      | 9.0-10.9     | 11.0-12.9    | 13.0-14.9    | 15.0-16.9    | 17.0-18.9    | 19.0-20.9    | 21.0-28.9    | 29.0+        |              |              |                |             |
| White/red pine                 | 16.8                                     | 18.6         | 8.8          | 10.0         | 4.9          | 1.2          | 1.5          | 1.1          | .0           | .0           | .0           | .0           | 62.9           | 36.8        |
| Loblolly pine                  | 49.3                                     | 74.0         | 86.5         | 95.1         | 77.8         | 49.5         | 29.7         | 12.3         | 8.5          | .0           | .0           | .0           | 482.6          | 9.1         |
| Virginia pine                  | 22.6                                     | 51.8         | 60.1         | 53.2         | 35.3         | 10.7         | 1.2          | .0           | .3           | .0           | .0           | .0           | 235.2          | 13.4        |
| Other yellow pines             | 2.0                                      | 2.9          | 4.9          | 3.6          | 1.7          | 1.2          | .4           | .0           | .0           | .0           | .0           | .0           | 16.7           | 30.1        |
| Other softwoods                | 2.6                                      | 6.2          | 4.5          | 5.2          | 5.2          | 4.2          | 5.4          | 4.2          | 4.5          | .6           | .6           | .6           | 42.5           | 31.4        |
| <b>Total softwoods</b>         | <b>93.2</b>                              | <b>153.4</b> | <b>164.7</b> | <b>167.1</b> | <b>125.0</b> | <b>66.7</b>  | <b>38.2</b>  | <b>17.6</b>  | <b>13.3</b>  | <b>.6</b>    | <b>.6</b>    | <b>.6</b>    | <b>839.8</b>   | <b>7.4</b>  |
| Red maple                      | 47.9                                     | 70.6         | 78.0         | 85.2         | 68.5         | 49.0         | 42.0         | 29.4         | 56.6         | 18.4         | 18.4         | 18.4         | 545.6          | 6.4         |
| Sugar maple                    | 6.7                                      | 9.4          | 10.0         | 8.7          | 6.6          | 8.2          | 2.9          | 5.9          | 5.2          | 3.4          | 3.4          | 3.4          | 67.2           | 17.3        |
| Hickory                        | 11.0                                     | 22.7         | 24.4         | 21.9         | 19.5         | 19.5         | 15.2         | 7.5          | 6.6          | 1.5          | 1.5          | 1.5          | 150.1          | 10.1        |
| Beech                          | 7.2                                      | 9.6          | 15.8         | 20.0         | 21.8         | 15.7         | 16.4         | 17.7         | 26.3         | 10.6         | 10.6         | 10.6         | 161.1          | 12.0        |
| Sweetgum                       | 26.4                                     | 46.1         | 49.0         | 55.3         | 52.6         | 41.4         | 21.9         | 13.3         | 17.0         | 4.0          | 4.0          | 4.0          | 327.1          | 8.7         |
| Yellow-poplar                  | 13.8                                     | 28.0         | 45.0         | 59.6         | 73.9         | 74.4         | 81.8         | 77.1         | 160.1        | 49.6         | 49.6         | 49.6         | 663.3          | 11.7        |
| Blackgum                       | 15.5                                     | 17.4         | 27.5         | 22.6         | 21.3         | 23.5         | 9.8          | 8.6          | 11.1         | 1.2          | 1.2          | 1.2          | 158.6          | 9.9         |
| Ash-walnut-cherry              | 18.9                                     | 30.1         | 35.8         | 28.0         | 32.7         | 20.2         | 14.4         | 8.2          | 6.8          | 4.3          | 4.3          | 4.3          | 199.4          | 9.5         |
| Select white oaks              | 23.5                                     | 45.8         | 69.8         | 62.6         | 53.6         | 48.8         | 41.2         | 26.5         | 56.4         | 18.8         | 18.8         | 18.8         | 447.0          | 6.7         |
| Select red oaks                | 5.4                                      | 14.7         | 26.1         | 38.1         | 44.9         | 38.1         | 25.1         | 27.6         | 49.7         | 18.0         | 18.0         | 18.0         | 287.7          | 7.7         |
| Other white oaks               | 8.8                                      | 29.0         | 44.2         | 41.6         | 44.8         | 32.1         | 26.5         | 12.7         | 28.9         | 4.5          | 4.5          | 4.5          | 273.2          | 11.4        |
| Other red oaks                 | 19.1                                     | 35.0         | 45.3         | 75.3         | 67.3         | 66.3         | 53.6         | 53.3         | 75.7         | 25.4         | 25.4         | 25.4         | 516.2          | 6.7         |
| Blacklocust                    | 6.8                                      | 10.4         | 14.3         | 7.9          | 8.9          | 6.6          | 4.3          | 2.7          | 1.0          | .0           | .0           | .0           | 63.1           | 16.1        |
| Other hardwoods                | 22.2                                     | 28.1         | 29.8         | 26.2         | 22.3         | 20.2         | 10.4         | 14.4         | 18.9         | 5.2          | 5.2          | 5.2          | 197.8          | 11.6        |
| <b>Noncommercial hardwoods</b> | <b>14.0</b>                              | <b>12.1</b>  | <b>11.2</b>  | <b>8.0</b>   | <b>6.7</b>   | <b>3.1</b>   | <b>1.0</b>   | <b>.0</b>    | <b>.7</b>    | <b>.0</b>    | <b>.0</b>    | <b>.0</b>    | <b>56.9</b>    | <b>14.3</b> |
| <b>Total hardwoods</b>         | <b>247.3</b>                             | <b>409.1</b> | <b>526.5</b> | <b>561.1</b> | <b>545.9</b> | <b>467.1</b> | <b>366.5</b> | <b>305.0</b> | <b>520.7</b> | <b>164.9</b> | <b>164.9</b> | <b>164.9</b> | <b>4,114.2</b> | <b>3.4</b>  |
| <b>All species</b>             | <b>340.5</b>                             | <b>562.5</b> | <b>691.2</b> | <b>728.2</b> | <b>670.9</b> | <b>533.8</b> | <b>404.7</b> | <b>322.6</b> | <b>534.0</b> | <b>165.5</b> | <b>165.5</b> | <b>165.5</b> | <b>4,954.0</b> | <b>2.8</b>  |
| SE                             | 4.5                                      | 4.0          | 3.6          | 3.5          | 3.6          | 4.4          | 5.9          | 6.9          | 7.0          | 12.7         | 12.7         | 12.7         | 2.8            |             |



Table 29.--Net volume of live trees on timberland by species and diameter class, Maryland, 1999

| Species                        | (In millions of cubic feet)              |              |              |               |               |               |               |               |               |              |                |             |  | All classes | SE |
|--------------------------------|--|--------------|--------------|---------------|---------------|---------------|---------------|---------------|---------------|--------------|----------------|-------------|--|-------------|----|
|                                | Diameter class (inches at breast height) |              |              |               |               |               |               |               |               |              |                |             |  |             |    |
|                                | 5.0-<br>6.9                              | 7.0-<br>8.9  | 9.0-<br>10.9 | 11.0-<br>12.9 | 13.0-<br>14.9 | 15.0-<br>16.9 | 17.0-<br>18.9 | 19.0-<br>20.9 | 21.0-<br>28.9 | 29.0+        |                |             |  |             |    |
| White/red pine                 | 8.0                                      | 22.2         | 19.1         | 10.6          | 4.1           | 3.2           | 4.5           | .0            | 2.8           | .0           | 74.5           | 41.7        |  |             |    |
| Loblolly pine                  | 48.4                                     | 81.6         | 93.3         | 95.2          | 71.3          | 57.9          | 38.0          | 29.1          | 15.5          | .0           | 530.4          | 10.5        |  |             |    |
| Virginia pine                  | 16.0                                     | 30.3         | 32.1         | 32.3          | 21.5          | 21.3          | 2.5           | .0            | 2.6           | .0           | 158.6          | 16.0        |  |             |    |
| Other yellow pines             | .2                                       | .8           | .3           | .4            | 1.7           | .0            | .0            | .0            | .0            | .0           | 3.5            | 61.5        |  |             |    |
| Other softwoods                | 4.0                                      | 5.9          | 4.4          | 4.5           | 5.8           | 2.5           | 3.6           | 1.8           | 3.7           | 4.2          | 40.5           | 25.7        |  |             |    |
| <b>Total softwoods</b>         | <b>76.8</b>                              | <b>140.8</b> | <b>149.3</b> | <b>143.0</b>  | <b>104.3</b>  | <b>84.9</b>   | <b>48.6</b>   | <b>30.9</b>   | <b>24.6</b>   | <b>4.2</b>   | <b>807.5</b>   | <b>8.7</b>  |  |             |    |
| Red maple                      | 49.7                                     | 69.4         | 85.6         | 85.5          | 88.7          | 54.3          | 49.3          | 41.6          | 92.8          | 58.9         | 675.7          | 9.7         |  |             |    |
| Sugar maple                    | 6.9                                      | 11.3         | 11.2         | 15.4          | 4.7           | 4.6           | 3.2           | .0            | 7.8           | 14.8         | 79.9           | 26.1        |  |             |    |
| Hickory                        | 9.2                                      | 16.0         | 23.6         | 26.9          | 24.5          | 16.1          | 11.4          | 7.8           | 22.2          | 2.4          | 160.1          | 13.1        |  |             |    |
| Beech                          | 8.0                                      | 10.1         | 11.8         | 15.3          | 13.7          | 14.6          | 8.8           | 9.2           | 12.1          | 6.2          | 109.7          | 14.6        |  |             |    |
| Sweetgum                       | 30.5                                     | 45.2         | 68.8         | 78.2          | 74.4          | 58.1          | 30.2          | 14.0          | 42.0          | 5.4          | 446.9          | 11.0        |  |             |    |
| Yellow-poplar                  | 11.5                                     | 23.3         | 33.7         | 56.7          | 64.2          | 85.1          | 121.7         | 96.0          | 212.9         | 50.1         | 755.4          | 10.7        |  |             |    |
| Blackgum                       | 15.2                                     | 14.9         | 21.5         | 17.8          | 16.1          | 15.1          | 7.9           | 7.7           | 10.9          | .0           | 127.1          | 12.6        |  |             |    |
| Ash-walnut-cherry              | 28.4                                     | 40.1         | 47.1         | 41.1          | 22.8          | 21.7          | 23.9          | 8.9           | 27.3          | 11.0         | 272.3          | 13.1        |  |             |    |
| Select white oaks              | 12.3                                     | 30.4         | 60.9         | 58.2          | 63.9          | 53.4          | 55.2          | 54.9          | 64.5          | 36.7         | 490.4          | 9.6         |  |             |    |
| Select red oaks                | 3.0                                      | 9.2          | 10.4         | 29.1          | 24.3          | 28.6          | 16.4          | 12.6          | 31.8          | 24.2         | 189.6          | 16.3        |  |             |    |
| Other white oaks               | 6.8                                      | 18.4         | 30.1         | 25.2          | 41.8          | 22.8          | 30.2          | 11.8          | 12.6          | .0           | 199.6          | 17.2        |  |             |    |
| Other red oaks                 | 13.5                                     | 21.1         | 44.5         | 64.1          | 82.3          | 86.8          | 67.7          | 61.1          | 93.6          | 45.7         | 580.3          | 8.9         |  |             |    |
| Blacklocust                    | 5.3                                      | 12.1         | 10.7         | 10.2          | 10.8          | 2.5           | .0            | 3.7           | 7.6           | .0           | 62.9           | 22.9        |  |             |    |
| Other hardwoods                | 30.3                                     | 30.0         | 32.0         | 26.7          | 22.6          | 12.3          | 14.2          | 12.4          | 37.0          | 15.4         | 233.0          | 12.6        |  |             |    |
| <b>Noncommercial hardwoods</b> | <b>12.0</b>                              | <b>10.4</b>  | <b>7.0</b>   | <b>8.4</b>    | <b>2.1</b>    | <b>1.8</b>    | <b>.1</b>     | <b>.0</b>     | <b>.0</b>     | <b>.0</b>    | <b>41.8</b>    | <b>15.7</b> |  |             |    |
| <b>Total hardwoods</b>         | <b>242.7</b>                             | <b>361.9</b> | <b>498.8</b> | <b>558.8</b>  | <b>557.1</b>  | <b>477.8</b>  | <b>440.0</b>  | <b>341.6</b>  | <b>675.3</b>  | <b>270.8</b> | <b>4,424.7</b> | <b>3.7</b>  |  |             |    |
| <b>All species</b>             | <b>319.5</b>                             | <b>502.7</b> | <b>648.1</b> | <b>701.8</b>  | <b>661.4</b>  | <b>562.7</b>  | <b>488.6</b>  | <b>372.5</b>  | <b>699.9</b>  | <b>275.0</b> | <b>5,232.2</b> | <b>3.2</b>  |  |             |    |
| <b>SE</b>                      | <b>4.8</b>                               | <b>5.2</b>   | <b>4.8</b>   | <b>4.4</b>    | <b>5.1</b>    | <b>6.2</b>    | <b>8.0</b>    | <b>9.6</b>    | <b>9.0</b>    | <b>19.6</b>  | <b>3.2</b>     |             |  |             |    |

Table 30.--Net volume of growing-stock trees on timberland by forest type and stand-size class, Maryland, 1999

(In millions of cubic feet)

| Forest type                    | Stand-size class |             |                      |             | All classes | SE    |
|--------------------------------|------------------|-------------|----------------------|-------------|-------------|-------|
|                                | Saw-timber       | Pole-timber | Sapling and seedling | Non-stocked |             |       |
| Red pine                       | 11.5             | 39.2        | .0                   | .0          | 50.7        | 61.0  |
| White pine                     | 18.5             | .0          | .0                   | .0          | 18.5        | 68.0  |
| White/red pine group           | 30.1             | 39.2        | .0                   | .0          | 69.2        | 48.2  |
| Norway spruce                  | 9.9              | .0          | .0                   | .0          | 9.9         | 100.0 |
| Spruce/fir group               | 9.9              | .0          | .0                   | .0          | 9.9         | 100.0 |
| Loblolly pine                  | 329.5            | 95.2        | 7.4                  | .0          | 432.1       | 16.3  |
| Virginia pine                  | 50.5             | 31.4        | .0                   | .0          | 81.9        | 30.1  |
| Loblolly/shortleaf group       | 380.0            | 126.6       | 7.4                  | .0          | 514.0       | 14.5  |
| Eastern redcedar/hardwood      | 12.0             | .0          | 4.7                  | .0          | 16.7        | 75.2  |
| Virginia pine/oak              | 92.7             | 13.6        | .0                   | .0          | 106.3       | 35.4  |
| Loblolly pine/hardwood         | 254.9            | 95.9        | 1.7                  | .0          | 352.6       | 18.9  |
| Oak/pine group                 | 359.7            | 109.5       | 6.4                  | .0          | 475.5       | 16.0  |
| Post, black, or bear oak       | 28.9             | 1.8         | .0                   | .0          | 30.6        | 67.8  |
| Chestnut oak                   | 78.8             | 30.3        | .0                   | .0          | 109.1       | 38.2  |
| White oak/red oak/hickory      | 307.0            | 27.5        | .0                   | 1.5         | 336.1       | 22.5  |
| White oak                      | 113.6            | 37.7        | .0                   | .0          | 151.3       | 28.9  |
| Northern red oak               | 81.1             | .0          | .0                   | .0          | 81.1        | 55.5  |
| Y-poplar/wh. oak/no.red oak    | 172.4            | .0          | .0                   | .0          | 172.4       | 35.2  |
| Black locust                   | 30.8             | 11.4        | 7.9                  | .0          | 50.1        | 42.8  |
| Sweetgum/yellow-poplar         | 149.0            | 21.9        | .1                   | .0          | 171.0       | 31.5  |
| Black walnut                   | .4               | .9          | .0                   | .0          | 1.3         | 75.6  |
| Yellow-poplar                  | 257.2            | 2.2         | 1.6                  | .0          | 261.0       | 28.2  |
| Scarlet oak                    | 55.9             | .0          | .0                   | .0          | 55.9        | 50.1  |
| Sassafras/persimmon            | .0               | 2.9         | 1.0                  | .0          | 3.9         | 65.1  |
| Red maple/central hardwood     | 48.5             | 10.6        | .0                   | .0          | 59.1        | 32.7  |
| Mixed central hardwoods        | 1,450.2          | 191.6       | 29.2                 | .4          | 1,671.4     | 8.2   |
| Oak/hickory group              | 2,773.8          | 338.8       | 39.8                 | 1.9         | 3,154.3     | 5.3   |
| Swamp chsnt oak/cherrybark oak | 47.7             | 4.3         | 3.3                  | .0          | 55.3        | 44.8  |
| Sweetgm/nuttall oak/willow oak | 133.6            | 3.5         | 3.8                  | .0          | 140.9       | 33.1  |
| Baldcypress/water tupelo       | 23.5             | 13.2        | .0                   | .0          | 36.7        | 56.6  |
| Sweetbay/swamp tupelo/red mple | 70.2             | .9          | .0                   | .0          | 71.1        | 56.4  |
| Oak/gum/cypress group          | 275.0            | 21.9        | 7.1                  | .0          | 304.0       | 22.8  |

Table 30.--continued

(In millions of cubic feet)

| Forest type                    | Stand-size class |             |                      |             | All classes | SE    |
|--------------------------------|------------------|-------------|----------------------|-------------|-------------|-------|
|                                | Saw-timber       | Pole-timber | Sapling and seedling | Non-stocked |             |       |
| Black ash/Amer. elm/red maple  | 29.6             | 6.2         | .0                   | .0          | 35.8        | 43.3  |
| Red maple(lowland)             | 76.2             | .0          | 2.4                  | .9          | 79.5        | 68.9  |
| Red maple(upland)              | 31.8             | 1.6         | .0                   | .0          | 33.4        | 66.9  |
| River birch/sycamore           | 41.7             | 7.8         | 1.5                  | .0          | 50.9        | 53.2  |
| Willow                         | .0               | .0          | .1                   | .0          | .1          | 100.0 |
| Sycamore/pecan/American elm    | 8.2              | .0          | .0                   | .0          | 8.2         | 100.0 |
| American elm/green ash         | 8.6              | 5.8         | .0                   | .0          | 14.4        | 72.1  |
| Elm/ash/red maple group        | 196.1            | 21.4        | 4.0                  | .9          | 222.3       | 30.6  |
| Sugar maple/beech/yellow birch | 106.9            | 2.3         | 3.6                  | .0          | 112.8       | 36.3  |
| Black cherry                   | 11.9             | 44.5        | 1.1                  | .0          | 57.4        | 47.4  |
| Red maple/northern hardwoods   | 25.4             | 45.9        | .0                   | .0          | 71.2        | 55.3  |
| Pin cherry/reverting field     | .0               | .0          | .1                   | .0          | .1          | 100.0 |
| Mixed northern hardwoods       | 62.8             | 12.4        | 2.3                  | .0          | 77.5        | 32.8  |
| Northern hardwoods group       | 206.9            | 105.1       | 7.0                  | .0          | 319.1       | 20.5  |
| Aspen                          | .0               | 3.8         | .0                   | .0          | 3.8         | 100.0 |
| Aspen/birch group              | .0               | 3.8         | .0                   | .0          | 3.8         | 100.0 |
| All forest types               | 4,231.4          | 766.3       | 71.7                 | 2.8         | 5,072.2     | 3.3   |
| SE                             | 4.3              | 11.6        | 21.3                 | 63.8        | 3.3         |       |

Table 31.--Net volume of growing-stock trees on timberland by species and forest-type group, Maryland, 1986

| Species                | (In millions of cubic feet) |            |                    |              |                |                 |                   |                    |             |                |            |                 | SE         |
|------------------------|-----------------------------|------------|--------------------|--------------|----------------|-----------------|-------------------|--------------------|-------------|----------------|------------|-----------------|------------|
|                        | Forest-type group           |            |                    |              |                |                 |                   |                    |             |                |            | All type groups |            |
|                        | White/red pine              | Spruce/fir | Loblolly/shortleaf | Oak/pine     | Oak/hickory    | Oak/gum/cypress | Elm/ash/red maple | Northern hardwoods | Aspen/birch |                |            |                 |            |
| White/red pine         | 50.7                        | .0         | .1                 | 2.8          | 7.0            | .0              | .0                | 1.5                | .0          | .0             | .0         | 62.1            | 37.0       |
| Loblolly pine          | .0                          | .0         | 305.6              | 127.0        | 38.6           | 10.5            | .0                | .0                 | .0          | .0             | .0         | 481.7           | 9.1        |
| Virginia pine          | .0                          | .0         | 144.7              | 51.3         | 35.2           | 1.4             | .0                | .6                 | .0          | .0             | .0         | 233.2           | 13.3       |
| Other yellow pines     | 1.9                         | .0         | 3.7                | 4.7          | 5.9            | .0              | .0                | .0                 | .0          | .0             | .0         | 16.3            | 30.4       |
| Other softwoods        | 16.2                        | .0         | .8                 | .8           | 14.7           | 3.3             | .0                | 5.5                | .0          | .0             | .0         | 41.4            | 31.9       |
| <b>Total softwoods</b> | <b>68.9</b>                 | <b>.0</b>  | <b>454.9</b>       | <b>186.7</b> | <b>101.3</b>   | <b>15.2</b>     | <b>.0</b>         | <b>7.6</b>         | <b>.0</b>   | <b>.0</b>      | <b>.0</b>  | <b>834.6</b>    | <b>7.3</b> |
| Red maple              | 2.4                         | .0         | 15.8               | 42.8         | 290.8          | 74.8            | 66.0              | 20.0               | .0          | .0             | .0         | 512.6           | 6.5        |
| Sugar maple            | .0                          | .0         | .0                 | .0           | 21.5           | .0              | .3                | 39.0               | .0          | .0             | .0         | 60.8            | 18.0       |
| Hickory                | .0                          | .0         | 1.4                | 4.6          | 129.2          | .0              | 3.5               | 9.5                | .0          | .0             | .0         | 148.1           | 10.1       |
| Beech                  | .9                          | .0         | .5                 | 4.8          | 132.6          | 2.8             | .9                | 6.3                | .0          | .0             | .0         | 148.8           | 12.3       |
| Sweetgum               | .0                          | .0         | 30.8               | 31.8         | 198.5          | 54.2            | 8.2               | .1                 | .0          | .0             | .0         | 323.7           | 8.7        |
| Yellow-poplar          | .0                          | .0         | 21.0               | 36.1         | 560.6          | 3.8             | 11.3              | 20.5               | .0          | .0             | .0         | 653.4           | 11.8       |
| Blackgum               | .0                          | .0         | 6.3                | 16.3         | 73.6           | 30.7            | 7.2               | 4.1                | .0          | .0             | .0         | 138.2           | 9.4        |
| Ash-walnut-cherry      | 1.6                         | .0         | 1.7                | 7.0          | 105.4          | 11.0            | 12.7              | 48.1               | .0          | .0             | .0         | 187.6           | 9.8        |
| Select white oaks      | .7                          | .0         | 15.1               | 34.2         | 350.9          | 25.3            | 2.9               | 7.2                | .0          | .0             | .0         | 436.3           | 6.7        |
| Other red oaks         | .3                          | .0         | 2.1                | 2.1          | 260.4          | 4.1             | 1.8               | 10.6               | .0          | .0             | .0         | 281.4           | 7.8        |
| Other white oaks       | .0                          | .0         | 3.6                | 4.7          | 250.7          | .3              | .2                | 5.1                | .0          | .0             | .0         | 264.6           | 11.5       |
| Other red oaks         | .0                          | .0         | 23.1               | 64.7         | 372.1          | 40.3            | 5.6               | 1.7                | .0          | .0             | .0         | 507.5           | 6.7        |
| Black locust           | .0                          | .0         | .4                 | .8           | 43.6           | .0              | 3.1               | 5.1                | .2          | .0             | .0         | 53.2            | 17.8       |
| Other hardwoods        | 2.4                         | .0         | 1.1                | 6.8          | 97.5           | 8.3             | 41.5              | 35.6               | 1.0         | .0             | .0         | 194.1           | 11.8       |
| <b>Total hardwoods</b> | <b>8.3</b>                  | <b>.0</b>  | <b>122.9</b>       | <b>256.7</b> | <b>2,887.5</b> | <b>255.7</b>    | <b>165.3</b>      | <b>212.9</b>       | <b>1.2</b>  | <b>3,910.5</b> | <b>1.2</b> | <b>3,910.5</b>  | <b>3.4</b> |
| <b>All species</b>     | <b>77.2</b>                 | <b>.0</b>  | <b>577.8</b>       | <b>443.4</b> | <b>2,988.8</b> | <b>270.8</b>    | <b>165.3</b>      | <b>220.5</b>       | <b>1.2</b>  | <b>4,745.1</b> | <b>1.2</b> | <b>4,745.1</b>  | <b>2.9</b> |
| SE                     | 37.2                        | .0         | 11.9               | 13.7         | 4.7            | 18.0            | 25.1              | 17.7               | 100.0       | 2.9            |            |                 |            |

Table 32.--Net volume of growing-stock trees on timberland by species and forest-type group, Maryland, 1999  
(In millions of cubic feet)

| Species            | Forest-type group |            |                    |          |             |                 |                   |                    |             |         | All type groups | SE   |
|--------------------|-------------------|------------|--------------------|----------|-------------|-----------------|-------------------|--------------------|-------------|---------|-----------------|------|
|                    | White/red pine    | Spruce/fir | Loblolly/shortleaf | Oak/pine | Oak/hickory | Oak/gum/cypress | Elm/ash/red maple | Northern hardwoods | Aspen/birch |         |                 |      |
| White/red pine     | 56.5              | 4.6        | 1.8                | .0       | 9.8         | .6              | .0                | .7                 | .0          | .0      | 74.1            | 41.6 |
| Loblolly pine      | .0                | .0         | 348.6              | 139.0    | 29.1        | 12.1            | .0                | .0                 | .0          | .0      | 528.8           | 10.6 |
| Virginia pine      | .0                | .0         | 74.4               | 51.7     | 24.7        | 4.7             | .0                | .0                 | .0          | .0      | 155.6           | 16.0 |
| Other yellow pines | .0                | .0         | .0                 | .0       | 3.5         | .0              | .0                | .0                 | .0          | .0      | 3.5             | 61.5 |
| Other softwoods    | 1.0               | 5.2        | .2                 | 3.7      | 15.0        | 9.7             | .0                | 4.2                | .0          | .0      | 39.1            | 26.3 |
| Red maple          | .5                | .0         | 13.5               | 40.0     | 362.6       | 63.6            | 116.6             | 43.8               | .0          | .0      | 640.7           | 10.0 |
| Sugar maple        | .0                | .0         | .0                 | .0       | 16.2        | .0              | .0                | 61.1               | .0          | .0      | 77.3            | 26.7 |
| Hickory            | .0                | .0         | 1.1                | 3.7      | 147.0       | .0              | 3.5               | 3.9                | .0          | .0      | 159.2           | 13.1 |
| Beech              | .0                | .0         | 1.6                | 4.3      | 93.9        | 2.5             | .0                | .8                 | .0          | .0      | 103.1           | 14.9 |
| Sweetgum           | .0                | .0         | 29.7               | 62.9     | 265.8       | 72.4            | 5.5               | 5.3                | .0          | .0      | 441.5           | 10.9 |
| Yellow-poplar      | 6.2               | .0         | 10.4               | 42.4     | 662.0       | 2.7             | 11.2              | 15.0               | .0          | .0      | 749.9           | 10.8 |
| Blackgum           | .0                | .0         | 3.0                | 11.1     | 81.0        | 21.8            | 4.4               | 3.3                | .0          | .0      | 124.6           | 12.8 |
| Ash-walnut-cherry  | 4.1               | .0         | 1.5                | 8.7      | 104.2       | 6.5             | 28.6              | 95.1               | .0          | .0      | 248.8           | 13.3 |
| Select white oaks  | .0                | .0         | 9.8                | 43.7     | 394.0       | 34.7            | 1.8               | 3.4                | .0          | .0      | 487.4           | 9.6  |
| Select red oaks    | .2                | .0         | .0                 | 2.5      | 172.4       | 3.0             | .0                | 9.8                | .0          | .0      | 187.9           | 16.3 |
| Other white oaks   | .0                | .0         | .0                 | 1.8      | 188.9       | .4              | .0                | 2.9                | .0          | .0      | 194.0           | 17.7 |
| Other red oaks     | .2                | .0         | 14.7               | 49.2     | 436.7       | 52.0            | 12.2              | 5.8                | .0          | .0      | 570.8           | 9.0  |
| Black locust       | .0                | .0         | .9                 | .9       | 50.7        | .4              | 1.0               | 5.6                | .0          | .0      | 59.4            | 23.9 |
| Other hardwoods    | .5                | .0         | 2.9                | 9.9      | 96.7        | 16.9            | 37.5              | 58.3               | .0          | 3.8     | 226.6           | 12.8 |
| All species        | 69.2              | 9.9        | 514.0              | 475.5    | 3,154.3     | 304.0           | 222.3             | 319.1              | 3.8         | 5,072.2 | 3.3             |      |
| SE                 | 48.2              | 100.0      | 14.5               | 16.0     | 5.3         | 22.8            | 30.6              | 20.5               | 100.0       | 3.3     |                 |      |

Table 33.--Net volume of growing-stock trees on timberland by species and stand-size class, Maryland, 1986

(In millions of cubic feet)

| Species                | Stand-size class |                |                      |              | All classes    | SE         |
|------------------------|------------------|----------------|----------------------|--------------|----------------|------------|
|                        | Saw-timber       | Pole-timber    | Sapling and seedling | Non-stocked  |                |            |
| White/red pine         | 17.5             | 38.7           | 5.9                  | .0           | 62.1           | 37.0       |
| Loblolly pine          | 322.7            | 145.0          | 13.9                 | .0           | 481.7          | 9.1        |
| Virginia pine          | 145.8            | 82.9           | 4.5                  | .0           | 233.2          | 13.3       |
| Other yellow pines     | 10.2             | 6.1            | .0                   | .0           | 16.3           | 30.4       |
| Other softwoods        | 25.1             | 16.2           | .1                   | .0           | 41.4           | 31.9       |
| <b>Total softwoods</b> | <b>521.3</b>     | <b>288.9</b>   | <b>24.4</b>          | <b>.0</b>    | <b>834.6</b>   | <b>7.3</b> |
| Red maple              | 384.4            | 124.0          | 4.2                  | .0           | 512.6          | 6.5        |
| Sugar maple            | 48.7             | 11.9           | .3                   | .0           | 60.8           | 18.0       |
| Hickory                | 115.3            | 31.5           | 1.3                  | .0           | 148.1          | 10.1       |
| Beech                  | 124.7            | 22.9           | 1.2                  | .0           | 148.8          | 12.3       |
| Sweetgum               | 245.7            | 69.9           | 8.1                  | .0           | 323.7          | 8.7        |
| Yellow-poplar          | 570.9            | 76.6           | 5.9                  | .0           | 653.4          | 11.8       |
| Blackgum               | 109.5            | 26.2           | 2.5                  | .0           | 138.2          | 9.4        |
| Ash-walnut-cherry      | 120.1            | 63.2           | 3.8                  | .5           | 187.6          | 9.8        |
| Select white oaks      | 296.0            | 138.3          | 2.1                  | .0           | 436.3          | 6.7        |
| Select red oaks        | 220.1            | 57.7           | 3.6                  | .0           | 281.4          | 7.8        |
| Other white oaks       | 222.5            | 41.4           | .6                   | .0           | 264.6          | 11.5       |
| Other red oaks         | 384.9            | 117.8          | 4.8                  | .0           | 507.5          | 6.7        |
| Black locust           | 24.5             | 27.6           | 1.0                  | .0           | 53.2           | 17.8       |
| Other hardwoods        | 149.9            | 43.4           | .7                   | .0           | 194.1          | 11.8       |
| <b>Total hardwoods</b> | <b>3,017.4</b>   | <b>852.3</b>   | <b>40.3</b>          | <b>.5</b>    | <b>3,910.5</b> | <b>3.4</b> |
| <b>All species</b>     | <b>3,538.7</b>   | <b>1,141.2</b> | <b>64.6</b>          | <b>.5</b>    | <b>4,745.1</b> | <b>2.9</b> |
| <b>SE</b>              | <b>4.3</b>       | <b>7.2</b>     | <b>21.8</b>          | <b>100.0</b> | <b>2.9</b>     |            |

Table 34.--Net volume of growing-stock trees on timberland by species and stand-size class, Maryland, 1999

(In millions of cubic feet)

| Species                | Stand-size class |              |                      |             | All classes    | SE         |
|------------------------|------------------|--------------|----------------------|-------------|----------------|------------|
|                        | Saw-timber       | Pole-timber  | Sapling and seedling | Non-stocked |                |            |
| White/red pine         | 31.5             | 41.1         | 1.5                  | .0          | 74.1           | 41.6       |
| Loblolly pine          | 386.0            | 137.3        | 5.4                  | .0          | 528.8          | 10.6       |
| Virginia pine          | 119.2            | 36.2         | .2                   | .0          | 155.6          | 16.0       |
| Other yellow pines     | 1.7              | 1.8          | .0                   | .0          | 3.5            | 61.5       |
| Other softwoods        | 29.9             | 9.0          | .1                   | .0          | 39.1           | 26.3       |
| <b>Total softwoods</b> | <b>568.4</b>     | <b>225.3</b> | <b>7.2</b>           | <b>.0</b>   | <b>801.0</b>   | <b>8.7</b> |
| Red maple              | 536.5            | 94.4         | 9.1                  | .7          | 640.7          | 10.0       |
| Sugar maple            | 68.9             | 7.3          | 1.1                  | .0          | 77.3           | 26.7       |
| Hickory                | 140.7            | 14.5         | 2.5                  | 1.5         | 159.2          | 13.1       |
| Beech                  | 98.1             | 4.7          | .3                   | .0          | 103.1          | 14.9       |
| Sweetgum               | 363.3            | 70.1         | 7.9                  | .2          | 441.5          | 10.9       |
| Yellow-poplar          | 706.7            | 32.3         | 10.9                 | .0          | 749.9          | 10.8       |
| Blackgum               | 103.6            | 19.9         | 1.0                  | .1          | 124.6          | 12.8       |
| Ash-walnut-cherry      | 151.6            | 85.0         | 12.2                 | .0          | 248.8          | 13.3       |
| Select white oaks      | 432.7            | 52.9         | 1.8                  | .0          | 487.4          | 9.6        |
| Select red oaks        | 173.7            | 12.3         | 1.9                  | .0          | 187.9          | 16.3       |
| Other white oaks       | 156.7            | 34.3         | 2.9                  | .0          | 194.0          | 17.7       |
| Other red oaks         | 504.5            | 62.4         | 3.9                  | .0          | 570.8          | 9.0        |
| Black locust           | 39.6             | 18.9         | .9                   | .0          | 59.4           | 23.9       |
| Other hardwoods        | 186.5            | 31.7         | 8.2                  | .2          | 226.6          | 12.8       |
| <b>Total hardwoods</b> | <b>3,663.0</b>   | <b>540.9</b> | <b>64.4</b>          | <b>2.8</b>  | <b>4,271.2</b> | <b>3.8</b> |
| <b>All species</b>     | <b>4,231.4</b>   | <b>766.3</b> | <b>71.7</b>          | <b>2.8</b>  | <b>5,072.2</b> | <b>3.3</b> |
| <b>SE</b>              | <b>4.3</b>       | <b>11.6</b>  | <b>21.3</b>          | <b>63.8</b> | <b>3.3</b>     |            |

Table 35.--Net volume of growing-stock trees on timberland by species and diameter class, Maryland, 1986

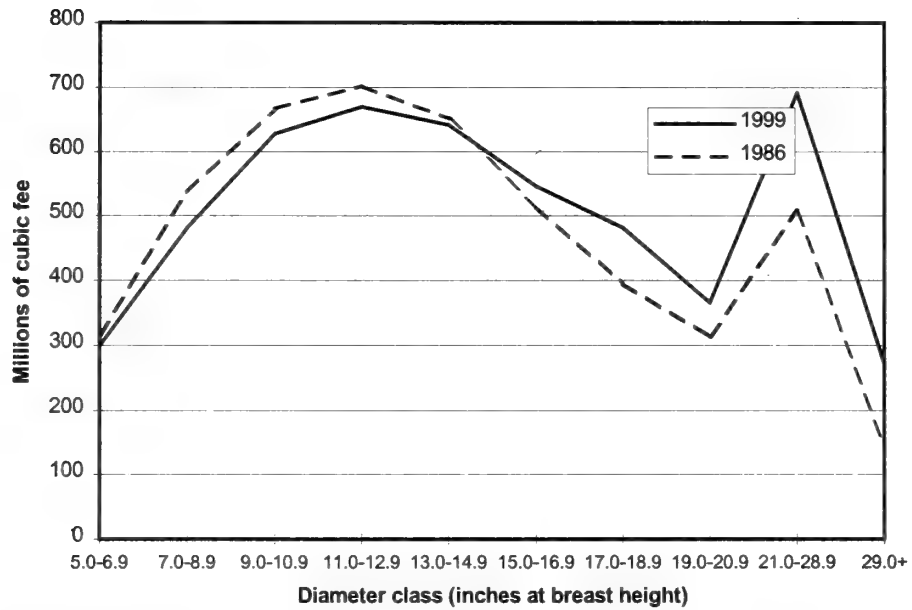
| Species                | (In millions of cubic feet)              |              |              |               |               |               |               |               |               |              |          |          |          | All classes    | SE         |
|------------------------|--|--------------|--------------|---------------|---------------|---------------|---------------|---------------|---------------|--------------|----------|----------|----------|----------------|------------|
|                        | Diameter class (inches at breast height) |              |              |               |               |               |               |               |               |              |          |          |          |                |            |
|                        | 5.0-<br>6.9                              | 7.0-<br>8.9  | 9.0-<br>10.9 | 11.0-<br>12.9 | 13.0-<br>14.9 | 15.0-<br>16.9 | 17.0-<br>18.9 | 19.0-<br>20.9 | 21.0-<br>28.9 | 29.0+        |          |          |          |                |            |
| White/red pine         | 16.7                                     | 18.4         | 8.6          | 9.7           | 4.9           | 1.2           | 1.5           | 1.1           | 1.1           | 0            | 0        | 0        | 0        | 62.1           | 37.0       |
| Loblolly pine          | 49.1                                     | 73.9         | 86.3         | 94.8          | 77.8          | 49.3          | 29.7          | 12.3          | 8.5           | 0            | 0        | 0        | 0        | 481.7          | 9.1        |
| Virginia pine          | 22.4                                     | 51.6         | 59.6         | 52.0          | 35.3          | 10.7          | 1.2           | 0             | 0             | 0            | 0        | 0        | 0        | 233.2          | 13.3       |
| Other yellow pines     | 1.9                                      | 2.8          | 4.8          | 3.5           | 1.7           | 1.2           | 0             | 0             | 0             | 0            | 0        | 0        | 0        | 16.3           | 30.4       |
| Other softwoods        | 2.5                                      | 6.2          | 4.1          | 4.9           | 5.2           | 4.2           | 5.4           | 4.2           | 4.2           | 0            | 0        | 0        | 0        | 41.4           | 31.9       |
| <b>Total softwoods</b> | <b>92.6</b>                              | <b>152.8</b> | <b>163.4</b> | <b>164.8</b>  | <b>125.0</b>  | <b>66.5</b>   | <b>38.2</b>   | <b>17.6</b>   | <b>13.0</b>   | <b>0</b>     | <b>0</b> | <b>0</b> | <b>0</b> | <b>834.6</b>   | <b>7.3</b> |
| Red maple              | 45.5                                     | 67.6         | 75.5         | 81.4          | 65.2          | 45.5          | 38.4          | 27.4          | 49.9          | 16.2         | 0        | 0        | 0        | 512.6          | 6.5        |
| Sugar maple            | 6.6                                      | 8.8          | 9.2          | 8.5           | 6.4           | 8.2           | 2.4           | 5.5           | 3.5           | 1.7          | 0        | 0        | 0        | 60.8           | 18.0       |
| Hickory                | 10.8                                     | 22.5         | 24.2         | 21.0          | 19.7          | 19.5          | 15.1          | 7.5           | 6.4           | 1.5          | 0        | 0        | 0        | 148.1          | 10.1       |
| Beech                  | 7.1                                      | 9.1          | 15.3         | 18.5          | 21.4          | 15.7          | 15.9          | 16.6          | 22.5          | 6.7          | 0        | 0        | 0        | 148.8          | 12.3       |
| Sweetgum               | 26.1                                     | 45.5         | 48.9         | 54.8          | 51.8          | 40.8          | 21.5          | 13.3          | 17.0          | 4.0          | 0        | 0        | 0        | 323.7          | 8.7        |
| Yellow-poplar          | 13.6                                     | 27.7         | 44.9         | 58.9          | 73.3          | 72.4          | 81.6          | 75.0          | 158.4         | 47.4         | 0        | 0        | 0        | 653.4          | 11.8       |
| Blackgum               | 13.7                                     | 15.9         | 25.2         | 18.2          | 19.1          | 20.2          | 9.3           | 7.6           | 9.0           | 0            | 0        | 0        | 0        | 138.2          | 9.4        |
| Ash-walnut-cherry      | 16.7                                     | 28.0         | 34.0         | 26.5          | 30.0          | 19.2          | 14.4          | 8.2           | 6.5           | 4.2          | 0        | 0        | 0        | 187.6          | 9.8        |
| Select white oaks      | 22.7                                     | 45.3         | 68.5         | 62.0          | 52.8          | 47.2          | 41.0          | 26.1          | 53.9          | 16.9         | 0        | 0        | 0        | 436.3          | 6.7        |
| Select red oaks        | 5.0                                      | 14.4         | 26.1         | 38.1          | 44.1          | 37.2          | 24.5          | 27.3          | 48.2          | 16.4         | 0        | 0        | 0        | 281.4          | 7.8        |
| Other white oaks       | 8.2                                      | 28.3         | 43.1         | 40.9          | 44.0          | 30.8          | 26.0          | 12.2          | 27.6          | 3.5          | 0        | 0        | 0        | 264.6          | 11.5       |
| Other red oaks         | 18.7                                     | 34.4         | 45.0         | 74.6          | 66.4          | 66.0          | 53.4          | 52.9          | 74.8          | 21.3         | 0        | 0        | 0        | 507.5          | 6.7        |
| Black locust           | 6.0                                      | 9.4          | 12.6         | 6.2           | 7.7           | 5.0           | 3.6           | 2.1           | 0             | 0            | 0        | 0        | 0        | 53.2           | 17.8       |
| Other hardwoods        | 21.8                                     | 27.2         | 30.6         | 27.0          | 23.2          | 19.7          | 9.4           | 14.4          | 16.5          | 4.3          | 0        | 0        | 0        | 194.1          | 11.8       |
| <b>Total hardwoods</b> | <b>222.7</b>                             | <b>384.2</b> | <b>503.1</b> | <b>536.5</b>  | <b>525.3</b>  | <b>447.6</b>  | <b>356.4</b>  | <b>296.1</b>  | <b>494.6</b>  | <b>144.0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>3,910.5</b> | <b>3.4</b> |
| <b>All species</b>     | <b>315.3</b>                             | <b>537.0</b> | <b>666.5</b> | <b>701.3</b>  | <b>650.3</b>  | <b>514.1</b>  | <b>394.6</b>  | <b>313.6</b>  | <b>507.6</b>  | <b>144.6</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>4,745.1</b> | <b>2.9</b> |
| SE                     | 4.8                                      | 4.1          | 3.7          | 3.6           | 3.7           | 4.5           | 6.0           | 7.0           | 7.2           | 13.5         | 0        | 0        | 0        | 2.9            | 0          |



Table 36.--Net volume of growing-stock trees on timberland by species and diameter class, Maryland, 1999

| Species                | (In millions of cubic feet)              |              |              |               |               |               |               |               |               |              |                |            | All classes | SE |
|------------------------|--|--------------|--------------|---------------|---------------|---------------|---------------|---------------|---------------|--------------|----------------|------------|-------------|----|
|                        | Diameter class (inches at breast height) |              |              |               |               |               |               |               |               |              |                |            |             |    |
|                        | 5.0-<br>6.9                              | 7.0-<br>8.9  | 9.0-<br>10.9 | 11.0-<br>12.9 | 13.0-<br>14.9 | 15.0-<br>16.9 | 17.0-<br>18.9 | 19.0-<br>20.9 | 21.0-<br>28.9 | 29.0+        |                |            |             |    |
| White/red pine         | 7.9                                      | 22.2         | 18.9         | 10.6          | 4.1           | 3.2           | 4.5           | .0            | 2.8           | .0           | 74.1           | 41.6       |             |    |
| Loblolly pine          | 48.3                                     | 81.6         | 92.4         | 71.3          | 38.0          | 29.1          | 15.5          | .0            | 528.8         | 10.6         | 528.8          | 10.6       |             |    |
| Virginia pine          | 15.7                                     | 30.3         | 30.6         | 21.5          | 2.1           | 2.6           | .0            | 155.6         | 16.0          | 16.0         | 155.6          | 16.0       |             |    |
| Other yellow pines     | .2                                       | .8           | .3           | .4            | 1.7           | .0            | .0            | 3.5           | 61.5          | .0           | 3.5            | 61.5       |             |    |
| Other softwoods        | 4.0                                      | 5.8          | 3.4          | 4.5           | 5.4           | 2.5           | 3.6           | 4.2           | 26.3          | 4.2          | 39.1           | 26.3       |             |    |
| <b>Total softwoods</b> | <b>76.2</b>                              | <b>140.7</b> | <b>145.6</b> | <b>143.0</b>  | <b>104.0</b>  | <b>83.5</b>   | <b>48.3</b>   | <b>30.9</b>   | <b>24.6</b>   | <b>4.2</b>   | <b>801.0</b>   | <b>8.7</b> |             |    |
| Red maple              | 48.1                                     | 66.2         | 83.3         | 73.7          | 85.2          | 51.3          | 45.4          | 41.2          | 90.5          | 55.8         | 640.7          | 10.0       |             |    |
| Sugar maple            | 6.7                                      | 11.0         | 10.2         | 15.4          | 4.7           | 3.5           | 3.2           | .0            | 7.8           | 14.8         | 77.3           | 26.7       |             |    |
| Hickory                | 9.1                                      | 15.6         | 23.6         | 26.9          | 24.0          | 16.1          | 11.4          | 7.8           | 22.2          | 2.4          | 159.2          | 13.1       |             |    |
| Beech                  | 7.9                                      | 9.9          | 11.7         | 13.9          | 12.2          | 13.6          | 8.2           | 9.2           | 11.4          | 5.2          | 103.1          | 14.9       |             |    |
| Sweetgum               | 29.1                                     | 44.4         | 68.6         | 76.3          | 73.3          | 58.1          | 30.2          | 14.0          | 42.0          | 5.4          | 441.5          | 10.9       |             |    |
| Yellow-poplar          | 11.5                                     | 23.2         | 33.0         | 56.5          | 62.9          | 85.1          | 120.6         | 96.0          | 211.0         | 50.1         | 749.9          | 10.8       |             |    |
| Blackgum               | 14.7                                     | 14.6         | 20.6         | 17.5          | 15.7          | 15.1          | 7.9           | 7.7           | 10.9          | .0           | 124.6          | 12.8       |             |    |
| Ash-walnut-cherry      | 26.8                                     | 37.3         | 44.8         | 36.2          | 19.6          | 17.4          | 23.8          | 5.9           | 25.8          | 11.0         | 248.8          | 13.3       |             |    |
| Select white oaks      | 12.1                                     | 30.2         | 60.8         | 56.9          | 63.1          | 52.9          | 55.2          | 54.9          | 64.5          | 36.7         | 487.4          | 9.6        |             |    |
| Other red oaks         | 2.9                                      | 9.2          | 10.3         | 29.1          | 24.3          | 27.1          | 16.4          | 12.6          | 31.8          | 24.2         | 187.9          | 16.3       |             |    |
| Other white oaks       | 6.5                                      | 17.9         | 29.3         | 24.8          | 40.8          | 22.8          | 30.2          | 9.1           | 12.6          | .0           | 194.0          | 17.7       |             |    |
| Other red oaks         | 13.0                                     | 20.9         | 43.9         | 63.6          | 79.8          | 85.6          | 66.5          | 61.1          | 90.7          | 45.7         | 570.8          | 9.0        |             |    |
| Black locust           | 4.7                                      | 11.7         | 9.4          | 9.4           | 10.3          | 2.5           | .0            | 3.7           | 7.6           | .0           | 59.4           | 23.9       |             |    |
| Other hardwoods        | 29.0                                     | 28.8         | 31.8         | 26.0          | 21.2          | 11.3          | 14.2          | 12.0          | 37.0          | 15.4         | 226.6          | 12.8       |             |    |
| <b>Total hardwoods</b> | <b>222.1</b>                             | <b>340.9</b> | <b>481.5</b> | <b>526.4</b>  | <b>536.9</b>  | <b>462.3</b>  | <b>433.3</b>  | <b>335.1</b>  | <b>666.0</b>  | <b>266.6</b> | <b>4,271.2</b> | <b>3.8</b> |             |    |
| <b>All species</b>     | <b>298.3</b>                             | <b>481.7</b> | <b>627.1</b> | <b>669.5</b>  | <b>640.9</b>  | <b>545.8</b>  | <b>481.5</b>  | <b>366.0</b>  | <b>690.6</b>  | <b>270.9</b> | <b>5,072.2</b> | <b>3.3</b> |             |    |
| SE                     | 5.0                                      | 5.4          | 4.9          | 4.6           | 5.2           | 6.3           | 8.1           | 9.7           | 9.1           | 19.9         | 3.3            |            |             |    |

## Net volume of growing-stock trees on timberland, Maryland, 1986 and 1999



## Net volume of growing-stock trees on timberland, top 5 species, Maryland, 1986 and 1999

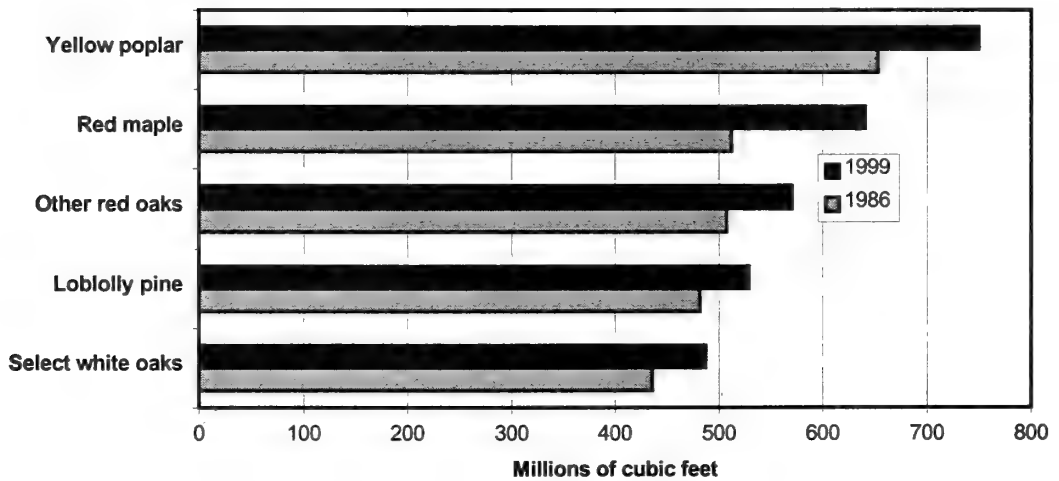


Table 37.--Net volume of growing-stock in the sawlog portion of sawtimber trees on timberland by species and diameter class, Maryland, 1999

| Species                | (In millions of cubic feet)              |               |               |               |               |               |               |              |                |            | All classes | SE |
|------------------------|--|---------------|---------------|---------------|---------------|---------------|---------------|--------------|----------------|------------|-------------|----|
|                        | Diameter class (inches at breast height) |               |               |               |               |               |               |              |                |            |             |    |
|                        | 9.0-<br>10.9                             | 11.0-<br>12.9 | 13.0-<br>14.9 | 15.0-<br>16.9 | 17.0-<br>18.9 | 19.0-<br>20.9 | 21.0-<br>28.9 | 29.0+        |                |            |             |    |
| White/red pine         | 15.9                                     | 9.2           | 3.6           | 2.9           | 4.2           | .0            | 2.7           | .0           | 38.4           | 34.0       |             |    |
| Loblolly pine          | 77.7                                     | 82.8          | 63.7          | 52.2          | 35.1          | 27.1          | 14.5          | .0           | 353.1          | 12.3       |             |    |
| Virginia pine          | 25.8                                     | 28.1          | 19.2          | 18.6          | 2.0           | .0            | 2.4           | .0           | 96.0           | 18.1       |             |    |
| Other yellow pines     | .3                                       | .4            | 1.5           | .0            | .0            | .0            | .0            | .0           | 2.2            | 58.1       |             |    |
| Other softwoods        | 2.9                                      | 3.9           | 4.8           | 2.3           | 3.3           | 1.7           | 3.5           | 4.0          | 26.3           | 29.9       |             |    |
| <b>Total softwoods</b> | <b>122.5</b>                             | <b>124.4</b>  | <b>92.9</b>   | <b>76.0</b>   | <b>44.5</b>   | <b>28.7</b>   | <b>23.0</b>   | <b>4.0</b>   | <b>516.1</b>   | <b>9.6</b> |             |    |
| Red maple              | .0                                       | 54.3          | 69.0          | 43.1          | 38.6          | 35.0          | 76.9          | 47.4         | 364.3          | 13.5       |             |    |
| Sugar maple            | .0                                       | 11.3          | 3.8           | 3.0           | 2.8           | .0            | 6.6           | 12.5         | 40.0           | 35.2       |             |    |
| Hickory                | .0                                       | 19.8          | 19.4          | 13.5          | 9.7           | 6.7           | 18.9          | 2.1          | 90.0           | 15.1       |             |    |
| Beech                  | .0                                       | 10.3          | 9.9           | 11.4          | 6.9           | 7.8           | 9.7           | 4.4          | 60.4           | 18.2       |             |    |
| Sweetgum               | .0                                       | 56.2          | 59.4          | 48.8          | 25.7          | 11.9          | 35.7          | 4.6          | 242.3          | 13.1       |             |    |
| Yellow-poplar          | .0                                       | 41.6          | 50.9          | 71.5          | 102.5         | 81.6          | 179.4         | 42.6         | 570.1          | 11.4       |             |    |
| Blackgum               | .0                                       | 12.9          | 12.7          | 12.7          | 6.7           | 6.5           | 9.3           | .0           | 60.7           | 18.2       |             |    |
| Ash-walnut-cherry      | .0                                       | 26.7          | 15.9          | 14.6          | 20.3          | 5.0           | 21.9          | 9.4          | 113.7          | 15.9       |             |    |
| Select white oaks      | .0                                       | 41.9          | 51.1          | 44.5          | 46.9          | 46.7          | 54.9          | 31.2         | 317.0          | 10.7       |             |    |
| Select red oaks        | .0                                       | 21.4          | 19.7          | 22.7          | 13.9          | 10.7          | 27.1          | 20.6         | 136.1          | 17.5       |             |    |
| Other white oaks       | .0                                       | 18.2          | 33.0          | 19.2          | 25.6          | 7.8           | 10.7          | .0           | 114.5          | 19.3       |             |    |
| Other red oaks         | .0                                       | 46.8          | 64.6          | 71.9          | 56.5          | 51.9          | 77.1          | 38.8         | 407.7          | 9.8        |             |    |
| Black locust           | .0                                       | 6.9           | 8.4           | 2.1           | .0            | 3.1           | 6.5           | .0           | 27.0           | 34.5       |             |    |
| Other hardwoods        | .0                                       | 19.1          | 17.2          | 9.5           | 12.1          | 10.2          | 31.5          | 13.1         | 112.6          | 17.6       |             |    |
| <b>Total hardwoods</b> | <b>.0</b>                                | <b>387.5</b>  | <b>434.9</b>  | <b>388.4</b>  | <b>368.3</b>  | <b>284.8</b>  | <b>566.1</b>  | <b>226.6</b> | <b>2,656.5</b> | <b>4.6</b> |             |    |
| <b>All species</b>     | <b>122.5</b>                             | <b>511.9</b>  | <b>527.9</b>  | <b>464.3</b>  | <b>412.8</b>  | <b>313.6</b>  | <b>589.1</b>  | <b>230.6</b> | <b>3,172.6</b> | <b>4.0</b> |             |    |
| SE                     | 11.9                                     | 4.6           | 5.2           | 6.3           | 8.0           | 9.8           | 9.1           | 19.9         | 4.0            |            |             |    |

Table 38.--Net volume of sawtimber trees on timberland by species and diameter class, Maryland, 1986

| Species                | (In millions of board feet)              |                |                |                |                |                |                |              |                 |            | All classes | SE |
|------------------------|--|----------------|----------------|----------------|----------------|----------------|----------------|--------------|-----------------|------------|-------------|----|
|                        | Diameter class (inches at breast height) |                |                |                |                |                |                |              |                 |            |             |    |
|                        | 9.0-<br>10.9                             | 11.0-<br>12.9  | 13.0-<br>14.9  | 15.0-<br>16.9  | 17.0-<br>18.9  | 19.0-<br>20.9  | 21.0-<br>28.9  | 29.0+        |                 |            |             |    |
| White/red pine         | 28.4                                     | 39.3           | 22.1           | 5.0            | 7.8            | 5.6            | .0             | .0           | 108.2           | 42.0       |             |    |
| Loblolly pine          | 271.1                                    | 364.1          | 329.9          | 215.5          | 137.4          | 57.1           | 39.6           | .0           | 1,414.7         | 9.6        |             |    |
| Virginia pine          | 187.8                                    | 199.3          | 150.1          | 47.1           | 5.6            | .0             | 1.4            | .0           | 591.3           | 13.6       |             |    |
| Other yellow pines     | 15.1                                     | 13.4           | 7.5            | 5.3            | 1.8            | .0             | .0             | .0           | 43.1            | 33.3       |             |    |
| Other softwoods        | 11.5                                     | 17.5           | 18.4           | 16.9           | 24.3           | 19.8           | 20.5           | 2.7          | 131.7           | 39.1       |             |    |
| <b>Total softwoods</b> | <b>513.8</b>                             | <b>633.6</b>   | <b>528.0</b>   | <b>289.8</b>   | <b>176.9</b>   | <b>82.5</b>    | <b>61.6</b>    | <b>2.7</b>   | <b>2,289.0</b>  | <b>7.8</b> |             |    |
| Red maple              | .0                                       | 279.2          | 253.7          | 176.9          | 161.3          | 118.2          | 235.5          | 85.1         | 1,309.8         | 8.2        |             |    |
| Sugar maple            | .0                                       | 30.5           | 23.0           | 32.1           | 9.5            | 24.6           | 18.3           | 7.2          | 145.2           | 22.0       |             |    |
| Hickory                | .0                                       | 73.8           | 77.5           | 79.7           | 65.2           | 37.4           | 29.9           | 7.0          | 370.4           | 12.3       |             |    |
| Beech                  | .0                                       | 68.8           | 86.4           | 64.7           | 71.0           | 74.3           | 101.6          | 22.3         | 489.2           | 13.0       |             |    |
| Sweetgum               | .0                                       | 189.7          | 202.0          | 176.1          | 94.3           | 61.2           | 84.2           | 17.9         | 825.3           | 10.6       |             |    |
| Yellow-poplar          | .0                                       | 205.2          | 292.7          | 325.5          | 384.8          | 363.7          | 831.7          | 236.7        | 2,640.3         | 12.3       |             |    |
| Blackgum               | .0                                       | 61.6           | 72.7           | 85.0           | 40.0           | 34.0           | 43.7           | .0           | 337.0           | 12.0       |             |    |
| Ash-walnut-cherry      | .0                                       | 91.8           | 114.3          | 76.9           | 61.8           | 30.1           | 28.6           | 21.5         | 425.0           | 11.2       |             |    |
| Select white oaks      | .0                                       | 221.9          | 211.8          | 204.0          | 180.5          | 115.5          | 253.7          | 82.5         | 1,270.0         | 7.7        |             |    |
| Select red oaks        | .0                                       | 131.6          | 170.8          | 158.1          | 107.5          | 123.3          | 239.5          | 79.3         | 1,010.2         | 8.6        |             |    |
| Other white oaks       | .0                                       | 144.7          | 162.1          | 116.0          | 105.6          | 47.4           | 126.7          | 16.2         | 718.7           | 13.0       |             |    |
| Other red oaks         | .0                                       | 258.4          | 259.1          | 282.0          | 234.0          | 241.9          | 371.1          | 100.6        | 1,747.1         | 7.7        |             |    |
| Black locust           | .0                                       | 21.7           | 30.5           | 21.6           | 15.7           | 9.0            | 2.6            | .0           | 101.2           | 21.4       |             |    |
| Other hardwoods        | .0                                       | 96.2           | 93.8           | 86.5           | 41.4           | 64.9           | 73.7           | 21.2         | 477.7           | 16.4       |             |    |
| <b>Total hardwoods</b> | <b>.0</b>                                | <b>1,875.1</b> | <b>2,050.4</b> | <b>1,885.2</b> | <b>1,572.7</b> | <b>1,345.5</b> | <b>2,440.7</b> | <b>697.5</b> | <b>11,867.2</b> | <b>4.4</b> |             |    |
| <b>All species</b>     | <b>513.8</b>                             | <b>2,508.8</b> | <b>2,578.4</b> | <b>2,175.1</b> | <b>1,749.5</b> | <b>1,428.0</b> | <b>2,502.4</b> | <b>700.2</b> | <b>14,156.2</b> | <b>3.7</b> |             |    |
| SE                     | 8.8                                      | 3.7            | 3.7            | 4.6            | 6.0            | 7.0            | 7.4            | 13.7         | 3.7             |            |             |    |

Table 39.--Net volume of sawtimber trees on timberland by species and diameter class, Maryland, 1999  
(In millions of board feet)

| Species                | Diameter class (inches at breast height) |                |                |                |                |                |                |                |                 |             | All classes | SE |
|------------------------|--|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------------|-------------|-------------|----|
|                        | 9.0-<br>10.9                             | 11.0-<br>12.9  | 13.0-<br>14.9  | 15.0-<br>16.9  | 17.0-<br>18.9  | 19.0-<br>20.9  | 21.0-<br>28.9  | 29.0+          |                 |             |             |    |
| White/red pine         | 64.1                                     | 44.3           | 17.6           | 12.8           | 22.8           | .0             | 15.5           | .0             | 177.1           | 34.1        |             |    |
| Loblolly pine          | 306.6                                    | 375.8          | 306.8          | 259.0          | 176.4          | 137.7          | 73.8           | .0             | 1,636.0         | 12.7        |             |    |
| Virginia pine          | 96.9                                     | 121.8          | 91.5           | 90.7           | 9.7            | .0             | 12.6           | .0             | 423.3           | 18.5        |             |    |
| Other yellow pines     | 1.0                                      | 1.7            | 7.4            | .0             | .0             | .0             | .0             | .0             | 10.0            | 58.4        |             |    |
| Other softwoods        | 9.9                                      | 16.6           | 20.4           | 10.8           | 15.0           | 5.9            | 16.8           | 21.9           | 117.3           | 32.1        |             |    |
| <b>Total softwoods</b> | <b>478.5</b>                             | <b>560.1</b>   | <b>443.7</b>   | <b>373.3</b>   | <b>223.8</b>   | <b>143.6</b>   | <b>118.7</b>   | <b>21.9</b>    | <b>2,363.7</b>  | <b>10.0</b> |             |    |
| Red maple              | .0                                       | 264.1          | 335.5          | 195.6          | 195.4          | 164.1          | 422.6          | 269.0          | 1,846.3         | 13.7        |             |    |
| Sugar maple            | .0                                       | 58.0           | 17.1           | 13.9           | 11.9           | .0             | 37.3           | 48.9           | 187.2           | 36.9        |             |    |
| Hickory                | .0                                       | 98.5           | 97.7           | 69.3           | 50.6           | 37.2           | 105.9          | 13.1           | 472.4           | 15.5        |             |    |
| Beech                  | .0                                       | 52.7           | 49.2           | 58.5           | 34.6           | 41.8           | 48.6           | 17.5           | 302.8           | 18.4        |             |    |
| Sweetgum               | .0                                       | 262.4          | 284.1          | 249.7          | 129.8          | 68.7           | 200.9          | 28.8           | 1,224.5         | 13.2        |             |    |
| Yellow-poplar          | .0                                       | 195.5          | 249.9          | 370.5          | 561.8          | 457.3          | 1,098.9        | 230.2          | 3,164.1         | 11.6        |             |    |
| Blackgum               | .0                                       | 58.5           | 61.0           | 63.9           | 36.4           | 35.4           | 51.2           | .0             | 306.4           | 19.7        |             |    |
| Ash-walnut-cherry      | .0                                       | 126.5          | 74.9           | 72.0           | 98.9           | 20.9           | 110.5          | 60.9           | 564.5           | 16.7        |             |    |
| Select white oaks      | .0                                       | 215.4          | 264.5          | 225.7          | 245.4          | 259.3          | 283.3          | 165.9          | 1,659.5         | 11.0        |             |    |
| Select red oaks        | .0                                       | 105.1          | 92.5           | 110.8          | 69.2           | 57.1           | 141.8          | 111.1          | 687.7           | 17.7        |             |    |
| Other white oaks       | .0                                       | 88.0           | 152.4          | 88.6           | 121.6          | 33.3           | 57.6           | .0             | 541.5           | 20.2        |             |    |
| Other red oaks         | .0                                       | 227.7          | 317.4          | 363.2          | 289.7          | 269.3          | 457.0          | 211.6          | 2,135.9         | 10.4        |             |    |
| Black locust           | .0                                       | 26.3           | 35.2           | 11.5           | .0             | 16.2           | 27.1           | .0             | 116.2           | 38.0        |             |    |
| Other hardwoods        | .0                                       | 96.9           | 91.6           | 52.9           | 63.4           | 49.4           | 159.0          | 75.5           | 588.8           | 18.0        |             |    |
| <b>Total hardwoods</b> | <b>.0</b>                                | <b>1,875.7</b> | <b>2,123.1</b> | <b>1,946.1</b> | <b>1,908.7</b> | <b>1,510.0</b> | <b>3,201.7</b> | <b>1,232.5</b> | <b>13,797.8</b> | <b>4.8</b>  |             |    |
| <b>All species</b>     | <b>478.5</b>                             | <b>2,435.9</b> | <b>2,566.8</b> | <b>2,319.5</b> | <b>2,132.5</b> | <b>1,653.6</b> | <b>3,320.5</b> | <b>1,254.4</b> | <b>16,161.5</b> | <b>4.2</b>  |             |    |
| <b>SE</b>              | <b>12.1</b>                              | <b>4.6</b>     | <b>5.4</b>     | <b>6.4</b>     | <b>8.2</b>     | <b>10.2</b>    | <b>9.3</b>     | <b>19.7</b>    | <b>4.2</b>      |             |             |    |

Table 40.--Net volume of sawtimber trees on timberland by species, size class, and tree grade, Maryland, 1999  
(In millions of board feet)

| Species                | >15" Diameter at breast height |                |                |              |              |                  |                |                |                |                | SE             |                 |             |
|------------------------|--------------------------------|----------------|----------------|--------------|--------------|------------------|----------------|----------------|----------------|----------------|----------------|-----------------|-------------|
|                        | All grades                     |                |                |              |              | All size classes |                |                |                |                |                |                 |             |
|                        | Grade 1                        | Grade 2        | Grade 3        | Grade 4      | Grade 5      | All grades       | Grade 1        | Grade 2        | Grade 3        | Grade 4        | Grade 5        | All grades      | SE          |
| White/red pine         | 7.5                            | 40.9           | 2.7            | .0           | .0           | 51.1             | 10.7           | 61.8           | 103.3          | 1.3            | .0             | 177.1           | 34.1        |
| Loblolly pine          | 484.5                          | 91.0           | 62.9           | .0           | 8.5          | 646.9            | 958.9          | 267.0          | 393.7          | .0             | 16.4           | 1,636.0         | 12.7        |
| Virginia pine          | 17.1                           | 13.1           | 75.8           | .0           | 6.9          | 113.0            | 46.7           | 4.4            | 323.2          | .0             | 10.0           | 423.3           | 18.5        |
| Other yellow pines     | .0                             | .0             | .0             | .0           | .0           | .0               | .0             | 3.8            | 4.5            | .0             | 1.7            | 10.0            | 58.4        |
| Other softwoods        | 69.2                           | .0             | .0             | .0           | 1.2          | 70.4             | 113.6          | .0             | .0             | .0             | 3.7            | 117.3           | 32.1        |
| <b>Total softwoods</b> | <b>578.3</b>                   | <b>145.0</b>   | <b>141.4</b>   | <b>.0</b>    | <b>16.6</b>  | <b>881.4</b>     | <b>1,130.0</b> | <b>376.0</b>   | <b>824.7</b>   | <b>1.3</b>     | <b>31.8</b>    | <b>2,363.7</b>  | <b>10.0</b> |
| Red maple              | 233.3                          | 263.1          | 235.0          | 293.1        | 222.3        | 1,246.8          | 233.3          | 353.9          | 593.1          | 404.8          | 261.3          | 1,846.3         | 13.7        |
| Sugar maple            | .0                             | 6.4            | 19.4           | .0           | 86.3         | 112.1            | .0             | 6.4            | 91.3           | 1.3            | 88.1           | 187.2           | 36.9        |
| Hickory                | 77.8                           | 102.7          | 60.0           | 14.3         | 21.3         | 276.2            | 77.8           | 136.2          | 214.0          | 23.1           | 21.3           | 472.4           | 15.5        |
| Beech                  | .0                             | 12.9           | 33.4           | 129.1        | 25.5         | 200.9            | .0             | 12.9           | 45.4           | 209.6          | 34.9           | 302.8           | 18.4        |
| Sheetgum               | 351.5                          | 198.1          | 81.1           | 14.8         | 32.5         | 677.9            | 351.5          | 380.2          | 401.5          | 55.4           | 35.8           | 1,224.5         | 13.2        |
| Yellow-poplar          | 1,511.5                        | 678.7          | 310.9          | 73.2         | 144.4        | 2,718.7          | 1,511.5        | 836.6          | 510.6          | 146.8          | 158.6          | 3,164.1         | 11.6        |
| Blackgum               | 55.5                           | 44.7           | 32.8           | 20.7         | 33.3         | 186.9            | 55.5           | 78.7           | 106.2          | 26.1           | 40.0           | 306.4           | 19.7        |
| Ash-walnut-cherry      | 143.4                          | 44.4           | 58.4           | .0           | 116.9        | 363.1            | 143.4          | 72.6           | 211.4          | 6.3            | 130.8          | 564.5           | 16.7        |
| Select white oaks      | 432.7                          | 369.4          | 137.6          | 47.4         | 192.5        | 1,179.6          | 432.7          | 494.6          | 439.1          | 95.4           | 197.7          | 1,659.5         | 11.0        |
| Select red oaks        | 171.4                          | 186.1          | 99.7           | .0           | 32.8         | 490.1            | 171.4          | 237.9          | 234.5          | 8.7            | 35.3           | 687.7           | 17.7        |
| Other white oaks       | 37.8                           | 104.7          | 90.2           | 21.3         | 47.1         | 301.1            | 37.8           | 151.4          | 267.8          | 29.2           | 55.2           | 541.5           | 20.2        |
| Other red oaks         | 722.7                          | 441.9          | 303.4          | 115.8        | 7.0          | 1,590.8          | 722.7          | 598.4          | 596.4          | 208.5          | 9.8            | 2,135.9         | 10.4        |
| Black locust           | .0                             | 9.4            | 30.9           | .0           | 14.5         | 54.8             | .0             | 26.6           | 44.2           | 3.4            | 42.1           | 116.2           | 38.0        |
| Other hardwoods        | 87.0                           | 134.0          | 113.2          | 60.8         | 5.3          | 400.3            | 87.0           | 163.8          | 236.4          | 78.1           | 23.6           | 588.8           | 18.0        |
| <b>Total hardwoods</b> | <b>3,824.5</b>                 | <b>2,596.3</b> | <b>1,606.2</b> | <b>790.4</b> | <b>981.6</b> | <b>9,799.1</b>   | <b>3,824.5</b> | <b>3,550.3</b> | <b>3,991.7</b> | <b>1,296.8</b> | <b>1,134.5</b> | <b>13,797.8</b> | <b>4.8</b>  |
| <b>All species</b>     | <b>4,402.8</b>                 | <b>2,741.3</b> | <b>1,747.7</b> | <b>790.4</b> | <b>998.2</b> | <b>10,680.4</b>  | <b>4,954.5</b> | <b>3,926.2</b> | <b>4,816.4</b> | <b>1,298.1</b> | <b>1,166.2</b> | <b>16,161.5</b> | <b>4.2</b>  |
| SE                     | 9.1                            | 7.9            | 9.3            | 14.6         | 12.5         | 5.6              | 8.5            | 6.3            | 4.8            | 10.2           | 11.1           | 4.2             |             |

**Net volume of 15+ inches d.b.h. sawtimber trees on timberland, top 5 species by tree grade, Maryland, 1999**

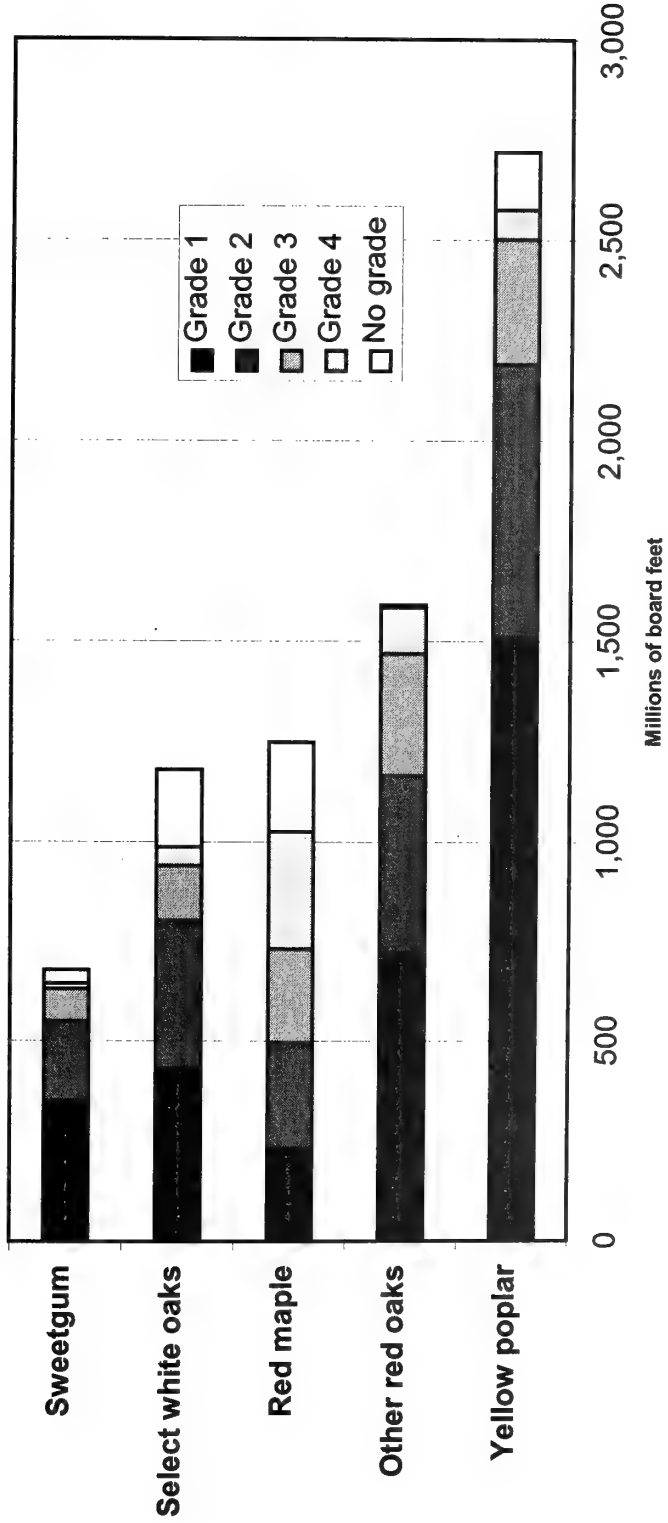


Table 41.--Average annual net change of growing-stock volume on timberland by species and component of change, Maryland, 1999

| Species                | (In thousands of cubic feet) |                |                |                |                |                |                |                  |                   |                | Net change    |               |
|------------------------|------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|------------------|-------------------|----------------|---------------|---------------|
|                        | Component of change          |                |                |                |                |                |                |                  |                   |                |               |               |
|                        | Ingrowth                     | Accretion      | Gross growth   | Mortality      | Cull decrement | Cull increment | Net growth     | Harvest removals | Land use removals | Total removals |               |               |
| White/red pine         | 485                          | 2,403          | 2,889          | -103           | 0              | 0              | 2,786          | 0                | 0                 | 0              | 2,786         | 2,786         |
| Loblolly pine          | 6,349                        | 11,269         | 17,618         | -2,691         | 0              | 0              | 14,927         | -13,906          | -1,076            | -14,982        | -55           | -55           |
| Virginia pine          | 3,140                        | 5,047          | 8,187          | -2,985         | 0              | 0              | 5,202          | -2,075           | -1,667            | -3,742         | 1,460         | 1,460         |
| Other yellow pines     | 0                            | 98             | 98             | 0              | 0              | 0              | 98             | 0                | -239              | -239           | -142          | -142          |
| Other softwoods        | 507                          | 688            | 1,195          | -476           | 0              | -57            | 662            | 0                | 0                 | 0              | 662           | 662           |
| <b>Total softwoods</b> | <b>10,481</b>                | <b>19,505</b>  | <b>29,987</b>  | <b>-6,254</b>  | <b>0</b>       | <b>-57</b>     | <b>23,675</b>  | <b>-15,981</b>   | <b>-2,982</b>     | <b>-18,963</b> | <b>4,711</b>  | <b>4,711</b>  |
| Red maple              | 4,184                        | 10,856         | 15,040         | -5,728         | 559            | -1,877         | 7,994          | -3,453           | -11,717           | -15,169        | -7,175        | -7,175        |
| Sugar maple            | 991                          | 951            | 1,942          | -48            | 97             | -365           | 1,627          | -2,294           | 0                 | -2,294         | -667          | -667          |
| Hickory                | 1,300                        | 1,384          | 2,684          | -920           | 0              | -56            | 1,707          | -2,210           | -147              | -2,357         | -649          | -649          |
| Beech                  | 417                          | 1,710          | 2,126          | 0              | 0              | -41            | 2,085          | -1,905           | 0                 | -1,905         | 180           | 180           |
| Sweetgum               | 2,341                        | 10,227         | 12,568         | -3,828         | 191            | -66            | 8,864          | -585             | -190              | -775           | 8,089         | 8,089         |
| Yellow-poplar          | 3,645                        | 26,374         | 30,019         | -2,611         | 0              | -320           | 27,087         | -6,005           | 0                 | -6,005         | 21,082        | 21,082        |
| Blackgum               | 630                          | 2,105          | 2,735          | -377           | 53             | -224           | 2,187          | -338             | -234              | -573           | 1,614         | 1,614         |
| Ash-walnut-cherry      | 3,277                        | 3,850          | 7,127          | -1,534         | 2,340          | -1,656         | 6,277          | -1,119           | 0                 | -1,119         | 5,158         | 5,158         |
| Select white oaks      | 1,459                        | 7,377          | 8,836          | -4,387         | 170            | -107           | 4,512          | -6,537           | -3,659            | -10,197        | -5,685        | -5,685        |
| Select red oaks        | 220                          | 1,685          | 1,905          | -966           | 91             | 0              | 1,031          | -3,276           | -885              | -4,161         | -3,130        | -3,130        |
| Other white oaks       | 392                          | 5,653          | 6,045          | -1,880         | 1,027          | -86            | 5,107          | -1,655           | -5,018            | -6,673         | -1,566        | -1,566        |
| Other red oaks         | 1,677                        | 8,878          | 10,555         | -6,927         | 0              | -70            | 3,558          | -4,943           | -3,616            | -8,559         | -5,001        | -5,001        |
| Black locust           | 827                          | 1,103          | 1,930          | -350           | 1,762          | -61            | 3,280          | 0                | 0                 | 0              | 3,280         | 3,280         |
| Other hardwoods        | 2,867                        | 5,401          | 8,268          | -730           | 300            | -39            | 7,799          | -1,750           | -2,153            | -3,904         | 3,896         | 3,896         |
| <b>Total hardwoods</b> | <b>24,229</b>                | <b>87,554</b>  | <b>111,783</b> | <b>-30,288</b> | <b>6,591</b>   | <b>-4,969</b>  | <b>83,117</b>  | <b>-36,072</b>   | <b>-27,619</b>    | <b>-63,691</b> | <b>19,425</b> | <b>19,425</b> |
| <b>All species</b>     | <b>34,710</b>                | <b>107,060</b> | <b>141,769</b> | <b>-36,543</b> | <b>6,591</b>   | <b>-5,026</b>  | <b>106,791</b> | <b>-52,053</b>   | <b>-30,602</b>    | <b>-82,655</b> | <b>24,137</b> | <b>24,137</b> |



Table 42.--Average annual net change of sawtimber volume on timberland by species and component of change, Maryland, 1999  
(In thousands of board feet)

| Species                | Component of change |                |                |                 |                |                |                |                  |                   |                 | Net change     |
|------------------------|---------------------|----------------|----------------|-----------------|----------------|----------------|----------------|------------------|-------------------|-----------------|----------------|
|                        | Ingrowth            | Accretion      | Gross growth   | Mortality       | Cull decrement | Cull increment | Net growth     | Harvest removals | Land use removals | Total removals  |                |
| White/red pine         | 5,025               | 6,960          | 11,986         | 0               | 0              | 0              | 11,986         | 0                | 0                 | 0               | 11,986         |
| Loblolly pine          | 37,703              | 21,278         | 58,981         | -5,484          | 0              | 0              | 53,497         | -44,809          | -1,797            | -46,606         | 6,891          |
| Virginia pine          | 6,378               | 18,977         | 25,355         | -6,774          | 0              | 0              | 18,581         | -7,078           | -4,018            | -11,097         | 7,484          |
| Other yellow pines     | 306                 | 305            | 612            | 0               | 0              | 0              | 612            | 0                | -897              | -897            | -285           |
| Other softwoods        | 3,848               | 0              | 3,848          | -1,012          | 0              | 0              | 2,836          | 0                | 0                 | 0               | 2,836          |
| <b>Total softwoods</b> | <b>53,260</b>       | <b>47,521</b>  | <b>100,782</b> | <b>-13,270</b>  | <b>0</b>       | <b>0</b>       | <b>87,511</b>  | <b>-51,887</b>   | <b>-6,712</b>     | <b>-58,600</b>  | <b>28,912</b>  |
| Red maple              | 25,377              | 24,680         | 50,057         | -21,627         | 796            | -5,233         | 23,993         | -7,972           | -45,106           | -53,078         | -29,085        |
| Sugar maple            | 0                   | 2,441          | 2,441          | 0               | 0              | -1,391         | 1,050          | -9,259           | 0                 | -9,259          | -8,209         |
| Hickory                | 6,110               | 1,106          | 7,216          | 0               | 0              | 0              | 7,216          | -5,563           | 0                 | -5,563          | 1,654          |
| Beech                  | 7,580               | 506            | 8,086          | 0               | 0              | 0              | 8,086          | -6,387           | 0                 | -6,387          | 1,699          |
| Sweetgum               | 28,016              | 18,083         | 46,099         | -9,741          | 582            | 0              | 36,940         | 0                | -686              | -686            | 36,254         |
| Yellow-poplar          | 46,352              | 114,216        | 160,568        | -10,489         | 0              | 0              | 150,078        | -24,332          | 0                 | -24,332         | 125,747        |
| Blackgum               | 4,458               | 5,583          | 10,041         | -454            | 0              | 0              | 9,587          | 0                | 0                 | 0               | 9,587          |
| Ash-walnut-cherry      | 14,932              | -275           | 14,656         | -3,502          | 0              | -2,912         | 8,242          | -4,447           | 0                 | -4,447          | 3,795          |
| Select white oaks      | 19,159              | 10,595         | 29,755         | -11,753         | 0              | 0              | 18,002         | -28,021          | -8,221            | -36,243         | -18,241        |
| Select red oaks        | 6,081               | 990            | 7,070          | -2,753          | 0              | 0              | 4,317          | -12,335          | -2,374            | -14,709         | -10,392        |
| Other white oaks       | 13,485              | 10,886         | 24,371         | -2,696          | 2,968          | 0              | 24,644         | -3,129           | -17,331           | -20,460         | 4,183          |
| Other red oaks         | 18,212              | 22,833         | 41,045         | -25,181         | 0              | 0              | 15,864         | -16,401          | -11,317           | -27,718         | -11,854        |
| Black locust           | 3,689               | 0              | 3,689          | -829            | 3,435          | 0              | 6,295          | 0                | 0                 | 0               | 6,295          |
| Other hardwoods        | 18,849              | 9,290          | 28,140         | -1,408          | 0              | 0              | 26,731         | -4,110           | -7,064            | -11,174         | 15,557         |
| <b>Total hardwoods</b> | <b>212,299</b>      | <b>220,935</b> | <b>433,235</b> | <b>-90,435</b>  | <b>7,781</b>   | <b>-9,536</b>  | <b>341,045</b> | <b>-121,955</b>  | <b>-92,101</b>    | <b>-214,055</b> | <b>126,990</b> |
| <b>All species</b>     | <b>265,560</b>      | <b>268,457</b> | <b>534,016</b> | <b>-103,705</b> | <b>7,781</b>   | <b>-9,536</b>  | <b>428,557</b> | <b>-173,842</b>  | <b>-98,813</b>    | <b>-272,655</b> | <b>155,901</b> |

# Average annual net growth and removals of sawtimber volume on timberland for top 5 species, Maryland, 1986-99

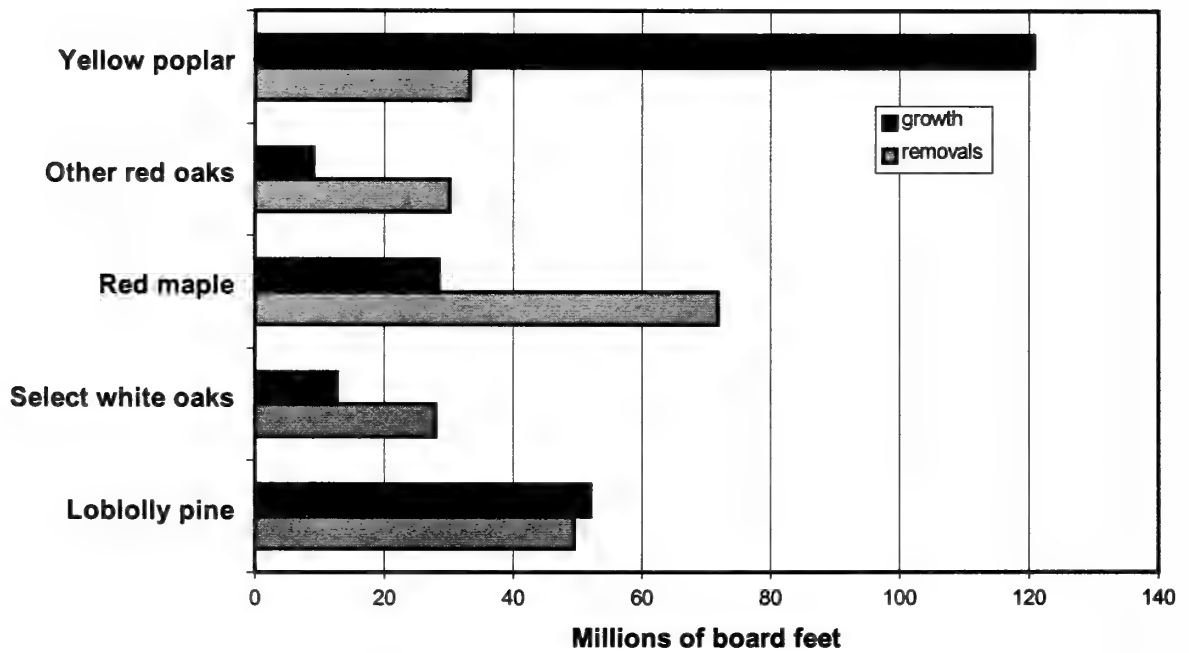


Table 43.--Average annual net growth and average annual removals of growing-stock volume on timberland by ownership class and species group, Maryland, 1999

(In thousands of cubic feet)

| Ownership class | Net Growth |           |            | Removals  |           |            |
|-----------------|------------|-----------|------------|-----------|-----------|------------|
|                 | Softwoods  | Hardwoods | All groups | Softwoods | Hardwoods | All groups |
|                 |            |           |            |           |           |            |
| Other public    | 4,871      | 1,663     | 6,535      | 1,671     | 23,520    | 25,191     |
| Forest industry | 3,044      | 1,169     | 4,213      | 3,813     | 3,897     | 7,710      |
| Other private   | 15,760     | 80,283    | 96,043     | 13,480    | 36,274    | 49,754     |
| All classes     | 23,675     | 83,117    | 106,791    | 18,963    | 63,691    | 82,655     |

Table 44.--Average annual net growth and average annual removals of sawtimber volume on timberland by ownership class and species group, Maryland, 1999

(In thousands of board feet)

| Ownership class | Net Growth |           |            | Removals  |           |            |
|-----------------|------------|-----------|------------|-----------|-----------|------------|
|                 | Softwoods  | Hardwoods | All groups | Softwoods | Hardwoods | All groups |
|                 |            |           |            |           |           |            |
| Other public    | 24,274     | 6,471     | 30,745     | 4,798     | 75,368    | 80,166     |
| Forest industry | 6,015      | 10,033    | 16,048     | 9,387     | 10,442    | 19,830     |
| Other private   | 57,223     | 324,541   | 381,763    | 44,415    | 128,245   | 172,659    |
| All classes     | 87,511     | 341,045   | 428,557    | 58,600    | 214,055   | 272,655    |

Table 45.--Change in area of timberland between inventories by forest-type group, Maryland, 1986 and 1999

(In thousands of acres)

| Forest-type group  | 1986    | 1999    | Change | Percent change |
|--------------------|---------|---------|--------|----------------|
| White/red pine     | 49.5    | 24.7    | -24.8  | -50.1          |
| Spruce/fir         | 0.0     | 3.2     | 3.2    | 100.0          |
| Loblolly/shortleaf | 292.2   | 282.6   | - 9.6  | - 3.3          |
| Oak/pine           | 243.4   | 229.6   | -13.8  | - 5.7          |
| Oak/hickory        | 1,502.3 | 1,387.9 | -114.4 | - 7.6          |
| Oak/gum/cypress    | 147.6   | 124.8   | -22.8  | -15.4          |
| Elm/ash/red maple  | 95.6    | 108.2   | 12.6   | 13.2           |
| Northern hardwoods | 188.7   | 209.1   | 20.4   | 10.8           |
| Aspen/birch        | 3.0     | 1.8     | - 1.2  | -40.0          |
| All types          | 2,522.2 | 2,371.9 | -150.3 | -6.0           |

Table 46.--Change in area of timberland between inventories by stand-size class, Maryland, 1986 and 1999

(In thousands of acres)

| Stand-size class     | 1986    | 1999     | Change | Percent change |
|----------------------|---------|----------|--------|----------------|
| Sawtimber            | 1,511.9 | 1,575.0  | 63.1   | 4.2            |
| Poletimber           | 740.7   | 506.1    | -234.6 | -31.7          |
| Sapling and seedling | 252.0   | 268.4    | 16.4   | 6.5            |
| Nonstocked           | 17.7    | 22.5     | 4.8    | 27.1           |
| All classes          | 2,522.2 | 2,371.91 | -150.3 | -6.0           |

Table 47.--Change in volume on timberland between inventories, Maryland, 1986 and 1999

| Species group                             | 1986     | 1999     | Change  | Percent change |
|---|----------|----------|---------|----------------|
| Growing stock<br>(Millions of cubic feet) |          |          |         |                |
| Softwoods                                 | 834.6    | 801.0    | 33.6    | - 4.0          |
| Hardwoods                                 | 3,910.5  | 4,271.2  | 360.7   | 9.2            |
| All groups                                | 4,745.1  | 5,072.2  | 327.1   | 6.9            |
| Sawtimber<br>(Millions of board feet)     |          |          |         |                |
| Softwoods                                 | 2,289.0  | 2,363.7  | 74.7    | 3.3            |
| Hardwoods                                 | 11,867.2 | 13,797.8 | 1,930.6 | 16.3           |
| All groups                                | 14,156.2 | 16,161.5 | 2,005.3 | 14.2           |

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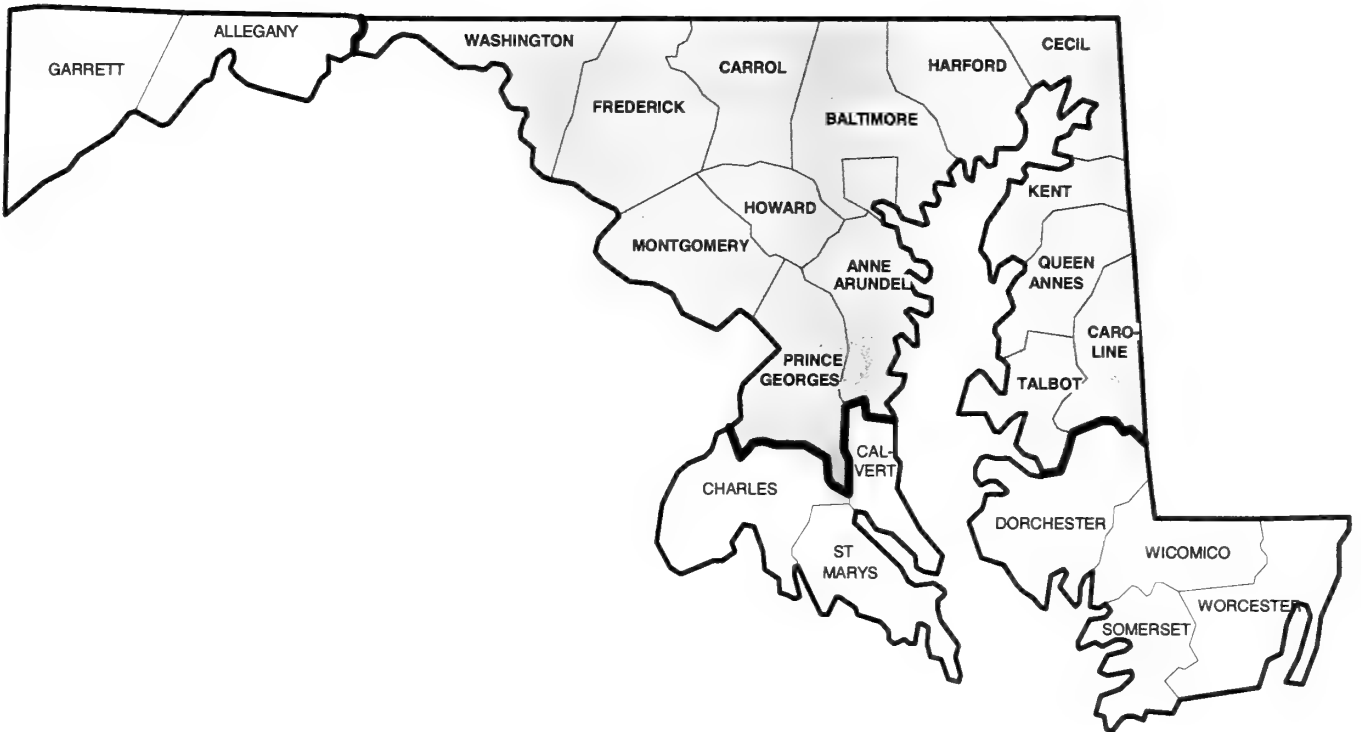


Table 48.--Area of timberland by forest type, forest-type group, and stand-size class, Central Unit, Maryland, 1986

(In thousands of acres)

| Forest type                    | Stand-size class |             |                      |             | All classes | SE    |
|--------------------------------|------------------|-------------|----------------------|-------------|-------------|-------|
|                                | Saw-timber       | Pole-timber | Sapling and seedling | Non-stocked |             |       |
| Red pine                       | .0               | 3.6         | .0                   | .0          | 3.6         | 100.0 |
| White pine                     | 4.4              | 4.3         | .0                   | .0          | 8.7         | 70.7  |
| Scotch pine                    | .0               | .0          | .0                   | 12.9        | 12.9        | 100.0 |
| White/red pine group           | 4.4              | 7.9         | .0                   | 12.9        | 25.2        | 58.4  |
| Loblolly pine                  | 16.9             | .0          | .0                   | .0          | 16.9        | 40.5  |
| Virginia pine                  | 25.0             | 22.6        | .0                   | .0          | 47.6        | 31.2  |
| Loblolly/shortleaf group       | 41.9             | 22.6        | .0                   | .0          | 64.6        | 25.3  |
| Virginia pine/oak              | 24.1             | 5.0         | 3.0                  | .0          | 32.1        | 36.5  |
| Loblolly pine/hardwood         | 25.8             | 4.1         | 12.2                 | .0          | 42.1        | 40.4  |
| Other oak/pine                 | 5.9              | .0          | .0                   | .0          | 5.9         | 100.0 |
| Oak/pine group                 | 55.8             | 9.1         | 15.2                 | .0          | 80.2        | 26.7  |
| Post, black, or bear oak       | 5.4              | 3.5         | .0                   | .0          | 8.9         | 68.5  |
| Chestnut oak                   | 39.8             | 3.0         | .0                   | .0          | 42.8        | 30.6  |
| White oak/red oak/hickory      | 31.2             | 25.7        | .0                   | .0          | 56.9        | 28.4  |
| White oak                      | 13.5             | 18.7        | .0                   | .0          | 32.2        | 38.9  |
| Northern red oak               | 3.0              | .0          | .0                   | .0          | 3.0         | 100.0 |
| Y-poplar/wh. oak/no.red oak    | 16.5             | 10.9        | .0                   | .0          | 27.3        | 41.7  |
| Black locust                   | 5.1              | 13.6        | 4.9                  | .0          | 23.6        | 43.2  |
| Sweetgum/yellow-poplar         | 29.1             | 13.6        | .0                   | .0          | 42.7        | 32.6  |
| Black walnut                   | 3.0              | .0          | .0                   | .0          | 3.0         | 100.0 |
| Yellow-poplar                  | 53.7             | 2.9         | .0                   | .0          | 56.6        | 36.8  |
| Scarlet oak                    | 8.4              | .0          | .0                   | .0          | 8.4         | 70.9  |
| Sassafras/persimmon            | .0               | 7.9         | 14.9                 | .0          | 22.8        | 53.0  |
| Red maple/central hardwood     | 11.2             | 2.3         | 1.4                  | .0          | 14.9        | 43.8  |
| Mixed central hardwoods        | 356.2            | 86.0        | 17.2                 | .0          | 459.4       | 8.9   |
| Oak/hickory group              | 576.0            | 188.2       | 38.3                 | .0          | 802.6       | 5.6   |
| Swamp chsnt oak/cherrybark oak | 3.7              | 5.5         | .0                   | .0          | 9.3         | 72.1  |
| Sweetgm/nuttall oak/willow oak | 7.5              | .0          | .0                   | .0          | 7.5         | 70.8  |
| Sweetbay/swamp tupelo/red mple | 3.5              | .0          | .0                   | .0          | 3.5         | 100.0 |
| Oak/gum/cypress group          | 14.7             | 5.5         | .0                   | .0          | 20.2        | 45.5  |
| Black ash/Amer. elm/red maple  | 10.7             | 5.6         | 4.1                  | .0          | 20.4        | 46.5  |
| Red maple(lowland)             | 8.0              | .0          | 8.8                  | .0          | 16.8        | 63.4  |
| River birch/sycamore           | 18.8             | .0          | .0                   | .0          | 18.8        | 56.5  |

Table 48.--continued

(In thousands of acres)

| Forest type                    | Stand-size class |             |                      |             | All classes | SE    |
|--------------------------------|------------------|-------------|----------------------|-------------|-------------|-------|
|                                | Saw-timber       | Pole-timber | Sapling and seedling | Non-stocked |             |       |
| Willow                         | .0               | 1.7         | .0                   | .0          | 1.7         | 100.0 |
| Sycamore/pecan/American elm    | 4.3              | 1.5         | .0                   | .0          | 5.8         | 78.2  |
| Elm/ash/red maple group        | 41.7             | 8.9         | 12.9                 | .0          | 63.5        | 29.0  |
| Sugar maple/beech/yellow birch | 7.2              | .0          | .0                   | .0          | 7.2         | 81.6  |
| Black Cherry                   | .0               | 9.8         | 14.6                 | .0          | 24.4        | 32.1  |
| Red maple/northern hardwoods   | .0               | 2.2         | .0                   | .0          | 2.2         | 100.0 |
| Pin cherry/reverting field     | .0               | .0          | 8.2                  | .0          | 8.2         | 72.7  |
| Mixed northern hardwoods       | 25.2             | 3.7         | 4.5                  | .0          | 33.5        | 43.0  |
| Northern hardwoods group       | 32.4             | 15.8        | 27.3                 | .0          | 75.4        | 24.5  |
| All forest types               | 767.0            | 258.1       | 93.7                 | 12.9        | 1,131.7     | 4.0   |
| SE                             | 6.2              | 12.9        | 25.0                 | 100.0       | 4.0         |       |

Table 49.--Area of timberland by forest type, forest-type group, and stand-size class, Central Unit, Maryland, 1999

(In thousands of acres)

| Forest type                    | Stand-size class |             |                      |             | All classes | SE    |
|--------------------------------|------------------|-------------|----------------------|-------------|-------------|-------|
|                                | Saw-timber       | Pole-timber | Sapling and seedling | Non-stocked |             |       |
| White pine                     | 9.2              | .0          | .0                   | .0          | 9.2         | 66.6  |
| White/red pine group           | 9.2              | .0          | .0                   | .0          | 9.2         | 66.6  |
| Loblolly pine                  | 21.4             | 8.2         | 9.9                  | .0          | 39.5        | 32.5  |
| Virginia pine                  | 13.1             | 11.5        | .0                   | .0          | 24.6        | 37.1  |
| Loblolly/shortleaf group       | 34.5             | 19.8        | 9.9                  | .0          | 64.1        | 24.2  |
| Eastern redcedar/hardwood      | 5.4              | .0          | 12.6                 | .0          | 18.0        | 58.4  |
| Virginia pine/oak              | 21.7             | 1.7         | .0                   | .0          | 23.3        | 41.7  |
| Loblolly pine/hardwood         | 20.2             | 6.3         | 5.3                  | .0          | 31.7        | 40.6  |
| Oak/pine group                 | 47.2             | 8.0         | 17.9                 | .0          | 73.1        | 26.4  |
| Post, black, or bear oak       | 10.4             | .9          | .0                   | .0          | 11.4        | 64.2  |
| Chestnut oak                   | 21.3             | 11.3        | .0                   | .0          | 32.6        | 38.2  |
| White oak/red oak/hickory-     | 45.7             | .0          | .0                   | 6.4         | 52.1        | 30.1  |
| White oak                      | 19.2             | .0          | .0                   | .0          | 19.2        | 45.7  |
| Northern red oak               | 20.1             | .0          | .0                   | .0          | 20.1        | 53.6  |
| Y-poplar/wh. oak/no.red oak    | 28.3             | .0          | .0                   | .0          | 28.3        | 46.1  |
| Black locust                   | 10.2             | 7.5         | 16.7                 | .0          | 34.4        | 36.7  |
| Sweetgum/yellow-poplar         | 30.9             | 12.8        | 1.6                  | .0          | 45.3        | 34.3  |
| Black walnut                   | .0               | .0          | .0                   | 1.2         | 1.2         | 100.0 |
| Yellow-poplar                  | 46.3             | 1.4         | .0                   | 1.5         | 49.2        | 28.2  |
| Hawthorn/reverting field       | .0               | .0          | .0                   | 1.9         | 1.9         | 100.0 |
| Scarlet oak                    | 19.9             | .0          | .0                   | .0          | 19.9        | 50.4  |
| Sassafras/persimmon            | .0               | 5.7         | 7.3                  | .0          | 13.0        | 61.6  |
| Red maple/central hardwood     | 25.4             | 11.3        | .0                   | .0          | 36.7        | 39.6  |
| Mixed central hardwoods        | 272.7            | 76.4        | 30.6                 | 6.3         | 386.0       | 10.3  |
| Oak/hickory group              | 550.3            | 127.3       | 56.2                 | 17.2        | 751.1       | 5.7   |
| Swamp chsnt oak/cherrybark oak | 5.8              | .0          | .0                   | .0          | 5.8         | 100.0 |
| Sweetgm/nuttall oak/willow oak | 14.8             | 1.1         | .0                   | .0          | 16.0        | 55.5  |
| Oak/gum/cypress group          | 20.7             | 1.1         | .0                   | .0          | 21.8        | 48.6  |
| Black ash/Amer. elm/red maple  | 9.6              | .0          | .0                   | .0          | 9.6         | 54.4  |
| Red maple(lowland)             | 8.9              | .0          | 1.5                  | 2.8         | 13.2        | 71.5  |
| Red maple(upland)              | 2.2              | .0          | .0                   | .0          | 2.2         | 100.0 |
| River birch/sycamore           | 6.5              | 8.7         | 4.1                  | .0          | 19.3        | 56.2  |
| Willow                         | .0               | .0          | 1.3                  | .0          | 1.3         | 100.0 |



Table 49.--continued

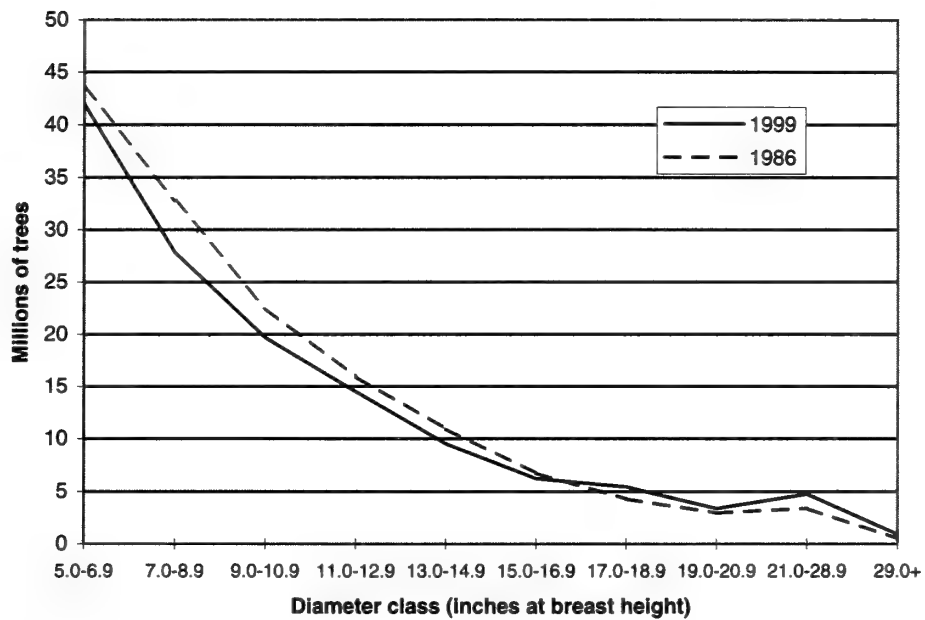
(In thousands of acres)

| Forest type                  | Stand-size class |             |                      |             | All classes | SE    |
|------------------------------|------------------|-------------|----------------------|-------------|-------------|-------|
|                              | Saw-timber       | Pole-timber | Sapling and seedling | Non-stocked |             |       |
| Sycamore/pecan/American elm  | 5.2              | .0          | .0                   | .0          | 5.2         | 89.1  |
| Elm/ash/red maple group      | 32.4             | 8.7         | 7.0                  | 2.8         | 50.9        | 31.4  |
| Black cherry                 | 6.7              | .3          | 7.6                  | .0          | 14.6        | 58.7  |
| Red maple/northern hardwoods | 3.2              | 3.2         | .0                   | .0          | 6.4         | 70.7  |
| Mixed northern hardwoods     | 34.4             | 2.2         | 7.6                  | .0          | 44.2        | 35.5  |
| Northern hardwoods group     | 44.3             | 5.7         | 15.2                 | .0          | 65.2        | 27.5  |
| Aspen                        | .0               | 1.8         | .0                   | .0          | 1.8         | 100.0 |
| Aspen/birch group            | .0               | 1.8         | .0                   | .0          | 1.8         | 100.0 |
| All forest types             | 738.5            | 172.4       | 106.3                | 20.0        | 1,037.2     | 3.6   |
| SE                           | 5.3              | 16.4        | 22.5                 | 41.6        | 3.6         |       |

Table 50.--Number of live trees (1.0+ inches d.b.h.) on forest land by species and diameter group, Central Unit, Maryland, 1999

| Species                        | (In thousands of trees) |                |               |              |                | SE          |
|--------------------------------|-------------------------|----------------|---------------|--------------|----------------|-------------|
|                                | Diameter                |                |               |              |                |             |
|                                | 1.0-4.9                 | 5.0-10.9       | 11.0-20.9     | 21+          | All Classes    |             |
| White/red pine                 | 397                     | 667            | 377           | 32           | 1,472          | 47.2        |
| Loblolly pine                  | 7,669                   | 6,420          | 1,987         | 53           | 16,131         | 35.4        |
| Virginia pine                  | 3,637                   | 7,226          | 2,017         | 0            | 12,879         | 31.9        |
| Other yellow pines             | 0                       | 0              | 32            | 0            | 32             | 100.0       |
| Other softwoods                | 5,762                   | 1,583          | 287           | 21           | 7,653          | 40.2        |
| <b>Total softwoods</b>         | <b>17,465</b>           | <b>15,895</b>  | <b>4,701</b>  | <b>106</b>   | <b>38,168</b>  | <b>19.7</b> |
| Red maple                      | 76,665                  | 16,941         | 5,203         | 1,059        | 99,869         | 13.7        |
| Sugar maple                    | 642                     | 829            | 194           | 0            | 1,665          | 49.9        |
| Hickory                        | 15,687                  | 4,733          | 2,063         | 164          | 22,647         | 23.9        |
| Beech                          | 16,571                  | 3,789          | 1,000         | 215          | 21,575         | 19.5        |
| Sweetgum                       | 40,819                  | 10,077         | 3,513         | 371          | 54,780         | 16.9        |
| Yellow-poplar                  | 31,320                  | 7,026          | 7,243         | 1,723        | 47,312         | 23.2        |
| Blackgum                       | 39,654                  | 6,069          | 1,160         | 73           | 46,956         | 16.4        |
| Ash-walnut-cherry              | 23,334                  | 9,300          | 2,997         | 325          | 35,957         | 14.2        |
| Select white oaks              | 6,370                   | 4,273          | 3,468         | 528          | 14,639         | 15.8        |
| Select red oaks                | 507                     | 1,185          | 1,723         | 533          | 3,947          | 16.9        |
| Other white oaks               | 3,330                   | 5,384          | 3,674         | 173          | 12,562         | 22.2        |
| Other red oaks                 | 6,900                   | 5,353          | 6,861         | 1,102        | 20,216         | 15.5        |
| Blacklocust                    | 3,417                   | 3,748          | 673           | 182          | 8,021          | 37.2        |
| Other hardwoods                | 30,058                  | 10,737         | 2,452         | 602          | 43,849         | 15.9        |
| <b>Noncommercial hardwoods</b> | <b>78,568</b>           | <b>8,338</b>   | <b>1,153</b>  | <b>33</b>    | <b>88,093</b>  | <b>11.6</b> |
| <b>Total hardwoods</b>         | <b>373,844</b>          | <b>97,783</b>  | <b>43,378</b> | <b>7,083</b> | <b>522,088</b> | <b>6.1</b>  |
| <b>All species</b>             | <b>391,309</b>          | <b>113,679</b> | <b>48,079</b> | <b>7,189</b> | <b>560,256</b> | <b>6.0</b>  |
| <b>SE</b>                      | <b>7.8</b>              | <b>5.4</b>     | <b>4.6</b>    | <b>9.8</b>   | <b>6.0</b>     |             |

## Number of growing-stock trees on timberland, Central Unit, Maryland, 1986 and 1999



## Number of growing-stock trees on timberland, top 5 species, Central Unit, Maryland, 1986 and 1999

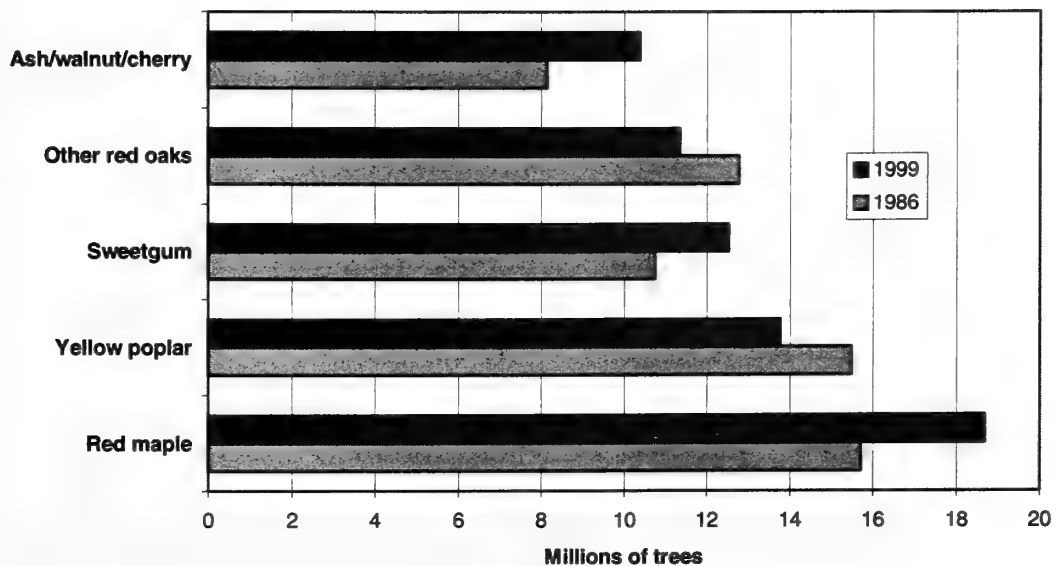


Table 51.--Number of growing-stock trees (5.0+ inches d.b.h.) on timberland by species and diameter class, Central Unit, Maryland, 1986

| Species                | (In thousands of trees)                  |               |               |               |               |              |              |              |              |            |                |            |          |          | All classes   | SE          |
|------------------------|--|---------------|---------------|---------------|---------------|--------------|--------------|--------------|--------------|------------|----------------|------------|----------|----------|---------------|-------------|
|                        | Diameter class (inches at breast height) |               |               |               |               |              |              |              |              |            |                |            |          |          |               |             |
|                        | 5.0-6.9                                  | 7.0-8.9       | 9.0-10.9      | 11.0-12.9     | 13.0-14.9     | 15.0-16.9    | 17.0-18.9    | 19.0-20.9    | 21.0-28.9    | 29.0+      |                |            |          |          |               |             |
| White/red pine         | 2,194                                    | 853           | 224           | 329           | 160           | 16           | 30           | 12           | 0            | 0          | 0              | 0          | 0        | 0        | 3,819         | 55.6        |
| Loblolly pine          | 846                                      | 1,311         | 1,351         | 1,180         | 769           | 418          | 195          | 118          | 22           | 0          | 0              | 0          | 0        | 0        | 6,211         | 22.3        |
| Virginia pine          | 4,693                                    | 4,189         | 2,428         | 1,437         | 691           | 143          | 4            | 0            | 0            | 0          | 0              | 0          | 0        | 0        | 13,586        | 24.1        |
| Other yellow pines     | 505                                      | 239           | 283           | 68            | 18            | 15           | 0            | 0            | 0            | 0          | 0              | 0          | 0        | 0        | 1,129         | 53.3        |
| Other softwoods        | 70                                       | 126           | 101           | 54            | 46            | 0            | 14           | 13           | 6            | 0          | 0              | 0          | 0        | 0        | 429           | 62.8        |
| <b>Total softwoods</b> | <b>8,308</b>                             | <b>6,719</b>  | <b>4,387</b>  | <b>3,069</b>  | <b>1,685</b>  | <b>592</b>   | <b>243</b>   | <b>143</b>   | <b>28</b>    | <b>0</b>   | <b>0</b>       | <b>0</b>   | <b>0</b> | <b>0</b> | <b>25,174</b> | <b>16.9</b> |
| Red maple              | 5,625                                    | 3,710         | 2,402         | 1,433         | 993           | 579          | 366          | 234          | 320          | 41         | 15,702         | 10.9       |          |          |               |             |
| Sugar maple            | 86                                       | 209           | 54            | 21            | 70            | 34           | 0            | 0            | 0            | 0          | 4,73           | 44.5       |          |          |               |             |
| Hickory                | 2,042                                    | 1,777         | 807           | 483           | 284           | 272          | 211          | 56           | 46           | 0          | 5,979          | 15.6       |          |          |               |             |
| Beech                  | 1,573                                    | 723           | 514           | 267           | 254           | 137          | 152          | 127          | 134          | 30         | 3,911          | 23.9       |          |          |               |             |
| Sweetgum               | 3,925                                    | 2,768         | 1,306         | 1,089         | 771           | 489          | 189          | 108          | 78           | 25         | 10,749         | 16.9       |          |          |               |             |
| Yellow-poplar          | 2,640                                    | 2,630         | 2,295         | 1,986         | 1,534         | 1,175        | 1,061        | 813          | 1,151        | 197        | 15,481         | 14.4       |          |          |               |             |
| Blackgum               | 2,652                                    | 1,047         | 1,115         | 481           | 351           | 283          | 73           | 63           | 50           | 0          | 6,116          | 12.9       |          |          |               |             |
| Ash-walnut-cherry      | 2,927                                    | 2,057         | 1,205         | 759           | 618           | 250          | 172          | 67           | 61           | 20         | 8,136          | 14.0       |          |          |               |             |
| Select white oaks      | 3,457                                    | 2,871         | 2,209         | 1,135         | 705           | 535          | 399          | 236          | 311          | 68         | 11,926         | 12.9       |          |          |               |             |
| Select red oaks        | 455                                      | 931           | 886           | 765           | 743           | 443          | 277          | 221          | 273          | 53         | 5,049          | 14.3       |          |          |               |             |
| Other white oaks       | 1,545                                    | 2,189         | 2,108         | 1,431         | 1,129         | 631          | 398          | 151          | 231          | 6          | 9,819          | 16.2       |          |          |               |             |
| Other red oaks         | 3,344                                    | 2,182         | 1,365         | 2,021         | 1,120         | 858          | 615          | 558          | 635          | 63         | 12,761         | 12.8       |          |          |               |             |
| Black locust           | 1,635                                    | 958           | 864           | 227           | 204           | 118          | 24           | 9            | 0            | 0          | 4,040          | 26.4       |          |          |               |             |
| Other hardwoods        | 3,320                                    | 2,039         | 941           | 774           | 452           | 340          | 110          | 191          | 93           | 18         | 8,279          | 15.8       |          |          |               |             |
| <b>Total hardwoods</b> | <b>35,227</b>                            | <b>26,092</b> | <b>18,071</b> | <b>12,872</b> | <b>9,228</b>  | <b>6,145</b> | <b>4,047</b> | <b>2,835</b> | <b>3,383</b> | <b>521</b> | <b>118,421</b> | <b>5.0</b> |          |          |               |             |
| <b>All species</b>     | <b>43,536</b>                            | <b>32,811</b> | <b>22,458</b> | <b>15,941</b> | <b>10,913</b> | <b>6,736</b> | <b>4,291</b> | <b>2,977</b> | <b>3,411</b> | <b>521</b> | <b>143,596</b> | <b>4.8</b> |          |          |               |             |
| SE                     | 8.0                                      | 6.4           | 6.6           | 6.2           | 6.3           | 7.2          | 9.2          | 10.0         | 9.7          | 17.9       | 4.8            |            |          |          |               |             |

Table 52.--Number of growing-stock trees (5.0+ inches d.b.h.) on timberland by species and diameter class, Central Unit, Maryland, 1999

| Species                | (In thousands of trees)                  |               |               |               |               |               |               |               |               |            |                |             |  | All classes | SE |
|------------------------|--|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|------------|----------------|-------------|--|-------------|----|
|                        | Diameter class (inches at breast height) |               |               |               |               |               |               |               |               |            |                |             |  |             |    |
|                        | 5.0-<br>6.9                              | 7.0-<br>8.9   | 9.0-<br>10.9  | 11.0-<br>12.9 | 13.0-<br>14.9 | 15.0-<br>16.9 | 17.0-<br>18.9 | 19.0-<br>20.9 | 21.0-<br>28.9 | 29.0+      |                |             |  |             |    |
| White/red pine         | 161                                      | 124           | 222           | 98            | 114           | 101           | 64            | 0             | 32            | 0          | 916            | 42.0        |  |             |    |
| Loblolly pine          | 2,968                                    | 2,291         | 1,061         | 879           | 306           | 319           | 240           | 189           | 53            | 0          | 8,308          | 36.9        |  |             |    |
| Virginia pine          | 2,852                                    | 2,359         | 1,447         | 1,058         | 362           | 416           | 51            | 0             | 0             | 0          | 8,545          | 25.7        |  |             |    |
| Other yellow pines     | 0  | 0             | 0             | 0             | 32            | 0             | 0             | 0             | 0             | 0          | 32             | 100.0       |  |             |    |
| Other softwoods        | 825                                      | 355           | 158           | 107           | 106           | 0             | 0             | 42            | 0             | 21         | 1,614          | 37.7        |  |             |    |
| <b>Total softwoods</b> | <b>6,805</b>                             | <b>5,130</b>  | <b>2,889</b>  | <b>2,142</b>  | <b>921</b>    | <b>836</b>    | <b>355</b>    | <b>232</b>    | <b>85</b>     | <b>21</b>  | <b>19,416</b>  | <b>20.0</b> |  |             |    |
| Red maple              | 6,681                                    | 4,058         | 3,160         | 1,460         | 1,239         | 428           | 445           | 345           | 736           | 128        | 18,683         | 10.2        |  |             |    |
| Sugar maple            | 226                                      | 118           | 43            | 129           | 32            | 0             | 32            | 0             | 0             | 0          | 580            | 53.1        |  |             |    |
| Hickory                | 1,662                                    | 1,349         | 754           | 712           | 453           | 230           | 198           | 75            | 150           | 14         | 5,598          | 14.9        |  |             |    |
| Beech                  | 1,709                                    | 765           | 485           | 195           | 151           | 105           | 64            | 67            | 64            | 0          | 3,605          | 20.1        |  |             |    |
| Sweetgum               | 4,823                                    | 2,725         | 1,282         | 1,404         | 1,023         | 558           | 202           | 129           | 332           | 39         | 12,518         | 20.5        |  |             |    |
| Yellow-poplar          | 2,524                                    | 1,927         | 1,648         | 1,490         | 1,161         | 1,235         | 1,371         | 1,017         | 1,231         | 166        | 13,769         | 12.4        |  |             |    |
| Blackgum               | 2,928                                    | 1,066         | 647           | 453           | 259           | 151           | 31            | 85            | 73            | 0          | 5,692          | 13.3        |  |             |    |
| Ash-walnut-cherry      | 4,117                                    | 2,220         | 1,648         | 1,036         | 403           | 253           | 304           | 67            | 287           | 38         | 10,374         | 13.6        |  |             |    |
| Select white oaks      | 1,210                                    | 1,136         | 1,120         | 865           | 779           | 535           | 237           | 337           | 288           | 168        | 6,992          | 14.9        |  |             |    |
| Select red oaks        | 334                                      | 454           | 261           | 415           | 201           | 347           | 514           | 61            | 320           | 63         | 2,693          | 20.0        |  |             |    |
| Other white oaks       | 1,426                                    | 1,399         | 1,890         | 1,047         | 1,044         | 357           | 514           | 145           | 160           | 0          | 7,983          | 24.4        |  |             |    |
| Other red oaks         | 1,662                                    | 1,378         | 1,507         | 1,871         | 1,355         | 1,029         | 986           | 611           | 721           | 228        | 11,348         | 13.6        |  |             |    |
| Black locust           | 986                                      | 1,443         | 670           | 258           | 214           | 51            | 0             | 81            | 97            | 0          | 3,801          | 36.8        |  |             |    |
| Other hardwoods        | 4,878                                    | 2,646         | 1,677         | 1,013         | 276           | 113           | 147           | 143           | 218           | 65         | 11,177         | 15.3        |  |             |    |
| <b>Total hardwoods</b> | <b>35,167</b>                            | <b>22,685</b> | <b>16,793</b> | <b>12,349</b> | <b>8,591</b>  | <b>5,394</b>  | <b>5,086</b>  | <b>3,162</b>  | <b>4,676</b>  | <b>910</b> | <b>114,812</b> | <b>5.1</b>  |  |             |    |
| <b>All species</b>     | <b>41,972</b>                            | <b>27,815</b> | <b>19,682</b> | <b>14,491</b> | <b>9,513</b>  | <b>6,230</b>  | <b>5,441</b>  | <b>3,393</b>  | <b>4,761</b>  | <b>930</b> | <b>134,228</b> | <b>5.1</b>  |  |             |    |
| SE                     | 7.6                                      | 7.2           | 7.9           | 7.2           | 8.3           | 9.9           | 10.5          | 12.1          | 11.6          | 22.8       | 5.1            |             |  |             |    |

Table 53.--Net volume of all live trees on timberland by species and diameter class, Central Unit, Maryland, 1986

(In millions of cubic feet)

| Species                        | Diameter class (inches at breast height) |              |              |              |              |              |              |              |              |              |                | All classes | SE |           |    |           |    |           |    |       |       |             |
|--------------------------------|--|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|----------------|-------------|----|-----------|----|-----------|----|-----------|----|-------|-------|-------------|
|                                | 5.0-6.9                                  |              | 7.0-8.9      |              | 9.0-10.9     |              | 11.0-12.9    |              | 13.0-14.9    |              | 15.0-16.9      |             |    | 17.0-18.9 |    | 19.0-20.9 |    | 21.0-28.9 |    | 29.0+ |       |             |
|                                |  |              |              |              |              |              |              |              |              |              |                |             |    |           |    |           |    |           |    |       |       |             |
| White/red pine                 | 7.9                                      | 6.2          | 2.8          | 6.4          | 3.9          | .5           | 1.5          | .8           | .0           | .0           | .0             | .0          | .0 | .0        | .0 | .0        | .0 | .0        | .0 | .0    | 30.1  | 48.9        |
| Loblolly pine                  | 2.6                                      | 9.0          | 15.6         | 21.0         | 19.4         | 14.4         | 8.5          | 6.6          | 1.4          | .0           | .0             | .0          | .0 | .0        | .0 | .0        | .0 | .0        | .0 | .0    | 98.4  | 21.9        |
| Virginia pine                  | 13.6                                     | 27.5         | 27.8         | 26.5         | 17.4         | 4.8          | .2           | .0           | .0           | .0           | .0             | .0          | .0 | .0        | .0 | .0        | .0 | .0        | .0 | .0    | 117.8 | 22.0        |
| Other yellow pines             | 1.4                                      | 1.4          | 3.2          | 1.1          | .5           | .4           | .0           | .0           | .0           | .0           | .0             | .0          | .0 | .0        | .0 | .0        | .0 | .0        | .0 | .0    | 8.0   | 53.4        |
| Other softwoods                | .3                                       | .8           | 1.1          | .9           | 1.2          | .0           | .6           | .8           | .4           | .0           | .6             | .8          | .4 | .0        | .0 | .0        | .0 | .0        | .0 | .0    | 6.2   | 59.4        |
| <b>Total softwoods</b>         | <b>25.8</b>                              | <b>45.0</b>  | <b>50.5</b>  | <b>55.9</b>  | <b>42.4</b>  | <b>20.2</b>  | <b>10.7</b>  | <b>8.2</b>   | <b>1.8</b>   | <b>.0</b>    | <b>260.5</b>   |             |    |           |    |           |    |           |    |       |       | <b>15.0</b> |
| Red maple                      | 15.1                                     | 24.9         | 28.7         | 29.2         | 28.4         | 22.2         | 18.3         | 15.3         | 31.7         | 8.0          | 221.9          |             |    |           |    |           |    |           |    |       |       | 11.6        |
| Sugar maple                    | .3                                       | 1.5          | .8           | .5           | 1.8          | 1.4          | .0           | .0           | .8           | .0           | 7.1            |             |    |           |    |           |    |           |    |       |       | 49.0        |
| Hickory                        | 6.2                                      | 13.6         | 10.5         | 11.2         | 9.0          | 11.3         | 10.6         | 4.1          | 4.5          | .0           | 81.0           |             |    |           |    |           |    |           |    |       |       | 15.5        |
| Beech                          | 3.5                                      | 4.4          | 6.2          | 6.7          | 8.1          | 5.2          | 8.9          | 10.8         | 16.1         | 8.5          | 78.4           |             |    |           |    |           |    |           |    |       |       | 18.8        |
| Sweetgum                       | 9.7                                      | 17.7         | 16.1         | 20.4         | 20.9         | 18.7         | 9.1          | 6.9          | 6.9          | 3.7          | 130.1          |             |    |           |    |           |    |           |    |       |       | 16.0        |
| Yellow-poplar                  | 7.3                                      | 20.3         | 32.6         | 43.8         | 50.7         | 56.1         | 62.4         | 61.1         | 122.6        | 41.1         | 498.0          |             |    |           |    |           |    |           |    |       |       | 15.0        |
| Blackgum                       | 6.8                                      | 6.6          | 12.8         | 9.9          | 9.5          | 10.8         | 3.2          | 3.9          | 4.8          | 1.2          | 69.4           |             |    |           |    |           |    |           |    |       |       | 13.2        |
| Ash-walnut-cherry              | 9.8                                      | 14.8         | 16.2         | 16.0         | 17.9         | 10.2         | 8.7          | 4.3          | 5.3          | 2.7          | 105.9          |             |    |           |    |           |    |           |    |       |       | 12.3        |
| Select white oaks              | 8.6                                      | 16.8         | 25.4         | 21.0         | 19.1         | 19.2         | 18.8         | 14.4         | 26.6         | 12.8         | 182.9          |             |    |           |    |           |    |           |    |       |       | 10.7        |
| Select red oaks                | 1.3                                      | 6.0          | 10.5         | 15.2         | 20.7         | 16.6         | 13.3         | 13.9         | 24.0         | 10.7         | 132.1          |             |    |           |    |           |    |           |    |       |       | 12.8        |
| Other white oaks               | 4.1                                      | 13.5         | 24.3         | 25.8         | 30.2         | 21.5         | 17.3         | 8.2          | 18.5         | 1.3          | 164.7          |             |    |           |    |           |    |           |    |       |       | 16.8        |
| Other red oaks                 | 8.4                                      | 14.0         | 16.2         | 38.8         | 30.5         | 32.3         | 29.2         | 34.4         | 56.1         | 13.1         | 273.0          |             |    |           |    |           |    |           |    |       |       | 10.6        |
| Blacklocust                    | 4.1                                      | 5.4          | 9.7          | 4.6          | 6.0          | 5.2          | 1.2          | .9           | .2           | .0           | 37.2           |             |    |           |    |           |    |           |    |       |       | 24.5        |
| Other hardwoods                | 8.0                                      | 13.5         | 13.4         | 15.4         | 12.9         | 12.7         | 6.6          | 10.8         | 9.5          | 2.6          | 105.5          |             |    |           |    |           |    |           |    |       |       | 18.9        |
| <b>Noncommercial hardwoods</b> | <b>8.3</b>                               | <b>5.2</b>   | <b>4.7</b>   | <b>3.6</b>   | <b>3.7</b>   | <b>2.3</b>   | <b>.3</b>    | <b>.0</b>    | <b>.0</b>    | <b>.0</b>    | <b>28.1</b>    |             |    |           |    |           |    |           |    |       |       | <b>18.2</b> |
| <b>Total hardwoods</b>         | <b>101.2</b>                             | <b>178.1</b> | <b>228.2</b> | <b>262.1</b> | <b>269.4</b> | <b>245.8</b> | <b>207.9</b> | <b>189.1</b> | <b>327.6</b> | <b>105.7</b> | <b>2,115.1</b> |             |    |           |    |           |    |           |    |       |       | <b>5.6</b>  |
| <b>All species</b>             | <b>127.0</b>                             | <b>223.1</b> | <b>278.7</b> | <b>318.1</b> | <b>311.8</b> | <b>265.9</b> | <b>218.7</b> | <b>197.3</b> | <b>329.3</b> | <b>105.7</b> | <b>2,375.6</b> |             |    |           |    |           |    |           |    |       |       | <b>5.0</b>  |
| <b>SE</b>                      | <b>8.0</b>                               | <b>6.3</b>   | <b>6.3</b>   | <b>6.2</b>   | <b>6.2</b>   | <b>7.2</b>   | <b>9.4</b>   | <b>9.9</b>   | <b>10.0</b>  | <b>18.3</b>  | <b>5.0</b>     |             |    |           |    |           |    |           |    |       |       | <b>18.9</b> |

Table 54.--Net volume of live trees on timberland by species and diameter class, Central Unit, Maryland, 1999  
(In millions of cubic feet)

| Species                        | Diameter class (inches at breast height) |              |              |              |              |              |              |              |              |              |                | All classes | SE |
|--------------------------------|--|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|----------------|-------------|----|
|                                | 5.0-6.9                                  | 7.0-8.9      | 9.0-10.9     | 11.0-12.9    | 13.0-14.9    | 15.0-16.9    | 17.0-18.9    | 19.0-20.9    | 21.0-28.9    | 29.0+        |                |             |    |
| White/red pine                 | .5                                       | .9           | 2.6          | 2.0          | 2.3          | 3.2          | 3.3          | .0           | 2.8          | .0           | 17.5           | 48.4        |    |
| Loblolly pine                  | 9.0                                      | 13.2         | 11.1         | 14.0         | 7.2          | 11.2         | 10.5         | 9.6          | 3.7          | .0           | 89.5           | 24.8        |    |
| Virginia pine                  | 9.4                                      | 15.1         | 16.2         | 16.7         | 9.0          | 13.2         | 2.1          | .0           | .0           | .0           | 81.7           | 24.6        |    |
| Other yellow pines             | .0                                       | .0           | .0           | .0           | .9           | .0           | .0           | .0           | .0           | .0           | .9             | 100.0       |    |
| Other softwoods                | 1.8                                      | 1.8          | 2.0          | 1.3          | 2.0          | .0           | .0           | 1.0          | .0           | 4.2          | 14.2           | 43.6        |    |
| <b>Total softwoods</b>         | <b>20.6</b>                              | <b>31.0</b>  | <b>31.9</b>  | <b>33.9</b>  | <b>21.4</b>  | <b>27.6</b>  | <b>15.9</b>  | <b>10.6</b>  | <b>6.5</b>   | <b>4.2</b>   | <b>203.8</b>   | <b>16.1</b> |    |
| Red maple                      | 15.3                                     | 24.3         | 34.6         | 31.3         | 32.6         | 17.2         | 18.9         | 16.9         | 57.0         | 38.9         | 287.1          | 17.9        |    |
| Sugar maple                    | .8                                       | .9           | .5           | 3.0          | .9           | .0           | 1.7          | .0           | .0           | .0           | 7.8            | 55.1        |    |
| Hickory                        | 4.1                                      | 9.3          | 9.7          | 15.3         | 14.4         | 9.5          | 8.9          | 5.8          | 13.9         | 2.4          | 93.4           | 15.1        |    |
| Beech                          | 3.6                                      | 4.4          | 4.9          | 5.2          | 5.1          | 4.0          | 3.5          | 4.8          | 6.5          | 1.0          | 42.8           | 21.5        |    |
| Sweetgum                       | 12.1                                     | 17.2         | 16.1         | 27.5         | 30.0         | 22.7         | 10.1         | 6.3          | 24.6         | 5.4          | 172.1          | 20.4        |    |
| Yellow-poplar                  | 6.7                                      | 14.6         | 23.3         | 31.9         | 39.0         | 56.3         | 81.6         | 73.6         | 141.4        | 30.1         | 498.5          | 14.3        |    |
| Blackgum                       | 6.5                                      | 6.2          | 7.6          | 8.7          | 6.6          | 5.1          | 1.1          | 5.2          | 6.1          | .0           | 53.0           | 19.8        |    |
| Ash-walnut-cherry              | 10.6                                     | 13.8         | 19.4         | 22.3         | 13.0         | 10.6         | 15.9         | 4.8          | 23.6         | 5.4          | 139.5          | 16.0        |    |
| Select white oaks              | 3.4                                      | 7.1          | 12.5         | 17.4         | 22.1         | 18.9         | 27.0         | 21.1         | 24.0         | 28.0         | 181.4          | 17.1        |    |
| Select red oaks                | .9                                       | 3.4          | 3.1          | 8.9          | 5.8          | 14.6         | 12.3         | 3.7          | 27.4         | 10.5         | 90.7           | 25.4        |    |
| Other white oaks               | 3.5                                      | 8.9          | 22.5         | 19.0         | 29.4         | 12.2         | 22.6         | 9.9          | 12.6         | .0           | 140.6          | 22.9        |    |
| Other red oaks                 | 4.0                                      | 8.9          | 18.1         | 35.9         | 39.7         | 40.7         | 48.5         | 36.1         | 68.0         | 34.6         | 334.6          | 13.2        |    |
| Blacklocust                    | 2.5                                      | 7.6          | 5.9          | 4.9          | 5.1          | 1.9          | .0           | 3.7          | 6.2          | .0           | 37.8           | 34.1        |    |
| Other hardwoods                | 12.5                                     | 15.1         | 19.0         | 18.4         | 7.0          | 4.8          | 6.5          | 8.7          | 20.4         | 9.3          | 121.7          | 16.8        |    |
| <b>Noncommercial hardwoods</b> | <b>7.4</b>                               | <b>7.2</b>   | <b>4.8</b>   | <b>6.3</b>   | <b>1.1</b>   | <b>.7</b>    | <b>-.1</b>   | <b>.0</b>    | <b>.0</b>    | <b>.0</b>    | <b>27.4</b>    | <b>20.1</b> |    |
| <b>Total hardwoods</b>         | <b>93.7</b>                              | <b>148.9</b> | <b>202.1</b> | <b>256.0</b> | <b>251.7</b> | <b>219.2</b> | <b>258.8</b> | <b>200.6</b> | <b>431.7</b> | <b>165.6</b> | <b>2,228.4</b> | <b>5.9</b>  |    |
| <b>All species</b>             | <b>114.3</b>                             | <b>179.9</b> | <b>234.0</b> | <b>290.0</b> | <b>273.1</b> | <b>246.8</b> | <b>274.7</b> | <b>211.3</b> | <b>438.2</b> | <b>169.9</b> | <b>2,432.2</b> | <b>5.4</b>  |    |
| <b>SE</b>                      | <b>7.8</b>                               | <b>6.9</b>   | <b>8.1</b>   | <b>6.9</b>   | <b>8.4</b>   | <b>10.1</b>  | <b>11.2</b>  | <b>12.5</b>  | <b>12.2</b>  | <b>26.5</b>  | <b>5.4</b>     |             |    |

Table 55.--Net volume of growing-stock trees on timberland by species and diameter class, Central Unit, Maryland, 1986

(In millions of cubic feet)

| Species                | Diameter class (inches at breast height) |              |              |              |              |              |              |              |              |             | All classes    | SE          |
|------------------------|--|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-------------|----------------|-------------|
|                        | 5.0-6.9                                  | 7.0-8.9      | 9.0-10.9     | 11.0-12.9    | 13.0-14.9    | 15.0-16.9    | 17.0-18.9    | 19.0-20.9    | 21.0-28.9    | 29.0+       |                |             |
| White/red pine         | 7.9                                      | 6.2          | 2.8          | 6.2          | 3.9          | .5           | 1.5          | .8           | .0           | .0          | 29.8           | 48.8        |
| Loblolly pine          | 2.6                                      | 9.0          | 15.6         | 20.9         | 19.4         | 14.2         | 8.5          | 6.6          | 1.4          | .0          | 98.2           | 21.9        |
| Virginia pine          | 13.6                                     | 27.5         | 27.6         | 25.7         | 17.4         | 4.8          | .2           | .0           | .0           | .0          | 116.7          | 21.8        |
| Other yellow pines     | 1.3                                      | 1.4          | 3.2          | 1.1          | .5           | .4           | .0           | .0           | .0           | .0          | 8.0            | 53.2        |
| Other softwoods        | .2                                       | .8           | 1.1          | .9           | 1.2          | .0           | .6           | .8           | .4           | .0          | 6.1            | 59.9        |
| <b>Total softwoods</b> | <b>25.6</b>                              | <b>44.9</b>  | <b>50.3</b>  | <b>54.9</b>  | <b>42.4</b>  | <b>20.0</b>  | <b>10.7</b>  | <b>8.2</b>   | <b>1.8</b>   | <b>.0</b>   | <b>258.7</b>   | <b>14.9</b> |
| Red maple              | 14.0                                     | 24.0         | 28.7         | 27.8         | 27.1         | 21.2         | 17.2         | 13.8         | 28.3         | 6.8         | 208.9          | 11.6        |
| Sugar maple            | .3                                       | 1.5          | .8           | .5           | 1.8          | 1.4          | .0           | .0           | .0           | .0          | 6.3            | 52.4        |
| Hickory                | 6.1                                      | 13.5         | 10.5         | 10.5         | 8.8          | 11.3         | 10.6         | 4.1          | 4.3          | .0          | 79.7           | 15.5        |
| Beech                  | 3.5                                      | 4.3          | 5.9          | 5.8          | 7.7          | 5.2          | 8.7          | 9.7          | 13.2         | 5.1         | 69.1           | 20.1        |
| Sweetgum               | 9.5                                      | 17.7         | 16.1         | 20.4         | 20.8         | 18.1         | 8.8          | 6.9          | 6.9          | 3.7         | 128.9          | 16.0        |
| Yellow-poplar          | 7.1                                      | 20.1         | 32.5         | 43.3         | 50.7         | 54.4         | 62.1         | 59.7         | 121.6        | 38.9        | 490.4          | 15.1        |
| Blackgum               | 6.1                                      | 6.3          | 12.8         | 9.4          | 9.3          | 10.8         | 3.2          | 3.9          | 4.1          | .0          | 65.9           | 13.7        |
| Ash-walnut-cherry      | 8.8                                      | 13.8         | 15.7         | 15.4         | 16.8         | 9.1          | 8.7          | 4.3          | 4.9          | 2.6         | 100.2          | 12.5        |
| Select white oaks      | 8.4                                      | 16.7         | 25.1         | 20.9         | 19.0         | 19.0         | 18.8         | 14.0         | 26.2         | 12.2        | 180.3          | 10.8        |
| Select red oaks        | 1.1                                      | 6.0          | 10.5         | 15.2         | 20.4         | 16.6         | 13.2         | 13.9         | 23.4         | 10.7        | 131.0          | 12.9        |
| Other white oaks       | 3.8                                      | 13.4         | 24.1         | 25.7         | 29.5         | 21.1         | 17.3         | 7.8          | 18.5         | .8          | 161.8          | 16.7        |
| Other red oaks         | 8.2                                      | 13.9         | 16.2         | 38.5         | 30.3         | 32.3         | 29.1         | 34.4         | 55.7         | 10.3        | 268.9          | 10.4        |
| Black locust           | 3.8                                      | 5.2          | 9.5          | 4.0          | 5.4          | 4.3          | 1.1          | .6           | .0           | .0          | 33.7           | 25.7        |
| Other hardwoods        | 7.8                                      | 12.3         | 11.2         | 14.5         | 12.6         | 12.2         | 5.2          | 10.8         | 8.1          | 2.6         | 97.3           | 19.8        |
| <b>Total hardwoods</b> | <b>88.5</b>                              | <b>168.7</b> | <b>219.6</b> | <b>251.8</b> | <b>260.1</b> | <b>237.1</b> | <b>204.0</b> | <b>183.9</b> | <b>315.3</b> | <b>93.7</b> | <b>2,022.6</b> | <b>5.7</b>  |
| <b>All species</b>     | <b>114.0</b>                             | <b>213.6</b> | <b>269.9</b> | <b>306.7</b> | <b>302.5</b> | <b>257.1</b> | <b>214.8</b> | <b>192.1</b> | <b>317.0</b> | <b>93.7</b> | <b>2,281.4</b> | <b>5.1</b>  |
| SE                     | 8.5                                      | 6.5          | 6.5          | 6.3          | 6.3          | 7.4          | 9.4          | 10.1         | 10.3         | 19.2        | 5.1            |             |



Table 56.--Net volume of growing-stock trees on timberland by species and diameter class, Central Unit, Maryland, 1999

| Species            | (In millions of cubic feet)              |         |          |           |           |           |           |           |           |       |         |       | All classes | SE |
|--------------------|--|---------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-------|---------|-------|-------------|----|
|                    | Diameter class (inches at breast height) |         |          |           |           |           |           |           |           |       |         |       |             |    |
|                    | 5.0-6.9                                  | 7.0-8.9 | 9.0-10.9 | 11.0-12.9 | 13.0-14.9 | 15.0-16.9 | 17.0-18.9 | 19.0-20.9 | 21.0-28.9 | 29.0+ |         |       |             |    |
| White/red pine     | .4                                       | .9      | 2.6      | 2.0       | 2.3       | 3.2       | 3.3       | .0        | 2.8       | .0    | 17.4    | 48.2  |             |    |
| Loblolly pine      | 8.8                                      | 13.2    | 11.1     | 14.0      | 7.2       | 11.2      | 10.5      | 9.6       | 3.7       | .0    | 89.3    | 24.9  |             |    |
| Virginia pine      | 9.2                                      | 15.1    | 15.2     | 16.7      | 9.0       | 12.3      | 2.1       | .0        | .0        | .0    | 79.6    | 24.7  |             |    |
| Other yellow pines | .0                                       | .0      | .0       | .0        | .9        | .0        | .0        | .0        | .0        | .0    | .9      | 100.0 |             |    |
| Other softwoods    | 1.8                                      | 1.8     | 1.4      | 1.3       | 2.0       | .0        | .0        | 1.0       | .0        | 4.2   | 13.6    | 44.1  |             |    |
| Total softwoods    | 20.2                                     | 31.0    | 30.3     | 33.9      | 21.4      | 26.7      | 15.9      | 10.6      | 6.5       | 4.2   | 200.8   | 16.2  |             |    |
| Red maple          | 14.5                                     | 22.2    | 32.4     | 26.7      | 31.4      | 15.2      | 18.0      | 16.9      | 57.0      | 35.8  | 269.9   | 18.9  |             |    |
| Sugar maple        | .7                                       | .9      | .5       | 3.0       | .9        | .0        | 1.7       | .0        | .0        | .0    | 7.7     | 55.5  |             |    |
| Hickory            | 4.1                                      | 8.9     | 9.7      | 15.3      | 13.9      | 9.5       | 8.9       | 5.8       | 13.9      | 2.4   | 92.5    | 15.1  |             |    |
| Beech              | 3.5                                      | 4.1     | 4.9      | 4.3       | 4.7       | 3.0       | 3.5       | 4.8       | 5.7       | .0    | 38.5    | 22.6  |             |    |
| Sweetgum           | 11.0                                     | 16.4    | 15.9     | 26.7      | 29.0      | 22.7      | 10.1      | 6.3       | 24.6      | 5.4   | 168.2   | 19.9  |             |    |
| Yellow-poplar      | 6.7                                      | 14.5    | 23.3     | 31.8      | 38.1      | 56.3      | 80.6      | 73.6      | 139.5     | 30.1  | 494.5   | 14.4  |             |    |
| Blackgum           | 6.2                                      | 5.9     | 6.8      | 8.5       | 6.6       | 5.1       | 1.1       | 5.2       | 6.1       | .0    | 51.4    | 20.2  |             |    |
| Ash-walnut-cherry  | 9.9                                      | 12.5    | 18.5     | 19.9      | 10.2      | 8.9       | 15.9      | 3.0       | 23.6      | 5.4   | 127.9   | 16.1  |             |    |
| Select white oaks  | 3.3                                      | 7.1     | 12.5     | 16.9      | 22.1      | 18.9      | 27.0      | 21.1      | 24.0      | 28.0  | 180.9   | 17.1  |             |    |
| Select red oaks    | .9                                       | 3.4     | 3.1      | 8.9       | 5.8       | 14.2      | 12.3      | 3.7       | 27.4      | 10.5  | 90.3    | 25.4  |             |    |
| Other white oaks   | 3.9                                      | 8.6     | 22.2     | 19.0      | 29.0      | 12.2      | 22.6      | 7.2       | 12.6      | .0    | 136.7   | 23.4  |             |    |
| Other red oaks     | 3.9                                      | 8.7     | 18.1     | 35.9      | 37.8      | 40.7      | 48.5      | 36.1      | 68.0      | 34.6  | 332.4   | 13.3  |             |    |
| Black locust       | 2.3                                      | 7.3     | 5.5      | 4.7       | 4.9       | 1.9       | .0        | 3.7       | 6.2       | .0    | 36.5    | 34.9  |             |    |
| Other hardwoods    | 12.0                                     | 14.2    | 18.7     | 18.4      | 6.6       | 3.8       | 6.5       | 8.7       | 20.4      | 9.3   | 118.7   | 17.2  |             |    |
| Total hardwoods    | 82.3                                     | 134.8   | 192.1    | 240.1     | 241.2     | 212.4     | 256.6     | 196.1     | 429.0     | 161.5 | 2,146.2 | 6.1   |             |    |
| All species        | 102.5                                    | 165.8   | 222.4    | 274.1     | 262.6     | 239.1     | 272.5     | 206.7     | 435.5     | 165.8 | 2,347.0 | 5.6   |             |    |
| SE                 | 8.2                                      | 7.3     | 8.4      | 7.2       | 8.5       | 10.3      | 11.3      | 12.7      | 12.2      | 27.1  | 5.6     |       |             |    |

Table 57.--Net volume of sawtimber trees on timberland by species and diameter class, Central Unit, Maryland, 1986

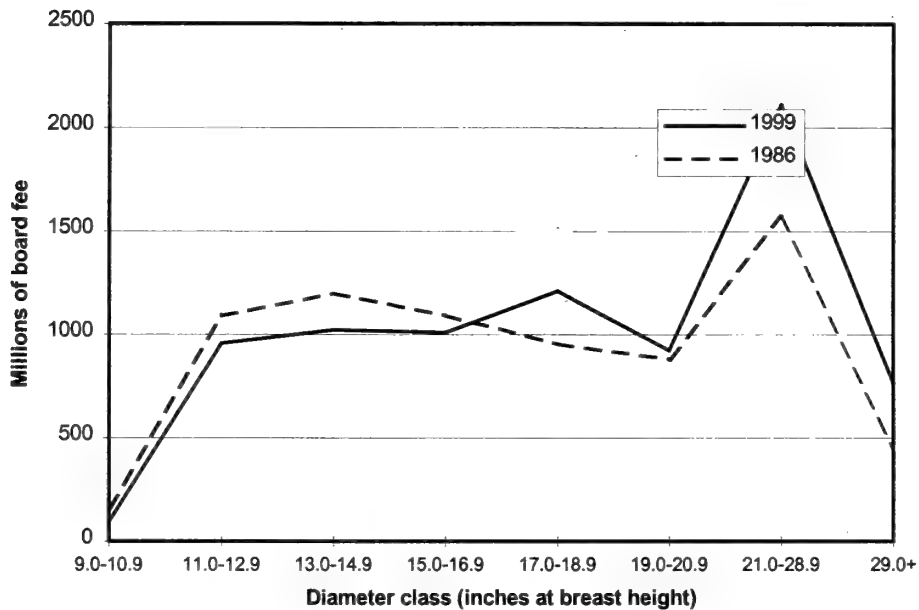
(In millions of board feet)

| Species                | Diameter class (inches at breast height) |                |                |                |               |               |                |              |              |                | All classes  | SE          |
|------------------------|--|----------------|----------------|----------------|---------------|---------------|----------------|--------------|--------------|----------------|--------------|-------------|
|                        | 9.0-<br>10.9                             | 11.0-<br>12.9  | 13.0-<br>14.9  | 15.0-<br>16.9  | 17.0-<br>18.9 | 19.0-<br>20.9 | 21.0-<br>28.9  | 29.0+        |              |                |              |             |
| White/red pine         | 9.2                                      | 25.2           | 17.6           | 2.1            | 7.8           | 3.9           | .0             | .0           | .0           | .0             | 65.9         | 60.6        |
| Loblolly pine          | 49.3                                     | 80.0           | 82.1           | 62.4           | 39.1          | 30.4          | 6.5            | .0           | .0           | .0             | 349.9        | 22.5        |
| Virginia pine          | 86.7                                     | 98.7           | 73.6           | 21.3           | .7            | .0            | .0             | .0           | .0           | .0             | 281.1        | 22.7        |
| Other yellow pines     | 9.9                                      | 4.4            | 2.2            | 1.9            | .0            | .0            | .0             | .0           | .0           | .0             | 18.4         | 60.2        |
| Other softwoods        | 3.2                                      | 3.4            | 5.3            | .0             | 2.7           | 4.1           | 1.7            | .0           | .0           | .0             | 20.5         | 62.2        |
| <b>Total softwoods</b> | <b>158.4</b>                             | <b>211.7</b>   | <b>180.8</b>   | <b>87.8</b>    | <b>50.4</b>   | <b>38.4</b>   | <b>8.2</b>     | <b>.0</b>    | <b>.0</b>    | <b>.0</b>      | <b>735.7</b> | <b>16.3</b> |
| Red maple              | .0                                       | 94.4           | 105.3          | 82.5           | 72.2          | 59.7          | 134.0          | 35.5         | .0           | .0             | 583.6        | 13.7        |
| Sugar maple            | .0                                       | 1.9            | 6.7            | 5.4            | .0            | .0            | .0             | .0           | .0           | .0             | 14.1         | 65.4        |
| Hickory                | .0                                       | 37.2           | 35.3           | 46.5           | 45.5          | 20.5          | 20.3           | .0           | .0           | .0             | 205.3        | 18.6        |
| Beech                  | .0                                       | 21.6           | 31.2           | 21.6           | 39.1          | 44.0          | 59.0           | 16.9         | .0           | .0             | 233.4        | 21.7        |
| Sweetgum               | .0                                       | 70.7           | 80.9           | 78.2           | 38.1          | 31.6          | 35.4           | 16.5         | .0           | .0             | 351.5        | 19.4        |
| Yellow-poplar          | .0                                       | 150.5          | 202.1          | 245.5          | 293.5         | 289.7         | 634.1          | 189.4        | .0           | .0             | 2,004.8      | 15.6        |
| Blackgum               | .0                                       | 31.8           | 35.3           | 45.7           | 13.8          | 17.4          | 19.8           | .0           | .0           | .0             | 163.8        | 17.1        |
| Ash-walnut-cherry      | .0                                       | 52.5           | 63.5           | 37.3           | 37.6          | 16.5          | 21.6           | 13.5         | .0           | .0             | 242.5        | 15.4        |
| Select white oaks      | .0                                       | 75.1           | 76.9           | 82.5           | 82.7          | 62.1          | 123.7          | 58.9         | .0           | .0             | 561.9        | 12.8        |
| Select red oaks        | .0                                       | 52.6           | 79.5           | 70.7           | 57.8          | 62.5          | 115.6          | 51.4         | .0           | .0             | 490.1        | 13.6        |
| Other white oaks       | .0                                       | 91.3           | 109.2          | 79.4           | 70.6          | 30.3          | 86.0           | 3.9          | .0           | .0             | 470.7        | 18.0        |
| Other red oaks         | .0                                       | 134.9          | 118.3          | 138.4          | 127.1         | 156.0         | 275.7          | 48.5         | .0           | .0             | 999.0        | 11.4        |
| Black locust           | .0                                       | 13.9           | 21.5           | 18.8           | 4.7           | 2.5           | .0             | .0           | .0           | .0             | 61.4         | 31.5        |
| Other hardwoods        | .0                                       | 50.4           | 50.3           | 53.8           | 23.2          | 49.0          | 35.9           | 12.9         | .0           | .0             | 275.6        | 26.0        |
| <b>Total hardwoods</b> | <b>.0</b>                                | <b>879.0</b>   | <b>1,016.0</b> | <b>1,006.5</b> | <b>905.8</b>  | <b>841.9</b>  | <b>1,561.0</b> | <b>447.5</b> | <b>447.5</b> | <b>6,657.7</b> | <b>7.0</b>   |             |
| <b>All species</b>     | <b>158.4</b>                             | <b>1,090.7</b> | <b>1,196.8</b> | <b>1,094.3</b> | <b>956.1</b>  | <b>880.3</b>  | <b>1,569.2</b> | <b>447.5</b> | <b>447.5</b> | <b>7,393.4</b> | <b>6.3</b>   |             |
| <b>SE</b>              | <b>18.2</b>                              | <b>6.4</b>     | <b>6.3</b>     | <b>7.5</b>     | <b>9.5</b>    | <b>10.2</b>   | <b>10.5</b>    | <b>19.5</b>  | <b>19.5</b>  | <b>6.3</b>     |              |             |

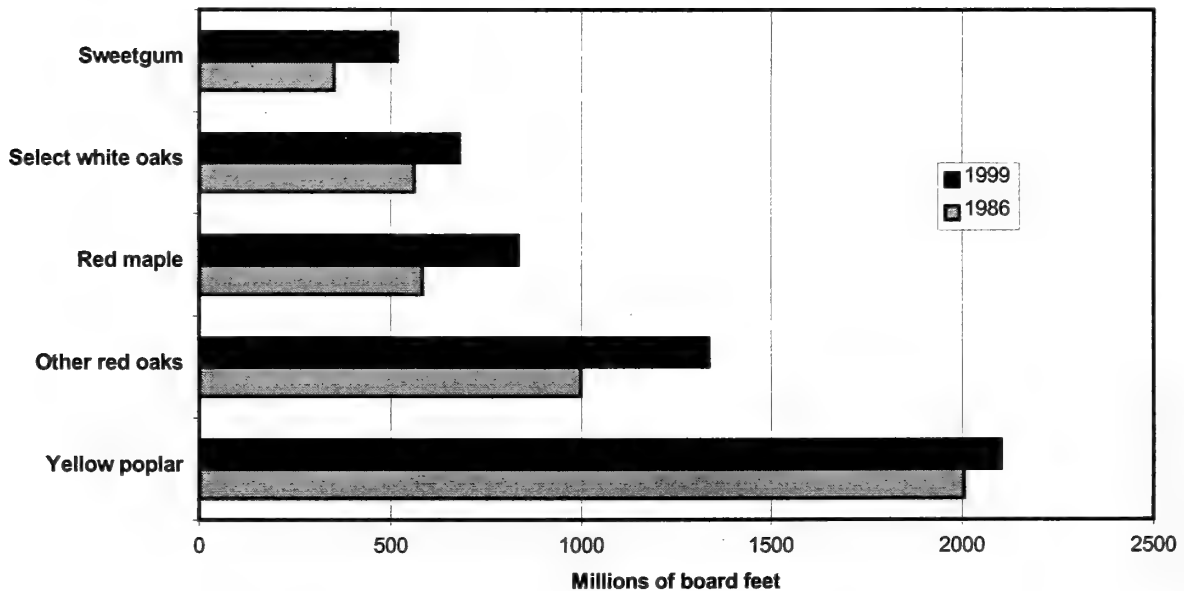
Table 58.--Net volume of sawtimber trees on timberland by species and diameter class, Central Unit, Maryland, 1999

| Species                | (In millions of board feet)              |               |                |                |                |               |                |              |                |             | SE |
|------------------------|--|---------------|----------------|----------------|----------------|---------------|----------------|--------------|----------------|-------------|----|
|                        | Diameter class (inches at breast height) |               |                |                |                |               |                |              |                |             |    |
|                        | 9.0-<br>10.9                             | 11.0-<br>12.9 | 13.0-<br>14.9  | 15.0-<br>16.9  | 17.0-<br>18.9  | 19.0-<br>20.9 | 21.0-<br>28.9  | 29.0+        | All<br>classes |             |    |
| White/red pine         | 8.1                                      | 7.5           | 9.5            | 12.8           | 16.6           | .0            | 15.5           | .0           | 70.0           | 53.1        |    |
| Loblolly pine          | 37.1                                     | 55.5          | 31.7           | 52.2           | 47.5           | 45.8          | 17.1           | .0           | 287.0          | 27.4        |    |
| Virginia pine          | 47.0                                     | 60.6          | 38.2           | 55.3           | 9.7            | .0            | .0             | .0           | 210.8          | 28.4        |    |
| Other yellow pines     | .0                                       | .0            | 3.8            | .0             | .0             | .0            | .0             | .0           | 3.8            | 100.0       |    |
| Other softwoods        | 3.7                                      | 4.0           | 6.1            | .0             | .0             | 2.6           | .0             | 21.9         | 38.2           | 61.7        |    |
| <b>Total softwoods</b> | <b>95.9</b>                              | <b>127.6</b>  | <b>89.4</b>    | <b>120.4</b>   | <b>73.8</b>    | <b>48.4</b>   | <b>32.6</b>    | <b>21.9</b>  | <b>609.8</b>   | <b>18.6</b> |    |
| Red maple              | .0                                       | 92.0          | 119.7          | 53.7           | 75.5           | 68.9          | 260.0          | 165.1        | 835.0          | 24.1        |    |
| Sugar maple            | .0                                       | 10.0          | 3.7            | .0             | 6.4            | .0            | .0             | .0           | 20.1           | 67.1        |    |
| Hickory                | .0                                       | 53.8          | 56.0           | 38.1           | 41.3           | 27.3          | 63.9           | 13.1         | 293.4          | 18.3        |    |
| Beech                  | .0                                       | 15.9          | 20.8           | 11.8           | 13.7           | 23.9          | 27.0           | .0           | 113.1          | 28.4        |    |
| Sweetgum               | .0                                       | 88.3          | 107.9          | 96.4           | 45.1           | 33.2          | 118.0          | 28.8         | 517.7          | 23.2        |    |
| Yellow-poplar          | .0                                       | 112.3         | 153.4          | 245.7          | 372.3          | 341.8         | 736.3          | 138.9        | 2,100.6        | 15.4        |    |
| Blackgum               | .0                                       | 25.2          | 23.7           | 20.4           | 5.9            | 22.4          | 31.0           | .0           | 128.5          | 33.3        |    |
| Ash-walnut-cherry      | .0                                       | 65.2          | 35.9           | 36.3           | 61.3           | 10.1          | 99.7           | 30.0         | 338.5          | 22.2        |    |
| Select white oaks      | .0                                       | 60.2          | 90.2           | 78.4           | 128.0          | 92.0          | 110.1          | 121.0        | 679.9          | 19.5        |    |
| Select red oaks        | .0                                       | 31.5          | 19.0           | 57.3           | 49.4           | 14.8          | 119.0          | 43.2         | 334.3          | 26.1        |    |
| Other white oaks       | .0                                       | 66.5          | 109.5          | 47.2           | 94.9           | 26.6          | 57.6           | .0           | 402.4          | 25.5        |    |
| Other red oaks         | .0                                       | 127.6         | 150.5          | 177.5          | 213.0          | 163.6         | 342.5          | 161.1        | 1,335.8        | 14.3        |    |
| Black locust           | .0                                       | 10.2          | 16.3           | 9.4            | .0             | 16.2          | 20.6           | .0           | 72.6           | 57.9        |    |
| Other hardwoods        | .0                                       | 70.4          | 28.3           | 17.9           | 28.7           | 36.1          | 90.4           | 44.8         | 316.6          | 24.1        |    |
| <b>Total hardwoods</b> | <b>.0</b>                                | <b>829.2</b>  | <b>934.7</b>   | <b>890.0</b>   | <b>1,135.5</b> | <b>876.8</b>  | <b>2,076.2</b> | <b>746.1</b> | <b>7,488.6</b> | <b>7.3</b>  |    |
| <b>All species</b>     | <b>95.9</b>                              | <b>956.8</b>  | <b>1,024.1</b> | <b>1,010.4</b> | <b>1,209.3</b> | <b>925.2</b>  | <b>2,108.7</b> | <b>768.0</b> | <b>8,098.4</b> | <b>6.7</b>  |    |
| <b>SE</b>              | <b>23.8</b>                              | <b>7.4</b>    | <b>8.7</b>     | <b>10.4</b>    | <b>11.5</b>    | <b>13.2</b>   | <b>12.5</b>    | <b>26.7</b>  | <b>6.7</b>     |             |    |

## Net volume of sawtimber trees on timberland, Central Unit, Maryland, 1986 and 1999



## Net volume of sawtimber trees on timberland, top 5 species, Central Unit, Maryland, 1986 and 1999



# MARYLAND SOUTHERN UNIT

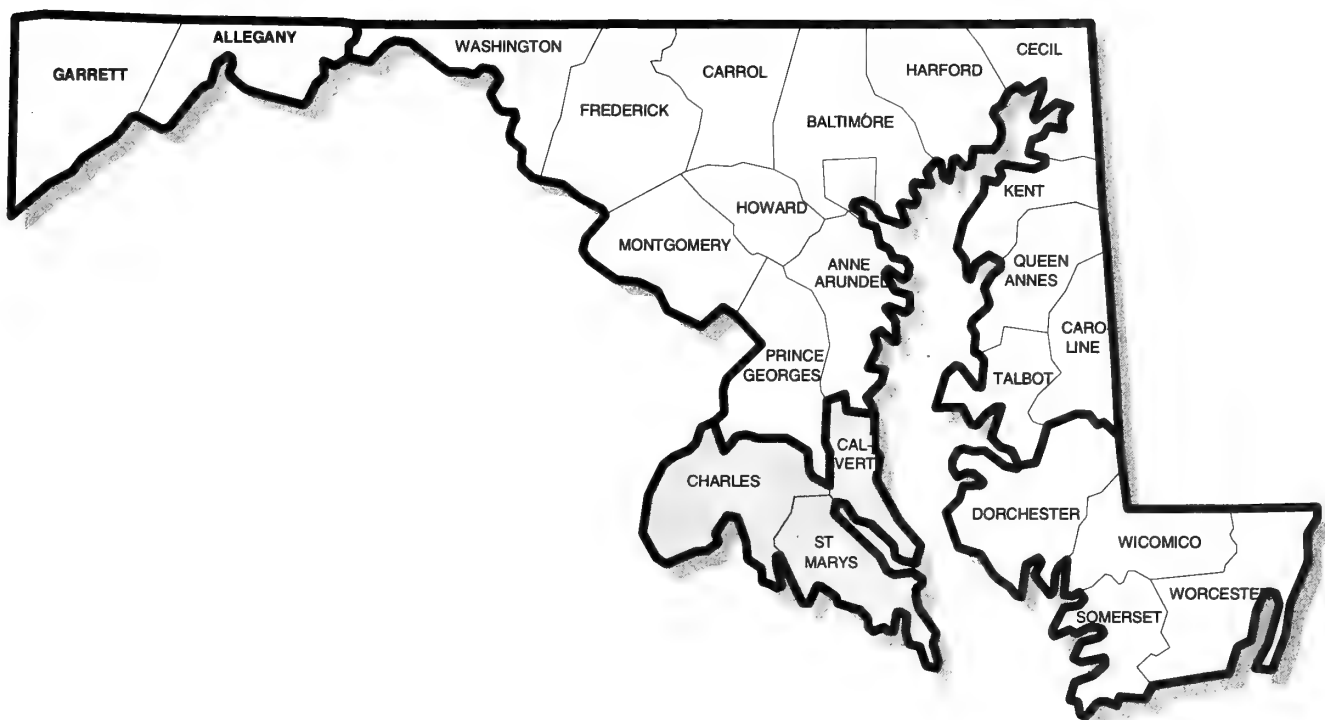


Table 59.--Area of timberland by forest type, forest-type group, and stand-size class, Southern Unit, Maryland, 1986

(In thousands of acres)

| Forest type                    | Stand-size class |             |                      |             | All classes | SE    |
|--------------------------------|------------------|-------------|----------------------|-------------|-------------|-------|
|                                | Saw-timber       | Pole-timber | Sapling and seedling | Non-stocked |             |       |
| Loblolly pine                  | 14.4             | 8.0         | .0                   | .0          | 22.4        | 37.3  |
| Virginia pine                  | 18.5             | 18.4        | 3.0                  | .0          | 39.8        | 27.7  |
| Loblolly/shortleaf group       | 32.9             | 26.4        | 3.0                  | .0          | 62.3        | 21.3  |
| Virginia pine/oak              | 29.0             | 15.9        | 3.0                  | .0          | 47.8        | 26.1  |
| Loblolly pine/hardwood         | 14.8             | .0          | .0                   | .0          | 14.8        | 42.7  |
| Oak/pine group                 | 43.8             | 15.9        | 3.0                  | .0          | 62.7        | 21.9  |
| White oak/red oak/hickory      | 15.6             | .0          | .0                   | .0          | 15.6        | 44.9  |
| White oak                      | 3.2              | .0          | .0                   | .0          | 3.2         | 100.0 |
| Y-poplar/wh. oak/no.red oak    | 6.4              | 3.2         | .0                   | .0          | 9.7         | 57.7  |
| Sweetgum/yellow-poplar         | 8.2              | 8.0         | 4.7                  | .0          | 20.9        | 39.4  |
| Scarlet oak                    | 6.5              | .0          | .0                   | .0          | 6.5         | 71.6  |
| Red maple/central hardwood     | 3.9              | .0          | .0                   | .0          | 3.9         | 100.0 |
| Mixed central hardwoods        | 124.3            | 27.1        | 14.2                 | .0          | 165.6       | 11.4  |
| Oak/hickory group              | 168.1            | 38.4        | 18.9                 | .0          | 225.4       | 8.2   |
| Swamp chsnt oak/cherrybark oak | 3.2              | 2.4         | .0                   | .0          | 5.7         | 71.4  |
| Sweetgm/nuttall oak/willow oak | 11.2             | 14.9        | 3.6                  | .0          | 29.7        | 33.5  |
| Oak/gum/cypress group          | 14.4             | 17.4        | 3.6                  | .0          | 35.4        | 30.2  |
| Black ash/Amer. elm/red maple  | 6.2              | .0          | .0                   | .0          | 6.2         | 70.8  |
| Sycamore/pecan/American elm    | 3.0              | .0          | .0                   | .0          | 3.0         | 100.0 |
| Elm/ash/red maple group        | 9.2              | .0          | .0                   | .0          | 9.2         | 54.8  |
| All forest types               | 268.5            | 98.0        | 28.4                 | .0          | 394.9       | 3.4   |
| SE                             | 6.9              | 17.3        | 34.0                 | .0          | 3.4         |       |

Table 60.--Area of timberland by forest type, forest-type group, and stand-size class, Southern Unit, Maryland, 1999

(In thousands of acres)

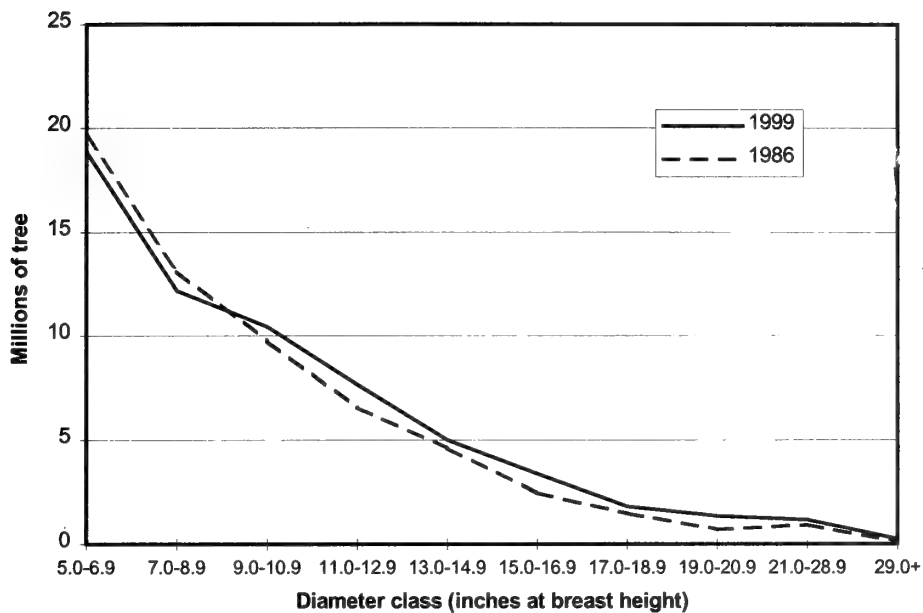
| Forest type                    | Stand-size class |             |                      |             | All classes | SE    |
|--------------------------------|------------------|-------------|----------------------|-------------|-------------|-------|
|                                | Saw-timber       | Pole-timber | Sapling and seedling | Non-stocked |             |       |
| Loblolly pine                  | 26.1             | .0          | .9                   | .0          | 26.9        | 40.4  |
| Virginia pine                  | 4.4              | 6.1         | .0                   | .0          | 10.5        | 64.1  |
| Loblolly/shortleaf group       | 30.4             | 6.1         | .9                   | .0          | 37.4        | 33.7  |
| Shortleaf pine/oak             | .0               | .0          | 1.8                  | .0          | 1.8         | 100.0 |
| Virginia pine/oak              | 14.7             | 8.6         | .0                   | .0          | 23.3        | 47.5  |
| Loblolly pine/hardwood         | 23.8             | .0          | .0                   | .0          | 23.8        | 47.3  |
| Oak/pine group                 | 38.5             | 8.6         | 1.8                  | .0          | 48.9        | 30.7  |
| White oak/red oak/hickory      | 19.8             | 6.8         | .0                   | .0          | 26.6        | 49.4  |
| White oak                      | 21.7             | .0          | .0                   | .0          | 21.7        | 58.5  |
| Y-poplar/wh. oak/no.red oak    | 18.1             | .0          | .0                   | .0          | 18.1        | 49.8  |
| Sweetgum/yellow-poplar         | 13.2             | .9          | 3.2                  | .0          | 17.4        | 50.3  |
| Yellow-poplar                  | 9.2              | .0          | 2.9                  | .0          | 12.1        | 58.4  |
| Scarlet oak                    | 2.4              | .0          | .0                   | .0          | 2.4         | 100.0 |
| Red maple/central hardwood     | .0               | .8          | .0                   | .0          | .8          | 100.0 |
| Mixed central hardwoods        | 116.2            | 15.9        | 8.1                  | .0          | 140.2       | 14.8  |
| Oak/hickory group              | 200.6            | 24.4        | 14.3                 | .0          | 239.2       | 9.6   |
| Swamp chsnt oak/cherrybark oak | 7.6              | .0          | .0                   | .0          | 7.6         | 81.7  |
| Sweetgm/nuttall oak/willow oak | 18.1             | .0          | 6.8                  | .0          | 24.9        | 47.0  |
| Oak/gum/cypress group          | 25.7             | .0          | 6.8                  | .0          | 32.5        | 42.5  |
| Black ash/Amer. elm/red maple  | 4.5              | .0          | .0                   | .0          | 4.5         | 100.0 |
| Red maple(lowland)             | .0               | .0          | 4.2                  | .0          | 4.2         | 100.0 |
| Red maple(upland)              | .0               | 1.8         | .0                   | .0          | 1.8         | 100.0 |
| American elm/green ash         | .0               | 2.3         | .0                   | .0          | 2.3         | 100.0 |
| Elm/ash/red maple group        | 4.5              | 4.1         | 4.2                  | .0          | 12.8        | 50.8  |
| Black cherry                   | .0               | 1.7         | .0                   | .0          | 1.7         | 100.0 |
| Red maple/northern hardwoods   | .0               | 8.8         | .0                   | .0          | 8.8         | 100.0 |
| Northern hardwoods group       | .0               | 10.5        | .0                   | .0          | 10.5        | 85.4  |
| All forest types               | 299.7            | 53.7        | 27.9                 | .0          | 381.3       | 3.1   |
| SE                             | 6.4              | 29.5        | 35.5                 | .0          | 3.1         |       |

Table 61.--Number of live trees (1.0+ inches d.b.h.) on forest land by species and diameter group, Southern Unit, Maryland, 1999

| Species                        | Diameter                |               |               |              | All Classes    | SE          |
|--------------------------------|-------------------------|---------------|---------------|--------------|----------------|-------------|
|                                | (In thousands of trees) |               |               |              |                |             |
|                                | 1.0-4.9                 | 5.0-10.9      | 11.0-20.9     | 21+          |                |             |
| Loblolly pine                  | 259                     | 2,457         | 2,460         | 39           | 5,214          | 28.3        |
| Virginia pine                  | 8,400                   | 5,102         | 1,483         | 36           | 15,021         | 44.4        |
| Other softwoods                | 1,668                   | 154           | 18            | 0            | 1,840          | 49.5        |
| <b>Total softwoods</b>         | <b>10,327</b>           | <b>7,713</b>  | <b>3,961</b>  | <b>75</b>    | <b>22,075</b>  | <b>31.0</b> |
| Red maple                      | 25,925                  | 5,179         | 1,408         | 39           | 32,551         | 16.9        |
| Hickory                        | 3,181                   | 1,139         | 495           | 81           | 4,896          | 31.8        |
| Beech                          | 13,736                  | 2,879         | 959           | 100          | 17,673         | 21.0        |
| Sweetgum                       | 22,544                  | 7,341         | 3,239         | 18           | 33,142         | 16.9        |
| Yellow-poplar                  | 4,473                   | 3,140         | 2,727         | 505          | 10,845         | 24.5        |
| Blackgum                       | 14,567                  | 2,913         | 275           | 0            | 17,755         | 17.7        |
| Ash-walnut-cherry              | 1,041                   | 2,080         | 410           | 0            | 3,531          | 44.3        |
| Select white oaks              | 2,832                   | 4,761         | 2,740         | 317          | 10,650         | 21.4        |
| Select red oaks                | 1,025                   | 277           | 500           | 57           | 1,859          | 47.0        |
| Other white oaks               | 272                     | 131           | 39            | 0            | 442            | 68.6        |
| Other red oaks                 | 3,583                   | 3,059         | 2,600         | 122          | 9,364          | 14.8        |
| Blacklocust                    | 1,697                   | 343           | 123           | 0            | 2,163          | 68.6        |
| Other hardwoods                | 45,362                  | 1,808         | 304           | 108          | 47,582         | 18.6        |
| <b>Noncommercial hardwoods</b> | <b>28,730</b>           | <b>1,452</b>  | <b>109</b>    | <b>0</b>     | <b>30,291</b>  | <b>22.0</b> |
| <b>Total hardwoods</b>         | <b>168,968</b>          | <b>36,503</b> | <b>15,929</b> | <b>1,346</b> | <b>222,746</b> | <b>6.7</b>  |
| <b>All species</b>             | <b>179,295</b>          | <b>44,215</b> | <b>19,889</b> | <b>1,421</b> | <b>244,821</b> | <b>6.8</b>  |
| SE                             | 8.7                     | 6.7           | 6.2           | 18.7         | 6.8            |             |



## Number of growing-stock trees on timberland, Southern Unit, Maryland, 1986 and 1999



## Number of growing-stock trees on timberland, top 5 species, Southern Unit, Maryland, 1986 and 1999

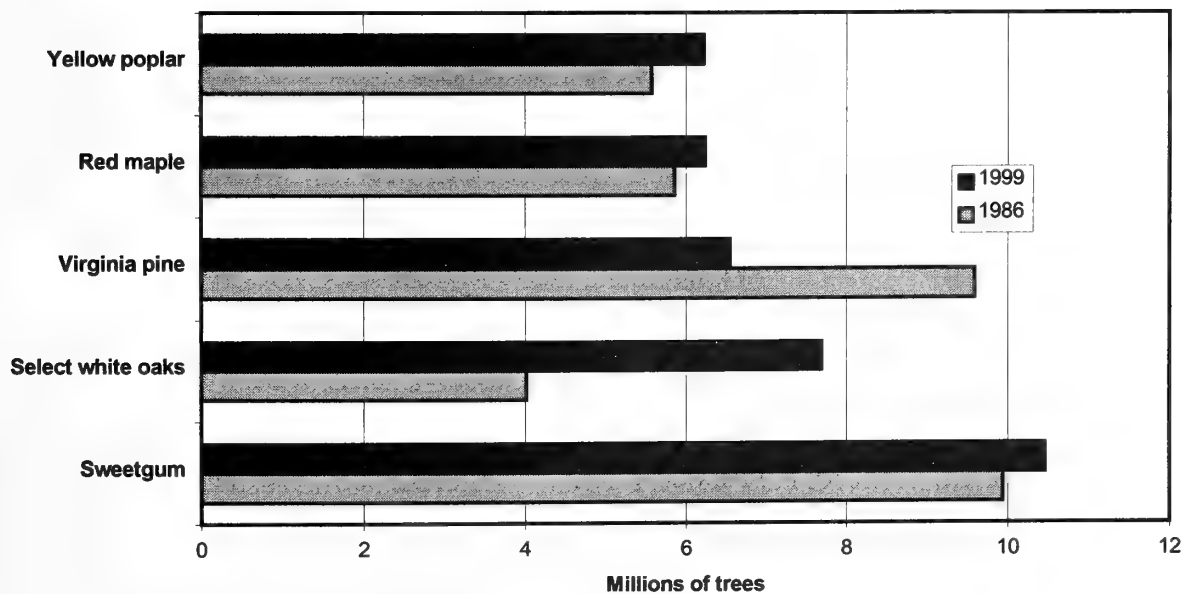


Table 62.--Number of growing-stock trees (5.0+ inches d.b.h.) on timberland by species and diameter class, Southern Unit, Maryland, 1986

| Species                | (In thousands of trees)                  |               |              |              |              |              |              |            |            |            |               |             |  | All classes | SE |
|------------------------|--|---------------|--------------|--------------|--------------|--------------|--------------|------------|------------|------------|---------------|-------------|--|-------------|----|
|                        | Diameter class (inches at breast height) |               |              |              |              |              |              |            |            |            |               |             |  |             |    |
|                        | 5.0-6.9                                  | 7.0-8.9       | 9.0-10.9     | 11.0-12.9    | 13.0-14.9    | 15.0-16.9    | 17.0-18.9    | 19.0-20.9  | 21.0-28.9  | 29.0+      |               |             |  |             |    |
| Loblolly pine          | 1,637                                    | 1,340         | 1,050        | 764          | 410          | 167          | 132          | 25         | 29         | 0          | 5,555         | 35.0        |  |             |    |
| Virginia pine          | 2,488                                    | 3,040         | 2,122        | 1,181        | 582          | 147          | 25           | 0          | 5          | 0          | 9,589         | 19.0        |  |             |    |
| Other yellow pines     | 90                                       | 58            | 12           | 0            | 0            | 0            | 0            | 0          | 0          | 0          | 160           | 81.6        |  |             |    |
| Other softwoods        | 56                                       | 84            | 19           | 28           | 0            | 0            | 0            | 0          | 0          | 4          | 191           | 39.7        |  |             |    |
| <b>Total softwoods</b> | <b>4,271</b>                             | <b>4,522</b>  | <b>3,202</b> | <b>1,973</b> | <b>992</b>   | <b>315</b>   | <b>156</b>   | <b>25</b>  | <b>35</b>  | <b>4</b>   | <b>15,495</b> | <b>17.3</b> |  |             |    |
| Red maple              | 2,492                                    | 1,127         | 782          | 726          | 309          | 186          | 132          | 29         | 69         | 8          | 5,862         | 15.0        |  |             |    |
| Hickory                | 135                                      | 273           | 400          | 155          | 139          | 95           | 29           | 36         | 18         | 8          | 1,288         | 20.6        |  |             |    |
| Beech                  | 1,208                                    | 570           | 420          | 367          | 329          | 212          | 109          | 73         | 86         | 10         | 3,383         | 16.2        |  |             |    |
| Sweetgum               | 3,731                                    | 2,412         | 1,485        | 1,049        | 602          | 333          | 172          | 56         | 94         | 0          | 9,933         | 13.4        |  |             |    |
| Yellow-poplar          | 1,577                                    | 931           | 777          | 566          | 573          | 347          | 314          | 182        | 277        | 35         | 5,579         | 16.2        |  |             |    |
| Blackgum               | 1,218                                    | 314           | 206          | 115          | 137          | 110          | 22           | 0          | 22         | 0          | 2,145         | 18.4        |  |             |    |
| Ash-walnut-cherry      | 367                                      | 250           | 230          | 83           | 129          | 80           | 32           | 7          | 13         | 0          | 1,193         | 27.4        |  |             |    |
| Select white oaks      | 925                                      | 794           | 698          | 582          | 481          | 193          | 151          | 64         | 112        | 15         | 4,017         | 13.9        |  |             |    |
| Select red oaks        | 192                                      | 140           | 109          | 55           | 63           | 57           | 22           | 36         | 26         | 3          | 703           | 24.1        |  |             |    |
| Other white oaks       | 263                                      | 137           | 89           | 41           | 63           | 39           | 44           | 28         | 18         | 3          | 726           | 29.3        |  |             |    |
| Other red oaks         | 1,645                                    | 979           | 839          | 701          | 640          | 381          | 225          | 154        | 98         | 42         | 5,706         | 12.4        |  |             |    |
| Black locust           | 14                                       | 95            | 0            | 18           | 26           | 0            | 0            | 0          | 0          | 0          | 154           | 44.7        |  |             |    |
| Other hardwoods        | 1,567                                    | 580           | 523          | 132          | 112          | 107          | 66           | 8          | 53         | 0          | 3,149         | 17.0        |  |             |    |
| <b>Total hardwoods</b> | <b>15,333</b>                            | <b>8,603</b>  | <b>6,559</b> | <b>4,592</b> | <b>3,604</b> | <b>2,139</b> | <b>1,319</b> | <b>675</b> | <b>889</b> | <b>125</b> | <b>43,839</b> | <b>5.2</b>  |  |             |    |
| <b>All species</b>     | <b>19,605</b>                            | <b>13,125</b> | <b>9,761</b> | <b>6,565</b> | <b>4,596</b> | <b>2,454</b> | <b>1,475</b> | <b>700</b> | <b>923</b> | <b>128</b> | <b>59,334</b> | <b>5.6</b>  |  |             |    |
| SE                     | 7.4                                      | 9.2           | 8.5          | 6.6          | 6.4          | 7.7          | 10.5         | 12.9       | 13.4       | 25.7       | 5.6           |             |  |             |    |

Table 63.--Number of growing-stock trees (5.0+ inches d.b.h.) on timberland by species and diameter class, Southern Unit, Maryland, 1999

| Species                | (In thousands of trees)                  |               |               |              |              |              |              |              |              |            |               |             | All classes | SE |
|------------------------|--|---------------|---------------|--------------|--------------|--------------|--------------|--------------|--------------|------------|---------------|-------------|-------------|----|
|                        | Diameter class (inches at breast height) |               |               |              |              |              |              |              |              |            |               |             |             |    |
|                        | 5.0-6.9                                  | 7.0-8.9       | 9.0-10.9      | 11.0-12.9    | 13.0-14.9    | 15.0-16.9    | 17.0-18.9    | 19.0-20.9    | 21.0-28.9    | 29.0+      |               |             |             |    |
| Loblolly pine          | 595                                      | 745           | 1,048         | 949          | 677          | 347          | 264          | 184          | 39           | 0          | 4,848         | 29.3        |             |    |
| Virginia pine          | 1,894                                    | 1,950         | 1,217         | 768          | 508          | 174          | 0            | 0            | 36           | 0          | 6,548         | 23.8        |             |    |
| Other softwoods        | 95                                       | 59            | 0             | 0            | 0            | 18           | 0            | 0            | 0            | 0          | 172           | 42.1        |             |    |
| <b>Total softwoods</b> | <b>2,584</b>                             | <b>2,754</b>  | <b>2,265</b>  | <b>1,717</b> | <b>1,185</b> | <b>540</b>   | <b>264</b>   | <b>184</b>   | <b>75</b>    | <b>0</b>   | <b>11,568</b> | <b>18.1</b> |             |    |
| Red maple              | 2,661                                    | 1,475         | 897           | 453          | 304          | 175          | 153          | 87           | 39           | 0          | 6,245         | 18.3        |             |    |
| Hickory                | 437                                      | 244           | 459           | 278          | 149          | 41           | 0            | 27           | 81           | 0          | 1,715         | 41.8        |             |    |
| Beech                  | 1,635                                    | 735           | 453           | 365          | 256          | 213          | 27           | 60           | 63           | 36         | 3,845         | 20.4        |             |    |
| Sweetgum               | 3,375                                    | 1,665         | 2,198         | 1,543        | 879          | 538          | 191          | 49           | 18           | 0          | 10,455        | 16.6        |             |    |
| Yellow-poplar          | 1,403                                    | 1,013         | 606           | 809          | 475          | 527          | 625          | 264          | 442          | 63         | 6,226         | 16.2        |             |    |
| Blackgum               | 1,485                                    | 763           | 541           | 46           | 54           | 139          | 36           | 0            | 0            | 0          | 3,064         | 17.2        |             |    |
| Ash-walnut-cherry      | 807                                      | 611           | 444           | 213          | 53           | 18           | 89           | 36           | 0            | 0          | 2,272         | 40.1        |             |    |
| Select white oaks      | 1,844                                    | 1,359         | 1,494         | 1,058        | 567          | 415          | 229          | 407          | 259          | 58         | 7,691         | 16.7        |             |    |
| Select red oaks        | 146                                      | 40            | 63            | 192          | 157          | 96           | 18           | 36           | 21           | 36         | 807           | 28.6        |             |    |
| Other white oaks       | 32                                       | 99            | 0             | 0            | 0            | 0            | 0            | 0            | 0            | 0          | 131           | 51.1        |             |    |
| Other red oaks         | 1,197                                    | 947           | 826           | 842          | 813          | 632          | 138          | 175          | 73           | 49         | 5,692         | 13.2        |             |    |
| Black locust           | 100                                      | 53            | 0             | 82           | 41           | 0            | 0            | 0            | 0            | 0          | 276           | 47.0        |             |    |
| Other hardwoods        | 1,150                                    | 413           | 204           | 81           | 81           | 58           | 40           | 27           | 108          | 0          | 2,161         | 17.7        |             |    |
| <b>Total hardwoods</b> | <b>16,273</b>                            | <b>9,417</b>  | <b>8,184</b>  | <b>5,961</b> | <b>3,829</b> | <b>2,853</b> | <b>1,547</b> | <b>1,171</b> | <b>1,104</b> | <b>243</b> | <b>50,581</b> | <b>6.4</b>  |             |    |
| <b>All species</b>     | <b>18,857</b>                            | <b>12,171</b> | <b>10,449</b> | <b>7,677</b> | <b>5,014</b> | <b>3,393</b> | <b>1,811</b> | <b>1,355</b> | <b>1,179</b> | <b>243</b> | <b>62,149</b> | <b>5.5</b>  |             |    |
| SE                     | 7.6                                      | 8.9           | 8.6           | 10.1         | 10.0         | 13.5         | 17.9         | 22.0         | 19.6         | 56.1       | 5.5           |             |             |    |

Table 64.--Net volume of all live trees on timberland by species and diameter class, Southern Unit, Maryland, 1986  
(In millions of cubic feet)

| Species                        | Diameter class (inches at breast height) |             |              |              |              |             |             |             |             |             | All classes  | SE          |
|--------------------------------|--|-------------|--------------|--------------|--------------|-------------|-------------|-------------|-------------|-------------|--------------|-------------|
|                                | 5.0-6.9                                  | 7.0-8.9     | 9.0-10.9     | 11.0-12.9    | 13.0-14.9    | 15.0-16.9   | 17.0-18.9   | 19.0-20.9   | 21.0-28.9   | 29.0+       |              |             |
| Loblolly pine                  | 4.9                                      | 8.8         | 11.7         | 13.8         | 10.5         | 5.8         | 5.6         | 1.5         | 2.2         | .0          | 64.9         | 25.9        |
| Virginia pine                  | 7.1                                      | 19.8        | 25.0         | 21.2         | 14.6         | 4.6         | 1.0         | .0          | .3          | .0          | 93.7         | 17.4        |
| Other yellow pines             | .2                                       | .4          | .2           | .0           | .0           | .0          | .0          | .0          | .0          | .0          | .8           | 68.5        |
| Other softwoods                | .1                                       | .5          | .4           | .6           | .0           | .0          | .0          | .0          | .3          | .6          | 2.5          | 44.3        |
| <b>Total softwoods</b>         | <b>12.3</b>                              | <b>29.6</b> | <b>37.3</b>  | <b>35.6</b>  | <b>25.1</b>  | <b>10.4</b> | <b>6.7</b>  | <b>1.5</b>  | <b>2.8</b>  | <b>.6</b>   | <b>161.8</b> | <b>14.5</b> |
| Red maple                      | 6.1                                      | 7.4         | 9.7          | 14.2         | 9.1          | 6.7         | 6.6         | 1.7         | 7.2         | 1.6         | 70.1         | 15.7        |
| Hickory                        | .4                                       | 1.9         | 5.4          | 3.5          | 4.3          | 4.1         | 1.6         | 2.7         | 1.5         | 1.5         | 26.9         | 19.0        |
| Beech                          | 2.7                                      | 3.7         | 5.1          | 8.1          | 9.6          | 8.2         | 6.4         | 5.4         | 9.4         | 2.0         | 60.7         | 16.3        |
| Sweetgum                       | 9.0                                      | 15.5        | 18.1         | 20.1         | 16.5         | 12.4        | 8.2         | 3.6         | 7.9         | .0          | 111.4        | 13.1        |
| Yellow-poplar                  | 4.6                                      | 7.0         | 11.1         | 12.4         | 20.0         | 15.8        | 18.1        | 14.0        | 31.6        | 7.4         | 141.8        | 13.8        |
| Blackgum                       | 3.1                                      | 2.6         | 3.3          | 2.7          | 4.9          | 5.6         | 1.0         | .0          | 2.7         | .0          | 25.9         | 17.0        |
| Ash-walnut-cherry              | 1.1                                      | 1.8         | 3.1          | 1.7          | 3.7          | 3.1         | 1.6         | .4          | .9          | .0          | 17.6         | 29.2        |
| Select white oaks              | 2.4                                      | 4.8         | 8.5          | 10.7         | 12.9         | 6.8         | 7.2         | 3.7         | 10.3        | 2.6         | 69.9         | 13.4        |
| Select red oaks                | .4                                       | .9          | 1.2          | 1.0          | 1.6          | 2.2         | 1.3         | 2.2         | 2.5         | .5          | 14.0         | 24.9        |
| Other white oaks               | .6                                       | .8          | .9           | .7           | 1.7          | 1.3         | 1.9         | 1.4         | 1.1         | .7          | 11.2         | 32.2        |
| Other red oaks                 | 4.0                                      | 6.7         | 10.2         | 13.6         | 17.5         | 14.4        | 10.8        | 9.8         | 8.4         | 6.5         | 101.9        | 13.2        |
| Blacklocust                    | .1                                       | .7          | .3           | .3           | .8           | .0          | .0          | .0          | .0          | .0          | 2.2          | 36.4        |
| Other hardwoods                | 3.8                                      | 3.8         | 6.1          | 2.7          | 3.1          | 3.9         | 3.0         | .4          | 4.2         | .0          | 31.2         | 17.5        |
| <b>Noncommercial hardwoods</b> | <b>2.0</b>                               | <b>1.8</b>  | <b>1.3</b>   | <b>.2</b>    | <b>.0</b>    | <b>.4</b>   | <b>.3</b>   | <b>.0</b>   | <b>.0</b>   | <b>.0</b>   | <b>6.0</b>   | <b>23.9</b> |
| <b>Total hardwoods</b>         | <b>40.4</b>                              | <b>59.2</b> | <b>84.4</b>  | <b>92.1</b>  | <b>105.6</b> | <b>85.0</b> | <b>68.1</b> | <b>45.3</b> | <b>87.8</b> | <b>22.7</b> | <b>690.7</b> | <b>6.0</b>  |
| <b>All species</b>             | <b>52.7</b>                              | <b>88.8</b> | <b>121.6</b> | <b>127.7</b> | <b>130.7</b> | <b>95.4</b> | <b>74.8</b> | <b>46.8</b> | <b>90.6</b> | <b>23.3</b> | <b>852.5</b> | <b>4.7</b>  |
| <b>SE</b>                      | <b>7.5</b>                               | <b>9.0</b>  | <b>8.0</b>   | <b>6.6</b>   | <b>6.4</b>   | <b>7.9</b>  | <b>10.8</b> | <b>13.0</b> | <b>13.7</b> | <b>24.7</b> | <b>4.7</b>   |             |

Table 65.--Net volume of live trees on timberland by species and diameter class, Southern Unit, Maryland, 1999

| Species                        | (In millions of cubic feet)              |             |              |               |               |               |               |               |               |             |                |             |  | SE |
|--------------------------------|--|-------------|--------------|---------------|---------------|---------------|---------------|---------------|---------------|-------------|----------------|-------------|--|----|
|                                | Diameter class (inches at breast height) |             |              |               |               |               |               |               |               |             |                |             |  |    |
|                                | 5.0-<br>6.9                              | 7.0-<br>8.9 | 9.0-<br>10.9 | 11.0-<br>12.9 | 13.0-<br>14.9 | 15.0-<br>16.9 | 17.0-<br>18.9 | 19.0-<br>20.9 | 21.0-<br>28.9 | 29.0+       | All<br>classes | SE          |  |    |
| Loblolly pine                  | 1.5                                      | 5.5         | 14.5         | 18.6          | 18.9          | 12.3          | 11.9          | 10.9          | 3.0           | .0          | 97.2           | 33.7        |  |    |
| Virginia pine                  | 5.7                                      | 12.9        | 13.8         | 13.5          | 12.5          | 5.7           | .4            | .0            | 2.6           | .0          | 67.1           | 22.4        |  |    |
| Other softwoods                | .2                                       | .2          | .0           | .0            | .0            | .4            | .0            | .0            | .0            | .0          | .8             | 52.8        |  |    |
| <b>Total softwoods</b>         | <b>7.4</b>                               | <b>18.6</b> | <b>28.3</b>  | <b>32.2</b>   | <b>31.5</b>   | <b>18.4</b>   | <b>12.2</b>   | <b>10.9</b>   | <b>5.6</b>    | <b>.0</b>   | <b>165.1</b>   | <b>21.4</b> |  |    |
| Red maple                      | 7.1                                      | 9.5         | 11.5         | 10.9          | 8.8           | 7.1           | 7.9           | 4.7           | 3.0           | .0          | 70.4           | 19.0        |  |    |
| Hickory                        | 1.3                                      | 2.0         | 6.6          | 6.2           | 5.0           | 1.9           | .0            | 2.0           | 5.9           | .0          | 30.8           | 43.1        |  |    |
| Beech                          | 3.8                                      | 4.1         | 5.7          | 7.0           | 8.0           | 8.4           | 1.8           | 4.4           | 5.7           | 5.2         | 54.0           | 22.3        |  |    |
| Sweetgum                       | 8.4                                      | 11.7        | 28.7         | 31.8          | 25.5          | 20.6          | 9.4           | 3.0           | 1.6           | .0          | 140.7          | 19.9        |  |    |
| Yellow-poplar                  | 4.2                                      | 7.6         | 9.2          | 19.7          | 18.0          | 23.9          | 35.2          | 20.4          | 53.0          | 9.5         | 200.8          | 17.3        |  |    |
| Blackgum                       | 3.1                                      | 4.4         | 6.3          | 1.1           | 1.2           | 4.7           | .9            | .0            | .0            | .0          | 21.8           | 22.7        |  |    |
| Ash-walnut-cherry              | 2.6                                      | 4.6         | 7.1          | 4.9           | 1.5           | .7            | 5.8           | 2.9           | .0            | .0          | 30.1           | 46.6        |  |    |
| Select white oaks              | 4.4                                      | 9.1         | 18.5         | 19.2          | 14.4          | 14.5          | 10.9          | 22.4          | 19.7          | 8.7         | 141.8          | 15.5        |  |    |
| Select red oaks                | .4                                       | .2          | .8           | 3.8           | 4.3           | 3.5           | .8            | 2.3           | 1.5           | 6.0         | 23.6           | 37.6        |  |    |
| Other white oaks               | .0                                       | .4          | .0           | .4            | .0            | .0            | .0            | .0            | .0            | .0          | .9             | 55.5        |  |    |
| Other red oaks                 | 2.9                                      | 5.3         | 10.7         | 15.2          | 21.8          | 22.8          | 6.1           | 10.1          | 7.2           | 7.4         | 109.3          | 15.1        |  |    |
| Blacklocust                    | .4                                       | .2          | .2           | 1.6           | .9            | .0            | .0            | .0            | .0            | .0          | 3.3            | 58.0        |  |    |
| Other hardwoods                | 2.2                                      | 2.3         | 1.9          | 1.8           | 2.2           | 2.2           | 2.0           | 1.4           | 9.0           | .0          | 25.0           | 30.7        |  |    |
| <b>Noncommercial hardwoods</b> | <b>1.7</b>                               | <b>1.2</b>  | <b>.8</b>    | <b>1.6</b>    | <b>.6</b>     | <b>.0</b>     | <b>.0</b>     | <b>.0</b>     | <b>.0</b>     | <b>.0</b>   | <b>5.9</b>     | <b>45.1</b> |  |    |
| <b>Total hardwoods</b>         | <b>42.6</b>                              | <b>62.5</b> | <b>107.9</b> | <b>125.2</b>  | <b>112.1</b>  | <b>110.5</b>  | <b>80.8</b>   | <b>73.6</b>   | <b>106.5</b>  | <b>36.8</b> | <b>858.4</b>   | <b>6.2</b>  |  |    |
| <b>All species</b>             | <b>50.0</b>                              | <b>81.1</b> | <b>136.2</b> | <b>157.4</b>  | <b>143.6</b>  | <b>128.9</b>  | <b>93.0</b>   | <b>84.5</b>   | <b>112.1</b>  | <b>36.8</b> | <b>1,023.6</b> | <b>5.6</b>  |  |    |
| <b>SE</b>                      | <b>8.3</b>                               | <b>9.4</b>  | <b>9.5</b>   | <b>10.2</b>   | <b>9.7</b>    | <b>13.7</b>   | <b>18.2</b>   | <b>21.3</b>   | <b>20.7</b>   | <b>57.6</b> | <b>5.6</b>     |             |  |    |

Table 66.--Net volume of growing-stock trees on timberland by species and diameter class, Southern Unit, Maryland, 1986

(In millions of cubic feet)

| Species                | Diameter class (inches at breast height) |             |              |              |              |             |             |             |             |             |              | All classes | SE |
|------------------------|--|-------------|--------------|--------------|--------------|-------------|-------------|-------------|-------------|-------------|--------------|-------------|----|
|                        | 5.0-6.9                                  | 7.0-8.9     | 9.0-10.9     | 11.0-12.9    | 13.0-14.9    | 15.0-16.9   | 17.0-18.9   | 19.0-20.9   | 21.0-28.9   | 29.0+       |              |             |    |
| Loblolly pine          | 4.9                                      | 8.8         | 11.7         | 13.8         | 10.5         | 5.8         | 5.6         | 1.5         | 2.2         | .0          | 64.9         | 25.9        |    |
| Virginia pine          | 7.1                                      | 19.8        | 24.9         | 20.8         | 14.6         | 4.6         | 1.0         | .0          | .3          | .0          | 93.2         | 17.3        |    |
| Other yellow pines     | .2                                       | .4          | .2           | .0           | .0           | .0          | .0          | .0          | .0          | .0          | .8           | 68.5        |    |
| Other softwoods        | .1                                       | .5          | .2           | .5           | .0           | .0          | .0          | .0          | .0          | .6          | 1.9          | 42.6        |    |
| <b>Total softwoods</b> | <b>12.3</b>                              | <b>29.5</b> | <b>37.0</b>  | <b>35.1</b>  | <b>25.1</b>  | <b>10.4</b> | <b>6.7</b>  | <b>1.5</b>  | <b>2.5</b>  | <b>.6</b>   | <b>160.8</b> | <b>14.5</b> |    |
| Red maple              | 6.0                                      | 7.4         | 9.5          | 14.2         | 8.5          | 6.7         | 6.2         | 1.7         | 5.8         | 1.5         | 67.5         | 16.0        |    |
| Hickory                | .4                                       | 1.9         | 5.4          | 3.4          | 4.3          | 4.1         | 1.6         | 2.7         | 1.5         | 1.5         | 26.8         | 19.1        |    |
| Beech                  | 2.7                                      | 3.5         | 5.1          | 7.8          | 9.6          | 8.2         | 6.1         | 5.4         | 9.0         | 1.6         | 59.1         | 16.1        |    |
| Sweetgum               | 9.0                                      | 15.4        | 18.0         | 20.0         | 16.3         | 12.4        | 8.1         | 3.6         | 7.9         | .0          | 110.8        | 13.1        |    |
| Yellow-poplar          | 4.5                                      | 7.0         | 11.1         | 12.3         | 19.3         | 15.8        | 18.1        | 13.6        | 31.0        | 7.4         | 140.0        | 13.8        |    |
| Blackgum               | 2.8                                      | 1.9         | 2.5          | 2.3          | 3.7          | 4.0         | 1.0         | .0          | 2.1         | .0          | 20.4         | 17.7        |    |
| Ash-walnut-cherry      | 1.1                                      | 1.7         | 3.1          | 1.7          | 3.6          | 3.1         | 1.6         | .4          | .9          | .0          | 17.4         | 29.4        |    |
| Select white oaks      | 2.3                                      | 4.7         | 8.2          | 10.5         | 12.5         | 6.8         | 7.1         | 3.7         | 9.5         | 2.6         | 68.0         | 13.6        |    |
| Select red oaks        | .4                                       | .9          | 1.2          | 1.0          | 1.6          | 2.2         | 1.1         | 2.2         | 2.5         | .5          | 13.8         | 25.1        |    |
| Other white oaks       | .6                                       | .8          | .9           | .7           | 1.7          | 1.3         | 1.9         | 1.4         | 1.1         | .7          | 11.2         | 32.2        |    |
| Other red oaks         | 3.9                                      | 6.2         | 10.2         | 13.5         | 17.4         | 14.4        | 10.8        | 9.8         | 8.4         | 6.5         | 101.2        | 13.3        |    |
| Black locust           | .0                                       | .7          | .0           | .3           | .7           | .0          | .0          | .0          | .0          | .0          | 1.7          | 41.4        |    |
| Other hardwoods        | 3.8                                      | 3.4         | 6.1          | 2.4          | 3.1          | 3.6         | 3.0         | .4          | 4.2         | .0          | 30.0         | 17.9        |    |
| <b>Total hardwoods</b> | <b>37.7</b>                              | <b>55.7</b> | <b>81.4</b>  | <b>90.2</b>  | <b>102.3</b> | <b>82.7</b> | <b>66.7</b> | <b>44.9</b> | <b>84.1</b> | <b>22.2</b> | <b>667.9</b> | <b>6.0</b>  |    |
| <b>All species</b>     | <b>50.0</b>                              | <b>85.2</b> | <b>118.4</b> | <b>125.3</b> | <b>127.5</b> | <b>93.1</b> | <b>73.4</b> | <b>46.4</b> | <b>86.6</b> | <b>22.8</b> | <b>828.6</b> | <b>4.7</b>  |    |
| SE                     | 7.7                                      | 9.3         | 8.3          | 6.6          | 6.5          | 7.8         | 10.8        | 13.0        | 14.0        | 25.0        | 4.7          |             |    |

Table 67.--Net volume of growing-stock trees on timberland by species and diameter class, Southern Unit, Maryland, 1999

(In millions of cubic feet)

| Species                | Diameter class (inches at breast height) |             |              |              |              |              |             |             |              |             |                | All classes | SE |
|------------------------|--|-------------|--------------|--------------|--------------|--------------|-------------|-------------|--------------|-------------|----------------|-------------|----|
|                        | 5.0-6.9                                  | 7.0-8.9     | 9.0-10.9     | 11.0-12.9    | 13.0-14.9    | 15.0-16.9    | 17.0-18.9   | 19.0-20.9   | 21.0-28.9    | 29.0+       |                |             |    |
| Loblolly pine          | 1.5                                      | 5.5         | 14.0         | 18.6         | 18.9         | 11.8         | 11.9        | 10.9        | 3.0          | .0          | 96.1           | 33.9        |    |
| Virginia pine          | 5.7                                      | 12.9        | 13.6         | 13.5         | 12.5         | 5.7          | .0          | .0          | 2.6          | .0          | 66.5           | 22.5        |    |
| Other softwoods        | .2                                       | .2          | .0           | .0           | .4           | .4           | .0          | .0          | .0           | .0          | .8             | 52.8        |    |
| <b>Total softwoods</b> | <b>7.4</b>                               | <b>18.6</b> | <b>27.6</b>  | <b>32.2</b>  | <b>31.5</b>  | <b>17.9</b>  | <b>11.9</b> | <b>10.9</b> | <b>5.6</b>   | <b>.0</b>   | <b>163.5</b>   | <b>21.5</b> |    |
| Red maple              | 7.0                                      | 9.5         | 11.5         | 8.3          | 8.1          | 7.1          | 7.9         | 4.7         | 3.0          | .0          | 67.2           | 19.6        |    |
| Hickory                | 1.3                                      | 2.0         | 6.6          | 6.2          | 5.0          | 1.9          | .0          | 2.0         | 5.9          | .0          | 30.8           | 43.1        |    |
| Beech                  | 3.8                                      | 4.1         | 5.7          | 7.0          | 7.2          | 8.4          | 1.8         | 4.4         | 5.7          | 5.2         | 53.2           | 22.3        |    |
| Sweetgum               | 8.3                                      | 11.7        | 28.7         | 31.2         | 25.5         | 20.6         | 9.4         | 3.0         | 1.6          | .0          | 140.0          | 20.0        |    |
| Yellow-poplar          | 4.2                                      | 7.5         | 8.7          | 19.7         | 18.0         | 23.9         | 35.2        | 20.4        | 53.0         | 9.5         | 200.2          | 17.3        |    |
| Blackgum               | 3.1                                      | 4.4         | 6.2          | 1.1          | 1.2          | 4.7          | .9          | .0          | .0           | .0          | 21.6           | 22.9        |    |
| Ash-walnut-cherry      | 2.2                                      | 4.6         | 6.4          | 4.9          | 1.5          | .7           | 5.8         | 2.9         | .0           | .0          | 29.1           | 45.9        |    |
| Select white oaks      | 4.4                                      | 9.1         | 18.5         | 18.8         | 13.9         | 14.5         | 10.9        | 22.4        | 19.7         | 8.7         | 140.9          | 15.5        |    |
| Select red oaks        | .4                                       | .2          | .7           | 3.8          | 4.3          | 3.5          | .8          | 2.3         | 1.5          | 6.0         | 23.5           | 37.8        |    |
| Other white oaks       | .0                                       | .4          | .0           | .0           | .0           | .0           | .0          | .0          | .0           | .0          | .5             | 55.2        |    |
| Other red oaks         | 2.9                                      | 5.3         | 10.4         | 15.2         | 21.8         | 22.8         | 6.1         | 10.1        | 7.2          | 7.4         | 109.0          | 15.0        |    |
| Black locust           | .3                                       | .2          | .0           | 1.6          | .9           | .0           | .0          | .0          | .0           | .0          | 3.0            | 62.2        |    |
| Other hardwoods        | 2.2                                      | 2.3         | 1.9          | 1.5          | 2.2          | 2.2          | 2.0         | 1.4         | 9.0          | .0          | 24.7           | 30.7        |    |
| <b>Total hardwoods</b> | <b>40.1</b>                              | <b>61.2</b> | <b>105.1</b> | <b>119.4</b> | <b>109.6</b> | <b>110.5</b> | <b>80.8</b> | <b>73.6</b> | <b>106.5</b> | <b>36.8</b> | <b>843.5</b>   | <b>6.3</b>  |    |
| <b>All species</b>     | <b>47.5</b>                              | <b>79.8</b> | <b>132.6</b> | <b>151.6</b> | <b>141.1</b> | <b>128.4</b> | <b>92.6</b> | <b>84.5</b> | <b>112.1</b> | <b>36.8</b> | <b>1,007.0</b> | <b>5.6</b>  |    |
| SE                     | 8.5                                      | 9.6         | 9.6          | 10.5         | 9.8          | 13.8         | 18.2        | 21.3        | 20.7         | 57.6        | 5.6            |             |    |

Table 68.--Net volume of sawtimber trees on timberland by species and diameter class, Southern Unit, Maryland, 1986

(In millions of board feet)

| Species                | Diameter class (inches at breast height) |              |              |              |              |              |              |              |                |             | All classes | SE |
|------------------------|--|--------------|--------------|--------------|--------------|--------------|--------------|--------------|----------------|-------------|-------------|----|
|                        | 9.0-10.9                                 | 11.0-12.9    | 13.0-14.9    | 15.0-16.9    | 17.0-18.9    | 19.0-20.9    | 21.0-28.9    | 29.0+        |                |             |             |    |
| Loblolly pine          | 36.6                                     | 53.2         | 44.4         | 25.6         | 25.9         | 7.1          | 10.4         | .0           | 203.1          | 24.1        |             |    |
| Virginia pine          | 78.7                                     | 79.8         | 62.3         | 20.1         | 4.9          | .0           | 1.4          | .0           | 247.2          | 16.9        |             |    |
| Other yellow pines     | .6                                       | .0           | .0           | .0           | .0           | .0           | .0           | .0           | .6             | 100.0       |             |    |
| Other softwoods        | .6                                       | 1.7          | .0           | .0           | .0           | .0           | .0           | 2.7          | 5.0            | 58.9        |             |    |
| <b>Total softwoods</b> | <b>116.5</b>                             | <b>134.6</b> | <b>106.6</b> | <b>45.8</b>  | <b>30.7</b>  | <b>7.1</b>   | <b>11.8</b>  | <b>2.7</b>   | <b>455.8</b>   | <b>13.9</b> |             |    |
| Red maple              | .0                                       | 49.7         | 33.4         | 26.0         | 26.5         | 7.5          | 27.5         | 7.8          | 178.4          | 18.1        |             |    |
| Hickory                | .0                                       | 12.2         | 16.9         | 16.8         | 7.1          | 13.6         | 7.0          | 7.0          | 80.6           | 22.5        |             |    |
| Beech                  | .0                                       | 29.1         | 38.4         | 33.9         | 27.2         | 24.0         | 41.4         | 5.4          | 199.5          | 16.9        |             |    |
| Sweetgum               | .0                                       | 69.7         | 63.7         | 53.9         | 35.8         | 16.8         | 38.2         | .0           | 278.1          | 14.1        |             |    |
| Yellow-poplar          | .0                                       | 43.0         | 77.3         | 70.2         | 84.8         | 66.0         | 166.5        | 41.8         | 549.6          | 15.5        |             |    |
| Blackgum               | .0                                       | 7.7          | 14.5         | 17.1         | 4.4          | .0           | 10.3         | .0           | 53.9           | 20.7        |             |    |
| Ash-walnut-cherry      | .0                                       | 6.2          | 13.8         | 13.1         | 7.0          | 1.6          | 4.3          | .0           | 46.0           | 31.5        |             |    |
| Select white oaks      | .0                                       | 37.4         | 50.2         | 29.2         | 32.0         | 16.4         | 45.1         | 13.9         | 224.1          | 15.2        |             |    |
| Select red oaks        | .0                                       | 3.7          | 6.2          | 9.5          | 4.9          | 10.2         | 13.1         | 2.2          | 49.7           | 27.0        |             |    |
| Other white oaks       | .0                                       | 2.4          | 6.5          | 5.1          | 7.8          | 5.3          | 5.0          | 3.3          | 35.4           | 34.0        |             |    |
| Other red oaks         | .0                                       | 46.3         | 68.1         | 61.5         | 47.9         | 46.3         | 41.0         | 31.8         | 342.9          | 16.3        |             |    |
| Black locust           | .0                                       | 1.2          | 2.7          | .0           | .0           | .0           | .0           | .0           | 3.9            | 54.0        |             |    |
| Other hardwoods        | .0                                       | 8.7          | 12.2         | 14.9         | 13.1         | 1.6          | 19.1         | .0           | 69.6           | 23.2        |             |    |
| <b>Total hardwoods</b> | <b>.0</b>                                | <b>317.4</b> | <b>403.9</b> | <b>351.2</b> | <b>298.2</b> | <b>209.3</b> | <b>418.6</b> | <b>113.2</b> | <b>2,111.8</b> | <b>7.4</b>  |             |    |
| <b>All species</b>     | <b>116.5</b>                             | <b>451.9</b> | <b>510.5</b> | <b>397.0</b> | <b>329.0</b> | <b>216.4</b> | <b>430.4</b> | <b>115.9</b> | <b>2,567.7</b> | <b>6.0</b>  |             |    |
| SE                     | 19.7                                     | 6.7          | 6.5          | 7.9          | 10.9         | 13.2         | 14.4         | 26.9         | 6.0            |             |             |    |

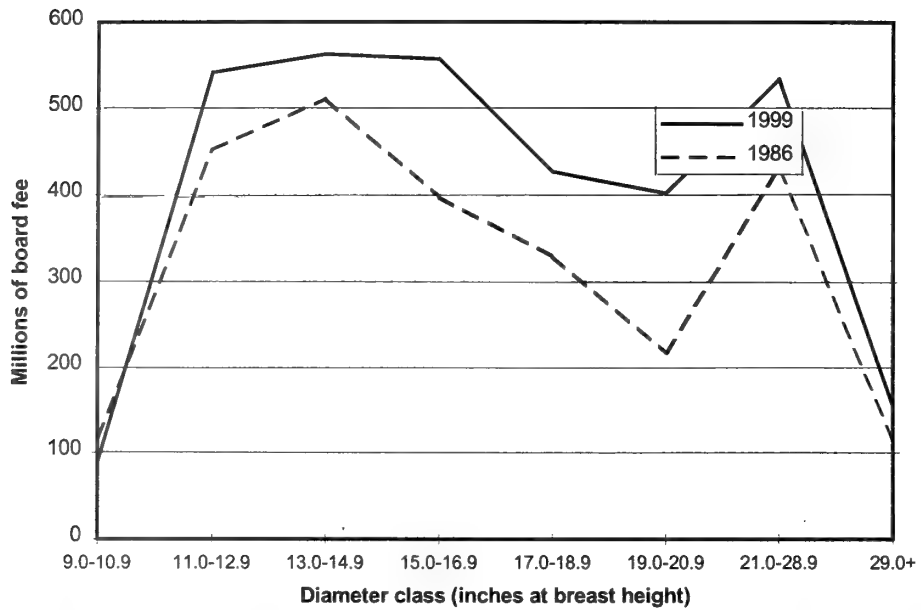


Table 69.--Net volume of sawtimber trees on timberland by species and diameter class, Southern Unit, Maryland, 1999

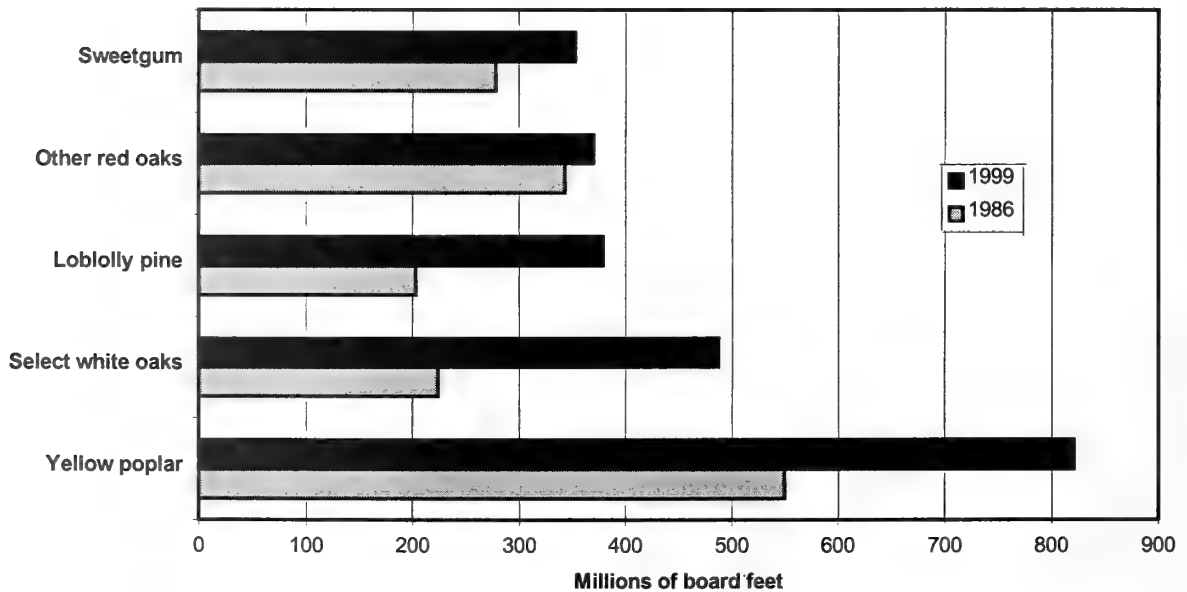
(In millions of board feet)

| Species                | Diameter class (inches at breast height) |               |               |               |               |               |               | All classes  | SE             |             |
|------------------------|--|---------------|---------------|---------------|---------------|---------------|---------------|--------------|----------------|-------------|
|                        | 9.0-<br>10.9                             | 11.0-<br>12.9 | 13.0-<br>14.9 | 15.0-<br>16.9 | 17.0-<br>18.9 | 19.0-<br>20.9 | 21.0-<br>28.9 |              |                | 29.0+       |
| Loblolly pine          | 44.8                                     | 71.7          | 82.4          | 54.3          | 58.6          | 52.2          | 15.1          | .0           | 379.1          | 36.6        |
| Virginia pine          | 43.6                                     | 53.0          | 53.3          | 25.3          | .0            | .0            | 12.6          | .0           | 187.8          | 26.6        |
| Other softwoods        | .0                                       | .0            | .0            | 1.2           | .0            | .0            | .0            | .0           | 1.2            | 100.0       |
| <b>Total softwoods</b> | <b>88.4</b>                              | <b>124.6</b>  | <b>135.7</b>  | <b>80.8</b>   | <b>58.6</b>   | <b>52.2</b>   | <b>27.7</b>   | <b>.0</b>    | <b>568.1</b>   | <b>25.5</b> |
| Red maple              | .0                                       | 26.4          | 29.3          | 29.2          | 35.1          | 20.3          | 10.2          | .0           | 150.5          | 23.7        |
| Hickory                | .0                                       | 22.7          | 20.4          | 9.6           | .0            | 9.9           | 30.2          | .0           | 92.9           | 45.8        |
| Beech                  | .0                                       | 27.1          | 27.1          | 39.1          | 7.7           | 17.9          | 21.5          | 17.5         | 157.8          | 27.3        |
| Sweetgum               | .0                                       | 107.7         | 96.8          | 88.1          | 39.6          | 13.8          | 7.0           | .0           | 352.9          | 23.2        |
| Yellow-poplar          | .0                                       | 64.7          | 67.1          | 104.5         | 166.5         | 106.9         | 274.4         | 36.4         | 820.4          | 18.8        |
| Blackgum               | .0                                       | 4.1           | 6.1           | 19.8          | 3.2           | .0            | .0            | .0           | 33.2           | 41.3        |
| Ash-walnut-cherry      | .0                                       | 19.7          | 6.6           | 3.2           | 28.1          | 10.8          | .0            | .0           | 68.3           | 53.1        |
| Select white oaks      | .0                                       | 71.8          | 58.0          | 62.2          | 49.2          | 114.5         | 86.8          | 44.9         | 487.4          | 17.9        |
| Select red oaks        | .0                                       | 11.0          | 16.2          | 15.2          | 3.7           | 10.3          | 8.4           | 23.4         | 88.1           | 38.9        |
| Other red oaks         | .0                                       | 52.9          | 86.6          | 95.4          | 26.5          | 40.1          | 35.7          | 32.9         | 370.1          | 18.5        |
| Black locust           | .0                                       | 5.3           | 4.1           | .0            | .0            | .0            | .0            | .0           | 9.5            | 71.2        |
| Other hardwoods        | .0                                       | 3.2           | 8.4           | 9.4           | 8.8           | 5.3           | 31.9          | .0           | 67.0           | 36.1        |
| <b>Total hardwoods</b> | <b>.0</b>                                | <b>416.6</b>  | <b>426.7</b>  | <b>475.5</b>  | <b>368.3</b>  | <b>349.9</b>  | <b>506.1</b>  | <b>155.0</b> | <b>2,698.0</b> | <b>7.7</b>  |
| <b>All species</b>     | <b>88.4</b>                              | <b>541.2</b>  | <b>562.4</b>  | <b>556.3</b>  | <b>426.9</b>  | <b>402.0</b>  | <b>533.8</b>  | <b>155.0</b> | <b>3,266.1</b> | <b>7.4</b>  |
| SE                     | 25.2                                     | 10.7          | 10.1          | 13.7          | 18.4          | 22.4          | 20.8          | 59.4         | 7.4            |             |

## Net volume of sawtimber trees on timberland, Southern Unit, Maryland, 1986 and 1999



## Net volume of sawtimber trees on timberland, top 5 species, Southern Unit, Maryland, 1986 and 1999



# MARYLAND LOWER EASTERN SHORE UNIT

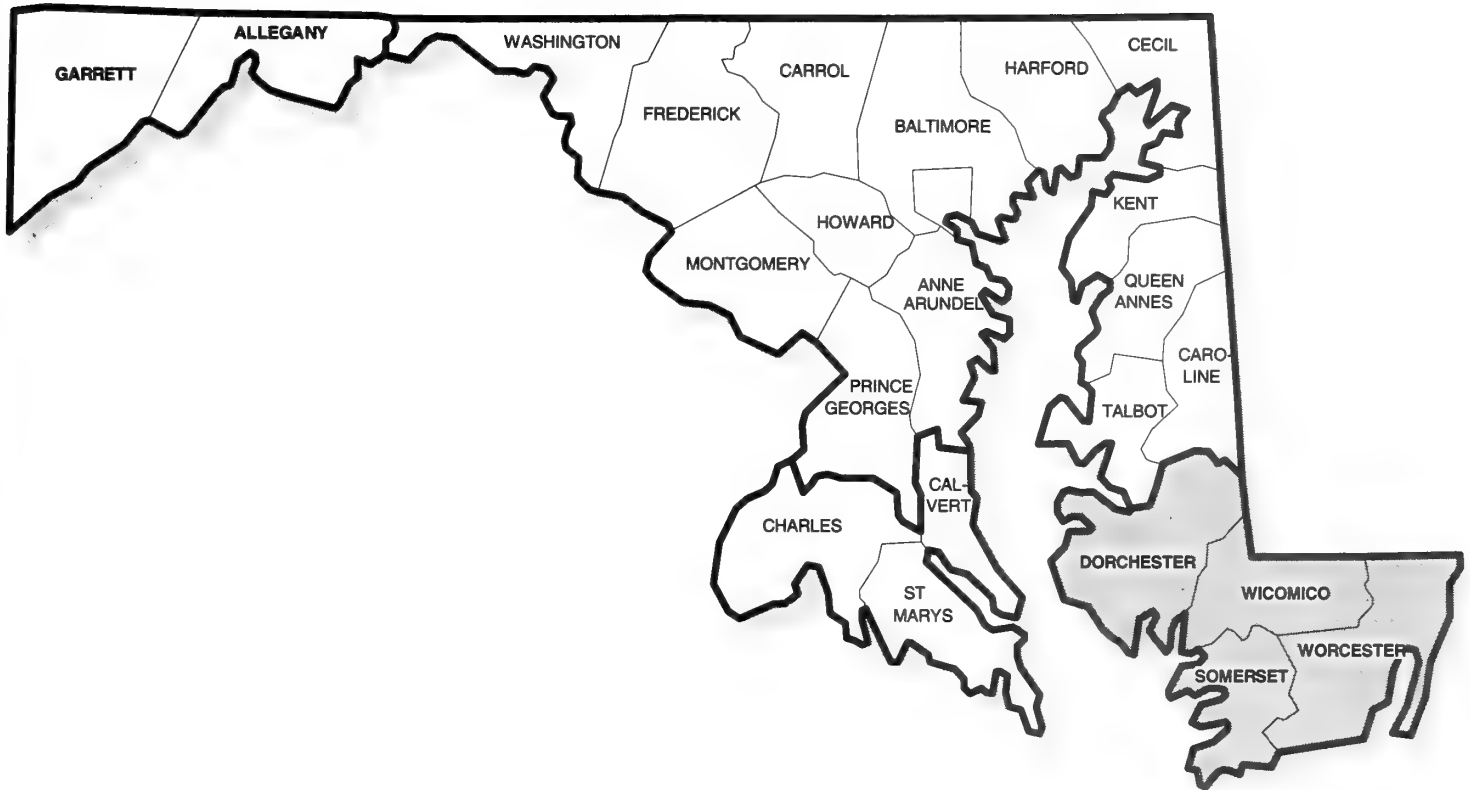


Table 70.--Area of timberland by forest type, forest-type group, and stand-size class, Lower Eastern Shore Unit, Maryland, 1986

(In thousands of acres)

| Forest type                    | Stand-size class |             |                      |             | All classes | SE    |
|--------------------------------|------------------|-------------|----------------------|-------------|-------------|-------|
|                                | Saw-timber       | Pole-timber | Sapling and seedling | Non-stocked |             |       |
| Loblolly pine                  | 64.5             | 70.7        | 11.9                 | .0          | 147.0       | 14.9  |
| Virginia pine                  | .0               | .0          | 1.9                  | .0          | 1.9         | 100.0 |
| Loblolly/shortleaf group       | 64.5             | 70.7        | 13.8                 | .0          | 149.0       | 14.7  |
| Virginia pine/oak              | .0               | 3.5         | .0                   | .0          | 3.5         | 100.0 |
| Loblolly pine/hardwood         | 59.3             | 17.5        | 18.0                 | .0          | 94.8        | 18.1  |
| Oak/pine group                 | 59.3             | 21.0        | 18.0                 | .0          | 98.3        | 17.8  |
| White oak/red oak/hickory      | .0               | 3.5         | .0                   | .0          | 3.5         | 100.0 |
| White oak                      | 4.1              | 8.7         | .0                   | .0          | 12.9        | 56.0  |
| Sweetgum/yellow-poplar         | 4.1              | .0          | 3.8                  | .0          | 7.9         | 70.8  |
| Scarlet oak                    | 1.9              | .0          | .0                   | .0          | 1.9         | 100.0 |
| Red maple/central hardwood     | .0               | 13.7        | 2.1                  | .0          | 15.8        | 47.3  |
| Mixed central hardwoods        | 54.6             | 30.1        | 13.6                 | .0          | 98.3        | 17.2  |
| Oak/hickory group              | 64.7             | 56.0        | 19.5                 | .0          | 140.1       | 12.9  |
| Swamp chsnt oak/cherrybark oak | 6.9              | 13.6        | .0                   | .0          | 20.5        | 50.6  |
| Sweetgm/nuttall oak/willow oak | 23.1             | 3.1         | 9.8                  | .0          | 36.0        | 29.1  |
| Baldcypress/water tupelo       | 4.2              | 3.4         | .0                   | .0          | 7.6         | 71.1  |
| Sweetbay/swamp tupelo/red mple | 14.2             | 3.0         | 10.6                 | .0          | 27.9        | 34.7  |
| Oak/gum/cypress group          | 48.4             | 23.1        | 20.4                 | .0          | 92.0        | 18.7  |
| Black ash/Amer. elm/red maple  | 12.4             | .0          | .0                   | .0          | 12.4        | 59.4  |
| Red maple(lowland)             | .0               | 3.4         | .0                   | .0          | 3.4         | 100.0 |
| Red maple(upland)              | 3.1              | .0          | .0                   | .0          | 3.1         | 100.0 |
| Elm/ash/red maple group        | 15.5             | 3.4         | .0                   | .0          | 18.9        | 45.9  |
| All forest types               | 252.4            | 174.1       | 71.7                 | .0          | 498.3       | 3.0   |
| SE                             | 8.1              | 11.4        | 20.7                 | .0          | 3.0         |       |

Table 71.--Area of timberland by forest type, forest-type group, and stand-size class, Lower Eastern Shore Unit, Maryland, 1999

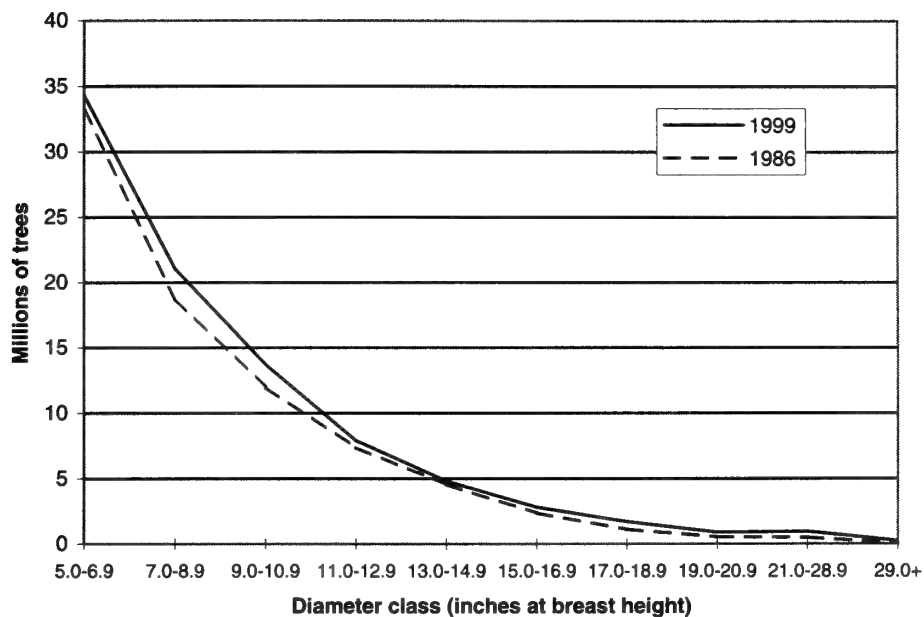
(In thousands of acres)

| Forest type                    | Stand-size class |             |                      |             | All classes | SE    |
|--------------------------------|------------------|-------------|----------------------|-------------|-------------|-------|
|                                | Saw-timber       | Pole-timber | Sapling and seedling | Non-stocked |             |       |
| Loblolly pine                  | 75.6             | 58.5        | 44.6                 | .0          | 178.7       | 13.1  |
| Loblolly/shortleaf group       | 75.6             | 58.5        | 44.6                 | .0          | 178.7       | 13.1  |
| Loblolly pine/hardwood         | 47.2             | 53.8        | 6.6                  | .0          | 107.6       | 20.8  |
| Oak/pine group                 | 47.2             | 53.8        | 6.6                  | .0          | 107.6       | 20.8  |
| Post, black, or bear oak       | .0               | 1.3         | .0                   | .0          | 1.3         | 100.0 |
| White oak                      | 4.6              | 1.5         | .0                   | .0          | 6.0         | 61.0  |
| Y-poplar/wh. oak/no.red oak    | 4.0              | .0          | .0                   | .0          | 4.0         | 100.0 |
| Sweetgum/yellow-poplar         | 2.5              | .0          | 7.4                  | .0          | 9.9         | 79.0  |
| Hawthorn/reverting field       | .0               | .0          | .3                   | .0          | .3          | 100.0 |
| Sassafras/persimmon            | .0               | .0          | 3.2                  | .0          | 3.2         | 100.0 |
| Red maple/central hardwood     | 2.6              | .0          | .0                   | .0          | 2.6         | 100.0 |
| Mixed central hardwoods        | 68.7             | 13.3        | 6.5                  | 1.6         | 90.1        | 19.5  |
| Oak/hickory group              | 82.3             | 16.1        | 17.4                 | 1.6         | 117.5       | 16.7  |
| Swamp chsnt oak/cherrybark oak | 5.4              | 3.2         | 3.2                  | .0          | 11.7        | 46.0  |
| Sweetgm/nuttall oak/willow oak | 11.4             | 5.7         | 5.2                  | .0          | 22.3        | 46.5  |
| Baldcypress/water tupelo       | 7.0              | 2.5         | .0                   | .0          | 9.4         | 57.8  |
| Sweetbay/swamp tupelo/red mple | 25.5             | 1.6         | .0                   | .0          | 27.1        | 44.8  |
| Oak/gum/cypress group          | 49.2             | 13.0        | 8.4                  | .0          | 70.6        | 24.5  |
| Black ash/Amer. elm/red maple  | 5.6              | .0          | .0                   | .0          | 5.6         | 100.0 |
| Red maple(lowland)             | 4.6              | .0          | 2.2                  | .0          | 6.8         | 59.6  |
| Red maple(upland)              | 4.2              | .0          | .0                   | .0          | 4.2         | 60.2  |
| American elm/green ash         | 1.8              | .0          | .0                   | .0          | 1.8         | 100.0 |
| Elm/ash/red maple group        | 16.1             | .0          | 2.2                  | .0          | 18.4        | 41.2  |
| All forest types               | 270.5            | 141.5       | 79.2                 | 1.6         | 492.8       | 3.4   |
| SE                             | 9.0              | 17.7        | 21.5                 | 100.0       | 3.4         |       |

Table 72.--Number of live trees (1.0+ inches d.b.h.) on forest land by species and diameter group, Lower Eastern Shore Unit, Maryland, 1999

| Species                        | Diameter                |               |               |              | All Classes    | SE          |
|--------------------------------|-------------------------|---------------|---------------|--------------|----------------|-------------|
|                                | (In thousands of trees) |               |               |              |                |             |
|                                | 1.0-4.9                 | 5.0-10.9      | 11.0-20.9     | 21+          |                |             |
| White/red pine                 | 0                       | 0             | 36            | 0            | 36             | 100.0       |
| Loblolly pine                  | 76,703                  | 31,017        | 7,177         | 120          | 115,016        | 18.7        |
| Virginia pine                  | 426                     | 249           | 82            | 0            | 757            | 63.7        |
| Other softwoods                | 716                     | 249           | 167           | 54           | 1,186          | 55.3        |
| <b>Total softwoods</b>         | <b>77,845</b>           | <b>31,514</b> | <b>7,462</b>  | <b>174</b>   | <b>116,995</b> | <b>18.4</b> |
| Red maple                      | 51,977                  | 12,966        | 3,857         | 497          | 69,298         | 14.2        |
| Hickory                        | 239                     | 466           | 78            | 0            | 783            | 53.0        |
| Beech                          | 1,422                   | 301           | 263           | 0            | 1,985          | 50.1        |
| Sweetgum                       | 47,605                  | 8,715         | 2,553         | 173          | 59,047         | 18.2        |
| Yellow-poplar                  | 1,278                   | 202           | 374           | 193          | 2,047          | 49.8        |
| Blackgum                       | 14,721                  | 3,203         | 1,024         | 66           | 19,014         | 16.4        |
| Ash-walnut-cherry              | 4,204                   | 1,306         | 258           | 32           | 5,799          | 31.8        |
| Select white oaks              | 2,096                   | 2,105         | 1,194         | 24           | 5,419          | 34.1        |
| Select red oaks                | 588                     | 0             | 77            | 0            | 665            | 88.7        |
| Other white oaks               | 197                     | 50            | 50            | 0            | 297            | 70.7        |
| Other red oaks                 | 13,971                  | 2,867         | 1,499         | 105          | 18,442         | 23.9        |
| Blacklocust                    | 0                       | 0             | 36            | 0            | 36             | 100.0       |
| Other hardwoods                | 55,049                  | 6,878         | 644           | 0            | 62,571         | 12.8        |
| <b>Noncommercial hardwoods</b> | <b>8,419</b>            | <b>677</b>    | <b>0</b>      | <b>0</b>     | <b>9,096</b>   | <b>29.8</b> |
| <b>Total hardwoods</b>         | <b>201,768</b>          | <b>39,738</b> | <b>11,906</b> | <b>1,091</b> | <b>254,503</b> | <b>9.2</b>  |
| <b>All species</b>             | <b>279,614</b>          | <b>71,252</b> | <b>19,367</b> | <b>1,265</b> | <b>371,498</b> | <b>9.0</b>  |
| <b>SE</b>                      | <b>10.7</b>             | <b>8.2</b>    | <b>7.9</b>    | <b>21.3</b>  | <b>9.0</b>     |             |

## Number of growing-stock trees on timberland, Lower Eastern Shore Unit, Maryland, 1986 and 1999



## Number of growing-stock trees on timberland, top 5 species, Lower Eastern Shore Unit, Maryland 1986 and 1999

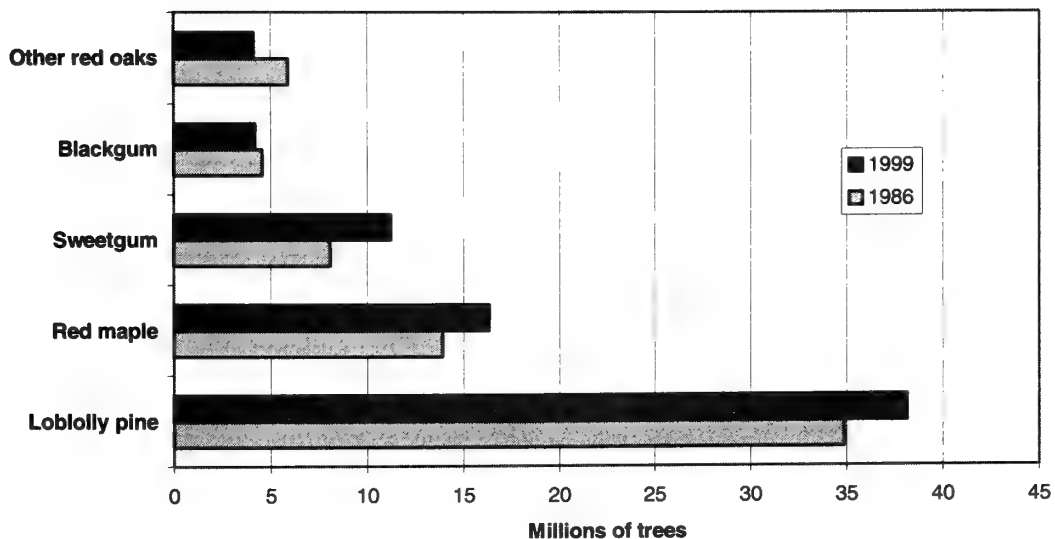


Table 73.--Number of growing-stock trees (5.0+ inches d.b.h.) on timberland by species and diameter class, Lower Eastern Shore Unit, Maryland, 1986

(In thousands of trees)

| Species                | Diameter class (inches at breast height) |               |               |              |              |              |              |            |            |           | All classes   | SE          |
|------------------------|--|---------------|---------------|--------------|--------------|--------------|--------------|------------|------------|-----------|---------------|-------------|
|                        | 5.0-6.9                                  | 7.0-8.9       | 9.0-10.9      | 11.0-12.9    | 13.0-14.9    | 15.0-16.9    | 17.0-18.9    | 19.0-20.9  | 21.0-28.9  | 29.0+     |               |             |
| Loblolly pine          | 14,652                                   | 8,529         | 5,145         | 3,312        | 1,849        | 872          | 367          | 73         | 67         | 0         | 34,868        | 13.6        |
| Virginia pine          | 106                                      | 151           | 150           | 89           | 59           | 34           | 0            | 0          | 0          | 0         | 590           | 46.9        |
| Other softwoods        | 58                                       | 0             | 33            | 14           | 25           | 19           | 34           | 8          | 7          | 0         | 199           | 73.4        |
| <b>Total softwoods</b> | <b>14,816</b>                            | <b>8,681</b>  | <b>5,328</b>  | <b>3,415</b> | <b>1,934</b> | <b>925</b>   | <b>401</b>   | <b>81</b>  | <b>75</b>  | <b>0</b>  | <b>35,657</b> | <b>13.3</b> |
| Red maple              | 6,110                                    | 3,132         | 1,816         | 1,180        | 773          | 322          | 238          | 144        | 172        | 45        | 13,933        | 10.3        |
| Hickory                | 262                                      | 164           | 67            | 30           | 0            | 0            | 0            | 0          | 0          | 0         | 523           | 64.1        |
| Beech                  | 140                                      | 89            | 224           | 138          | 90           | 35           | 0            | 12         | 4          | 0         | 733           | 47.3        |
| Sweetgum               | 3,210                                    | 1,917         | 1,216         | 747          | 543          | 269          | 100          | 48         | 28         | 2         | 8,080         | 12.2        |
| Yellow-poplar          | 373                                      | 55            | 66            | 71           | 14           | 25           | 6            | 23         | 59         | 6         | 698           | 51.3        |
| Blackgum               | 1,865                                    | 1,118         | 755           | 342          | 221          | 122          | 68           | 52         | 32         | 0         | 4,576         | 16.4        |
| Ash-walnut-cherry      | 347                                      | 366           | 231           | 97           | 50           | 14           | 17           | 20         | 0          | 0         | 1,142         | 48.2        |
| Select white oaks      | 1,717                                    | 1,078         | 1,150         | 867          | 441          | 306          | 113          | 77         | 66         | 6         | 5,821         | 17.1        |
| Select red oaks        | 33                                       | 14            | 40            | 18           | 30           | 13           | 9            | 0          | 9          | 0         | 165           | 38.1        |
| Other white oaks       | 0  | 0             | 22            | 0            | 0            | 0            | 0            | 0          | 0          | 0         | 22            | 100.0       |
| Other red oaks         | 1,991                                    | 1,272         | 889           | 709          | 445          | 344          | 151          | 58         | 45         | 3         | 5,907         | 13.5        |
| Other hardwoods        | 2,369                                    | 883           | 180           | 122          | 28           | 0            | 7            | 19         | 0          | 0         | 3,607         | 19.5        |
| <b>Total hardwoods</b> | <b>18,416</b>                            | <b>10,087</b> | <b>6,656</b>  | <b>4,322</b> | <b>2,636</b> | <b>1,452</b> | <b>707</b>   | <b>453</b> | <b>416</b> | <b>62</b> | <b>45,207</b> | <b>6.9</b>  |
| <b>All species</b>     | <b>33,232</b>                            | <b>18,767</b> | <b>11,984</b> | <b>7,737</b> | <b>4,570</b> | <b>2,378</b> | <b>1,108</b> | <b>534</b> | <b>491</b> | <b>62</b> | <b>80,864</b> | <b>6.3</b>  |
| SE                     | 9.7                                      | 7.8           | 7.2           | 7.7          | 7.7          | 10.8         | 13.0         | 18.2       | 16.3       | 27.8      | 6.3           |             |



Table 74.--Number of growing-stock trees (5.0+ inches d.b.h.) on timberland by species and diameter class, Lower Eastern Shore Unit, Maryland, 1999

(In thousands of trees)

| Species                | Diameter class (inches at breast height) |               |               |              |              |              |              |            |            |            |          | All classes | SE       |               |             |
|------------------------|--|---------------|---------------|--------------|--------------|--------------|--------------|------------|------------|------------|----------|-------------|----------|---------------|-------------|
|                        | 5.0-6.9                                  | 7.0-8.9       | 9.0-10.9      | 11.0-12.9    | 13.0-14.9    | 15.0-16.9    | 17.0-18.9    | 19.0-20.9  | 21.0-28.9  | 29.0+      |          |             |          |               |             |
| White/red pine         | 0  | 0             | 0             | 36           | 0            | 0            | 0            | 0          | 0          | 0          | 0        | 0           | 0        | 36            | 100.0       |
| Loblolly pine          | 14,221                                   | 10,297        | 6,335         | 3,626        | 1,905        | 1,097        | 389          | 159        | 120        | 0          | 0        | 0           | 0        | 38,150        | 13.0        |
| Virginia pine          | 100                                      | 125           | 24            | 48           | 0            | 34           | 0            | 0          | 0          | 0          | 0        | 0           | 0        | 330           | 47.8        |
| Other softwoods        | 194                                      | 36            | 0             | 18           | 55           | 0            | 18           | 18         | 54         | 0          | 0        | 0           | 0        | 393           | 45.0        |
| <b>Total softwoods</b> | <b>14,515</b>                            | <b>10,457</b> | <b>6,359</b>  | <b>3,728</b> | <b>1,961</b> | <b>1,131</b> | <b>407</b>   | <b>177</b> | <b>174</b> | <b>0</b>   | <b>0</b> | <b>0</b>    | <b>0</b> | <b>38,909</b> | <b>12.9</b> |
| Red maple              | 6,366                                    | 3,627         | 2,581         | 1,284        | 777          | 635          | 335          | 305        | 284        | 132        | 0        | 0           | 0        | 16,326        | 10.2        |
| Hickory                | 251                                      | 119           | 96            | 39           | 39           | 0            | 0            | 0          | 0          | 0          | 0        | 0           | 0        | 544           | 62.4        |
| Beech                  | 89                                       | 100           | 111           | 45           | 13           | 58           | 83           | 0          | 0          | 0          | 0        | 0           | 0        | 501           | 38.0        |
| Sweetgum               | 3,953                                    | 2,615         | 1,975         | 1,046        | 751          | 397          | 237          | 84         | 173        | 0          | 0        | 0           | 0        | 11,230        | 16.2        |
| Yellow-poplar          | 63                                       | 107           | 31            | 144          | 125          | 0            | 68           | 0          | 132        | 61         | 0        | 0           | 0        | 733           | 30.5        |
| Blackgum               | 1,834                                    | 629           | 665           | 430          | 304          | 89           | 138          | 43         | 66         | 0          | 0        | 0           | 0        | 4,199         | 17.9        |
| Ash-walnut-cherry      | 542                                      | 436           | 203           | 85           | 36           | 0            | 42           | 0          | 32         | 0          | 0        | 0           | 0        | 1,376         | 30.5        |
| Select white oaks      | 607                                      | 743           | 737           | 372          | 209          | 221          | 199          | 76         | 24         | 0          | 0        | 0           | 0        | 3,187         | 18.0        |
| Select red oaks        | 0  | 0             | 0             | 34           | 43           | 0            | 0            | 0          | 0          | 0          | 0        | 0           | 0        | 77            | 59.4        |
| Other white oaks       | 32                                       | 18            | 0             | 50           | 0            | 0            | 0            | 0          | 0          | 0          | 0        | 0           | 0        | 101           | 73.5        |
| Other red oaks         | 1,351                                    | 713           | 646           | 467          | 363          | 199          | 133          | 155        | 69         | 36         | 0        | 0           | 0        | 4,133         | 16.0        |
| Black locust           | 0  | 0             | 0             | 36           | 36           | 0            | 0            | 0          | 0          | 0          | 0        | 0           | 0        | 36            | 100.0       |
| Other hardwoods        | 4,724                                    | 1,495         | 318           | 174          | 172          | 105          | 66           | 45         | 0          | 0          | 0        | 0           | 0        | 7,099         | 19.6        |
| <b>Total hardwoods</b> | <b>19,812</b>                            | <b>10,601</b> | <b>7,362</b>  | <b>4,171</b> | <b>2,869</b> | <b>1,705</b> | <b>1,302</b> | <b>709</b> | <b>780</b> | <b>229</b> | <b>0</b> | <b>0</b>    | <b>0</b> | <b>49,541</b> | <b>7.8</b>  |
| <b>All species</b>     | <b>34,327</b>                            | <b>21,059</b> | <b>13,721</b> | <b>7,899</b> | <b>4,830</b> | <b>2,837</b> | <b>1,709</b> | <b>886</b> | <b>954</b> | <b>229</b> | <b>0</b> | <b>0</b>    | <b>0</b> | <b>88,451</b> | <b>6.8</b>  |
| SE                     | 10.0                                     | 10.2          | 8.8           | 9.2          | 11.0         | 11.8         | 17.0         | 22.6       | 21.5       | 39.3       |          |             |          | 6.8           |             |

Table 75.--Net volume of all live trees on timberland by species and diameter class, Lower Eastern Shore Unit, Maryland, 1986

| Species                        | (In millions of cubic feet)              |              |              |               |               |               |               |               |               |             |              |             |  | All classes | SE |
|--------------------------------|--|--------------|--------------|---------------|---------------|---------------|---------------|---------------|---------------|-------------|--------------|-------------|--|-------------|----|
|                                | Diameter class (inches at breast height) |              |              |               |               |               |               |               |               |             |              |             |  |             |    |
|                                | 5.0-<br>6.9                              | 7.0-<br>8.9  | 9.0-<br>10.9 | 11.0-<br>12.9 | 13.0-<br>14.9 | 15.0-<br>16.9 | 17.0-<br>18.9 | 19.0-<br>20.9 | 21.0-<br>28.9 | 29.0+       |              |             |  |             |    |
| Loblolly pine                  | 41.8                                     | 56.1         | 59.1         | 60.3          | 48.0          | 29.2          | 15.6          | 4.2           | 4.9           | .0          | 319.2        | 10.8        |  |             |    |
| Virginia pine                  | .2                                       | 1.0          | 1.7          | 1.6           | 1.5           | 1.1           | .0            | .0            | .0            | .0          | 7.1          | 57.6        |  |             |    |
| Other softwoods                | .1                                       | .0           | .3           | .3            | .5            | .5            | 1.6           | .4            | .5            | .0          | 4.2          | 80.3        |  |             |    |
| <b>Total softwoods</b>         | <b>42.2</b>                              | <b>57.2</b>  | <b>61.2</b>  | <b>62.1</b>   | <b>49.9</b>   | <b>30.8</b>   | <b>17.2</b>   | <b>4.6</b>    | <b>5.3</b>    | <b>.0</b>   | <b>330.5</b> | <b>10.4</b> |  |             |    |
| Red maple                      | 15.6                                     | 21.4         | 22.3         | 25.1          | 22.1          | 13.8          | 13.4          | 8.4           | 15.3          | 8.5         | 165.8        | 10.9        |  |             |    |
| Hickory                        | .7                                       | 1.4          | .9           | .6            | .0            | .0            | .0            | .0            | .0            | .0          | 3.6          | 63.2        |  |             |    |
| Beech                          | .4                                       | .6           | 3.0          | 2.9           | 2.7           | 1.4           | .0            | .9            | .3            | .0          | 12.1         | 49.8        |  |             |    |
| Sweetgum                       | 7.7                                      | 12.9         | 14.8         | 14.8          | 15.3          | 10.2          | 4.6           | 2.9           | 2.2           | .3          | 85.6         | 14.9        |  |             |    |
| Yellow-poplar                  | 1.1                                      | .4           | 1.1          | 1.6           | .5            | 1.2           | .3            | 1.7           | 5.8           | 1.1         | 14.9         | 41.7        |  |             |    |
| Blackgum                       | 5.0                                      | 7.7          | 10.6         | 9.7           | 6.5           | 6.1           | 3.8           | 4.3           | 3.6           | .0          | 57.3         | 20.5        |  |             |    |
| Ash-walnut-cherry              | 1.3                                      | 2.7          | 3.0          | 2.2           | 1.7           | .5            | .8            | 1.5           | .0            | .0          | 13.7         | 48.5        |  |             |    |
| Select white oaks              | 4.3                                      | 6.6          | 13.6         | 16.2          | 11.9          | 11.0          | 5.3           | 4.6           | 5.1           | 1.3         | 79.8         | 16.4        |  |             |    |
| Select red oaks                | .1                                       | .1           | .5           | .3            | .8            | .5            | .4            | .0            | .6            | .0          | 3.4          | 38.1        |  |             |    |
| Other white oaks               | .0                                       | .0           | .3           | .0            | .0            | .0            | .0            | .0            | .0            | .0          | .3           | 100.0       |  |             |    |
| Other red oaks                 | 5.0                                      | 7.7          | 10.7         | 13.6          | 12.3          | 13.2          | 7.2           | 3.8           | 4.2           | .9          | 78.6         | 13.0        |  |             |    |
| Other hardwoods                | 5.6                                      | 5.2          | 2.1          | 2.5           | .9            | .0            | .3            | 1.2           | .0            | .0          | 18.0         | 24.1        |  |             |    |
| <b>Noncommercial hardwoods</b> | <b>.8</b>                                | <b>.3</b>    | <b>.1</b>    | <b>.6</b>     | <b>.0</b>     | <b>.0</b>     | <b>.0</b>     | <b>.0</b>     | <b>.7</b>     | <b>.0</b>   | <b>2.6</b>   | <b>38.7</b> |  |             |    |
| <b>Total hardwoods</b>         | <b>47.6</b>                              | <b>66.9</b>  | <b>82.9</b>  | <b>90.1</b>   | <b>74.7</b>   | <b>58.0</b>   | <b>36.3</b>   | <b>29.1</b>   | <b>37.8</b>   | <b>12.2</b> | <b>535.7</b> | <b>8.6</b>  |  |             |    |
| <b>All species</b>             | <b>89.8</b>                              | <b>124.1</b> | <b>144.1</b> | <b>152.2</b>  | <b>124.6</b>  | <b>88.9</b>   | <b>53.5</b>   | <b>33.7</b>   | <b>43.1</b>   | <b>12.2</b> | <b>866.2</b> | <b>5.9</b>  |  |             |    |
| <b>SE</b>                      | <b>9.9</b>                               | <b>7.9</b>   | <b>7.2</b>   | <b>7.5</b>    | <b>7.6</b>    | <b>10.8</b>   | <b>12.4</b>   | <b>18.7</b>   | <b>16.8</b>   | <b>26.3</b> | <b>5.9</b>   |             |  |             |    |

Table 76.--Net volume of live trees on timberland by species and diameter class, Lower Eastern Shore Unit, Maryland, 1999

| Species                        | (In millions of cubic feet)              |              |              |               |               |               |               |               |               |               |               |               |               |                | SE          |
|--------------------------------|--|--------------|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|-------------|
|                                | Diameter class (inches at breast height) |              |              |               |               |               |               |               |               |               |               |               |               |                |             |
|                                | 5.0-<br>6.9                              | 7.0-<br>8.9  | 9.0-<br>10.9 | 11.0-<br>12.9 | 13.0-<br>14.9 | 15.0-<br>16.9 | 17.0-<br>18.9 | 19.0-<br>20.9 | 21.0-<br>22.9 | 23.0-<br>24.9 | 25.0-<br>26.9 | 27.0-<br>28.9 | 29.0-<br>30.9 | All<br>classes |             |
| White/red pine                 | .0                                       | .0           | .0           | .6            | .0            | .0            | .0            | .0            | .0            | .0            | .0            | .0            | .0            | .6             | 100.0       |
| Loblolly pine                  | 38.0                                     | 62.9         | 67.7         | 62.6          | 45.1          | 34.4          | 15.7          | 8.6           | 8.8           | .0            | .0            | .0            | .0            | 343.8          | 11.5        |
| Virginia pine                  | .1                                       | 1.0          | .2           | .7            | .0            | .8            | .0            | .0            | .0            | .0            | .0            | .0            | .0            | 2.8            | 55.4        |
| Other softwoods                | .4                                       | .3           | .1           | .3            | 1.6           | .0            | .6            | .8            | 3.7           | .0            | .0            | .0            | .0            | 7.8            | 55.8        |
| <b>Total softwoods</b>         | <b>38.6</b>                              | <b>64.2</b>  | <b>68.0</b>  | <b>64.0</b>   | <b>46.7</b>   | <b>35.2</b>   | <b>16.3</b>   | <b>9.4</b>    | <b>12.5</b>   | <b>.0</b>     | <b>.0</b>     | <b>.0</b>     | <b>.0</b>     | <b>355.0</b>   | <b>11.3</b> |
| Red maple                      | 14.6                                     | 21.5         | 27.4         | 27.4          | 20.6          | 20.9          | 14.9          | 17.3          | 19.9          | 20.0          | 20.0          | 20.0          | 20.0          | 204.7          | 14.4        |
| Hickory                        | .5                                       | .8           | 1.2          | .8            | 1.0           | .0            | .0            | .0            | .0            | .0            | .0            | .0            | .0            | 4.3            | 78.9        |
| Beech                          | .2                                       | .5           | 1.1          | 1.0           | .7            | 2.2           | 3.5           | .0            | .0            | .0            | .0            | .0            | .0            | 9.2            | 44.0        |
| Sweetgum                       | 10.0                                     | 16.3         | 23.9         | 18.9          | 18.8          | 14.8          | 10.8          | 4.7           | 15.8          | .0            | .0            | .0            | .0            | 134.1          | 15.3        |
| Yellow-poplar                  | .2                                       | .8           | .4           | 2.8           | 4.3           | .0            | 3.4           | .0            | 13.8          | 10.5          | 10.5          | 10.5          | 10.5          | 36.2           | 36.4        |
| Blackgum                       | 4.1                                      | 3.5          | 6.8          | 7.5           | 8.3           | 3.4           | 5.9           | 2.5           | 4.8           | .0            | .0            | .0            | .0            | 46.8           | 23.0        |
| Ash-walnut-cherry              | 1.3                                      | 3.0          | 2.3          | 2.6           | .9            | .0            | 2.2           | .0            | 2.2           | .0            | .0            | .0            | .0            | 14.4           | 38.3        |
| Select white oaks              | 1.3                                      | 3.7          | 8.1          | 6.4           | 5.5           | 8.2           | 8.6           | 5.0           | 1.6           | .0            | .0            | .0            | .0            | 48.4           | 22.2        |
| Select red oaks                | .0                                       | .0           | .0           | .8            | 1.1           | .0            | .0            | .0            | .0            | .0            | .0            | .0            | .0            | 1.9            | 59.1        |
| Other white oaks               | .1                                       | .1           | .0           | .8            | .0            | .0            | .0            | .0            | .0            | .0            | .0            | .0            | .0            | 1.0            | 73.3        |
| Other red oaks                 | 2.8                                      | 3.4          | 7.0          | 7.9           | 8.3           | 7.2           | 7.8           | 9.2           | 4.5           | 3.7           | 3.7           | 3.7           | 3.7           | 61.8           | 18.3        |
| Blacklocust                    | .0                                       | .0           | .0           | .0            | .4            | .0            | .0            | .0            | .0            | .0            | .0            | .0            | .0            | .4             | 100.0       |
| Other hardwoods                | 9.6                                      | 6.2          | 2.6          | 2.5           | 3.7           | 2.9           | 2.0           | 1.9           | .0            | .0            | .0            | .0            | .0            | 31.4           | 26.0        |
| <b>Noncommercial hardwoods</b> | <b>.8</b>                                | <b>.3</b>    | <b>.4</b>    | <b>.0</b>     | <b>.0</b>     | <b>.0</b>     | <b>.0</b>     | <b>.0</b>     | <b>.0</b>     | <b>.0</b>     | <b>.0</b>     | <b>.0</b>     | <b>.0</b>     | <b>1.4</b>     | <b>33.3</b> |
| <b>Total hardwoods</b>         | <b>45.5</b>                              | <b>60.2</b>  | <b>81.2</b>  | <b>79.6</b>   | <b>73.7</b>   | <b>59.5</b>   | <b>59.0</b>   | <b>40.6</b>   | <b>62.5</b>   | <b>34.2</b>   | <b>34.2</b>   | <b>34.2</b>   | <b>34.2</b>   | <b>596.0</b>   | <b>9.8</b>  |
| <b>All species</b>             | <b>84.1</b>                              | <b>124.3</b> | <b>149.2</b> | <b>143.6</b>  | <b>120.5</b>  | <b>94.8</b>   | <b>75.3</b>   | <b>50.0</b>   | <b>75.0</b>   | <b>34.2</b>   | <b>34.2</b>   | <b>34.2</b>   | <b>34.2</b>   | <b>951.0</b>   | <b>6.4</b>  |
| <b>SE</b>                      | <b>10.7</b>                              | <b>10.8</b>  | <b>9.1</b>   | <b>8.9</b>    | <b>10.4</b>   | <b>11.5</b>   | <b>16.8</b>   | <b>23.9</b>   | <b>21.4</b>   | <b>43.2</b>   | <b>43.2</b>   | <b>43.2</b>   | <b>43.2</b>   | <b>6.4</b>     | <b>6.4</b>  |

Table 77.--Net volume of growing-stock trees on timberland by species and diameter class, Lower Eastern Shore Unit, Maryland, 1999

| Species                | (In millions of cubic feet)              |              |              |              |              |             |             |             |             |             |              |           |           | SE          |       |
|------------------------|--|--------------|--------------|--------------|--------------|-------------|-------------|-------------|-------------|-------------|--------------|-----------|-----------|-------------|-------|
|                        | Diameter class (inches at breast height) |              |              |              |              |             |             |             |             |             |              |           |           |             |       |
|                        | 5.0-6.9                                  | 7.0-8.9      | 9.0-10.9     | 11.0-12.9    | 13.0-14.9    | 15.0-16.9   | 17.0-18.9   | 19.0-20.9   | 21.0-28.9   | 29.0+       | All classes  | SE        |           |             |       |
| White/red pine         | .0                                       | .0           | .0           | .6           | .0           | .0          | .0          | .0          | .0          | .0          | .0           | .0        | .0        | .6          | 100.0 |
| Loblolly pine          | 38.0                                     | 62.9         | 67.3         | 62.6         | 45.1         | 34.4        | 15.7        | 8.6         | 8.8         | .0          | 343.3        | .0        | .0        | 11.5        |       |
| Virginia pine          | .1                                       | 1.0          | .2           | .7           | .0           | .8          | .0          | .0          | .0          | .0          | 2.8          | .0        | .0        | 55.4        |       |
| Other softwoods        | .4                                       | .3           | .0           | .3           | 1.2          | .0          | .6          | .8          | 3.7         | .0          | 7.3          | .0        | .0        | 59.1        |       |
| <b>Total softwoods</b> | <b>38.6</b>                              | <b>64.2</b>  | <b>67.5</b>  | <b>64.0</b>  | <b>46.4</b>  | <b>35.2</b> | <b>16.3</b> | <b>9.4</b>  | <b>12.5</b> | <b>.0</b>   | <b>354.1</b> | <b>.0</b> | <b>.0</b> | <b>11.4</b> |       |
| Red maple              | 14.4                                     | 21.3         | 27.4         | 24.0         | 19.5         | 20.6        | 13.9        | 17.0        | 19.2        | 20.0        | 197.3        | .0        | .0        | 14.6        |       |
| Hickory                | .5                                       | .8           | 1.2          | .8           | 1.0          | .0          | .0          | .0          | .0          | .0          | 4.3          | .0        | .0        | 78.9        |       |
| Beech                  | .2                                       | .5           | 1.1          | 1.0          | .3           | 2.2         | 2.9         | .0          | .0          | .0          | 8.2          | .0        | .0        | 44.2        |       |
| Sweetgum               | 9.8                                      | 16.3         | 23.9         | 18.3         | 18.8         | 14.8        | 10.8        | 4.7         | 15.8        | .0          | 133.3        | .0        | .0        | 15.4        |       |
| Yellow-poplar          | .2                                       | .8           | .4           | 2.8          | 3.8          | .0          | 3.4         | .0          | 13.8        | 10.5        | 35.7         | .0        | .0        | 36.9        |       |
| Blackgum               | 4.1                                      | 3.4          | 6.8          | 7.5          | 7.9          | 3.4         | 5.9         | 2.5         | 4.8         | .0          | 46.2         | .0        | .0        | 23.3        |       |
| Ash-walnut-cherry      | 1.1                                      | 2.6          | 2.3          | 2.1          | .9           | .0          | 2.2         | .0          | 2.2         | .0          | 13.3         | .0        | .0        | 40.3        |       |
| Select white oaks      | 1.3                                      | 3.7          | 8.1          | 6.0          | 5.1          | 7.8         | 8.6         | 5.0         | 1.6         | .0          | 47.1         | .0        | .0        | 22.4        |       |
| Select red oaks        | .0                                       | .0           | .0           | .8           | 1.1          | .0          | .0          | .0          | .0          | .0          | 1.9          | .0        | .0        | 59.1        |       |
| Other white oaks       | .1                                       | .1           | .0           | .8           | .0           | .0          | .0          | .0          | .0          | .0          | 1.0          | .0        | .0        | 73.3        |       |
| Other red oaks         | 2.7                                      | 3.4          | 6.8          | 7.5          | 8.3          | 5.9         | 6.7         | 9.2         | 4.5         | 3.7         | 58.5         | .0        | .0        | 18.9        |       |
| Black locust           | .0                                       | .0           | .0           | .0           | .4           | .0          | .0          | .0          | .0          | .0          | .4           | .0        | .0        | 100.0       |       |
| Other hardwoods        | 9.2                                      | 6.1          | 2.6          | 2.3          | 3.1          | 2.9         | 2.0         | 1.9         | .0          | .0          | 30.0         | .0        | .0        | 25.8        |       |
| <b>Total hardwoods</b> | <b>43.6</b>                              | <b>59.0</b>  | <b>80.5</b>  | <b>73.8</b>  | <b>70.2</b>  | <b>57.6</b> | <b>56.3</b> | <b>40.3</b> | <b>61.8</b> | <b>34.2</b> | <b>577.2</b> | <b>.0</b> | <b>.0</b> | <b>9.9</b>  |       |
| <b>All species</b>     | <b>82.2</b>                              | <b>123.2</b> | <b>148.0</b> | <b>137.9</b> | <b>116.5</b> | <b>92.8</b> | <b>72.6</b> | <b>49.6</b> | <b>74.3</b> | <b>34.2</b> | <b>931.3</b> | <b>.0</b> | <b>.0</b> | <b>6.4</b>  |       |
| SE                     | 11.0                                     | 10.7         | 9.2          | 9.0          | 10.8         | 11.6        | 17.3        | 24.0        | 21.7        | 43.1        | 6.4          | .0        | .0        |             |       |

Table 78.--Net volume of growing-stock trees on timberland by species and diameter class, Lower Eastern Shore Unit, Maryland, 1986

(In millions of cubic feet)

| Species                | Diameter class (inches at breast height) |              |              |              |              |             |             |             |             |             | All classes  | SE          |
|------------------------|--|--------------|--------------|--------------|--------------|-------------|-------------|-------------|-------------|-------------|--------------|-------------|
|                        | 5.0-6.9                                  | 7.0-8.9      | 9.0-10.9     | 11.0-12.9    | 13.0-14.9    | 15.0-16.9   | 17.0-18.9   | 19.0-20.9   | 21.0-28.9   | 29.0+       |              |             |
| Loblolly pine          | 41.6                                     | 56.0         | 58.9         | 60.1         | 48.0         | 29.2        | 15.6        | 4.2         | 4.9         | .0          | 318.5        | 10.8        |
| Virginia pine          | .2                                       | 1.0          | 1.7          | 1.6          | 1.5          | 1.1         | .0          | .0          | .0          | .0          | 7.0          | 58.0        |
| Other softwoods        | .1                                       | .0           | .3           | .2           | .5           | .5          | 1.6         | .4          | .5          | .0          | 4.1          | 81.5        |
| <b>Total softwoods</b> | <b>42.0</b>                              | <b>57.1</b>  | <b>60.9</b>  | <b>61.9</b>  | <b>49.9</b>  | <b>30.8</b> | <b>17.2</b> | <b>4.6</b>  | <b>5.3</b>  | <b>.0</b>   | <b>329.7</b> | <b>10.4</b> |
| Red maple              | 15.3                                     | 20.8         | 22.1         | 23.2         | 21.0         | 11.5        | 11.2        | 8.2         | 14.1        | 7.9         | 155.3        | 11.0        |
| Hickory                | .7                                       | 1.4          | .9           | .6           | .0           | .0          | .0          | .0          | .0          | .0          | 3.6          | 63.2        |
| Beech                  | .4                                       | .6           | 2.7          | 2.9          | 2.7          | 1.4         | .0          | .9          | .3          | .0          | 11.9         | 49.1        |
| Sweetgum               | 7.6                                      | 12.3         | 14.8         | 14.3         | 14.7         | 10.2        | 4.6         | 2.9         | 2.2         | .3          | 84.0         | 14.9        |
| Yellow-poplar          | 1.1                                      | .4           | 1.1          | 1.6          | .5           | 1.0         | .3          | 1.7         | 5.8         | 1.1         | 14.7         | 42.1        |
| Blackgum               | 4.2                                      | 7.2          | 9.1          | 6.3          | 5.6          | 4.6         | 3.2         | 3.3         | 2.7         | .0          | 46.1         | 18.2        |
| Ash-walnut-cherry      | 1.2                                      | 2.6          | 3.0          | 2.0          | 1.4          | .5          | .8          | 1.5         | .0          | .0          | 13.0         | 49.3        |
| Select white oaks      | 4.3                                      | 6.6          | 13.6         | 15.8         | 11.6         | 10.8        | 5.2         | 4.6         | 5.1         | .8          | 78.3         | 16.5        |
| Select red oaks        | .1                                       | .1           | .5           | .3           | .8           | .5          | .4          | .0          | .6          | .0          | 3.4          | 38.1        |
| Other white oaks       | .0                                       | .0           | .3           | .0           | .0           | .0          | .0          | .0          | .0          | .0          | .3           | 100.0       |
| Other red oaks         | 5.0                                      | 7.7          | 10.5         | 13.4         | 12.0         | 12.9        | 7.2         | 3.8         | 4.2         | .6          | 77.2         | 13.2        |
| Other hardwoods        | 5.3                                      | 5.1          | 2.0          | 2.1          | .7           | .0          | .3          | 1.2         | .0          | .0          | 16.8         | 23.9        |
| <b>Total hardwoods</b> | <b>45.1</b>                              | <b>64.6</b>  | <b>80.6</b>  | <b>82.5</b>  | <b>71.0</b>  | <b>53.5</b> | <b>33.4</b> | <b>28.0</b> | <b>35.1</b> | <b>10.8</b> | <b>504.5</b> | <b>8.3</b>  |
| <b>All species</b>     | <b>87.1</b>                              | <b>121.7</b> | <b>141.5</b> | <b>144.4</b> | <b>120.9</b> | <b>84.3</b> | <b>50.6</b> | <b>32.5</b> | <b>40.4</b> | <b>10.8</b> | <b>834.2</b> | <b>5.7</b>  |
| SE                     | 10.1                                     | 7.9          | 7.2          | 7.6          | 7.6          | 11.1        | 12.8        | 18.2        | 16.9        | 28.2        | 5.7          |             |

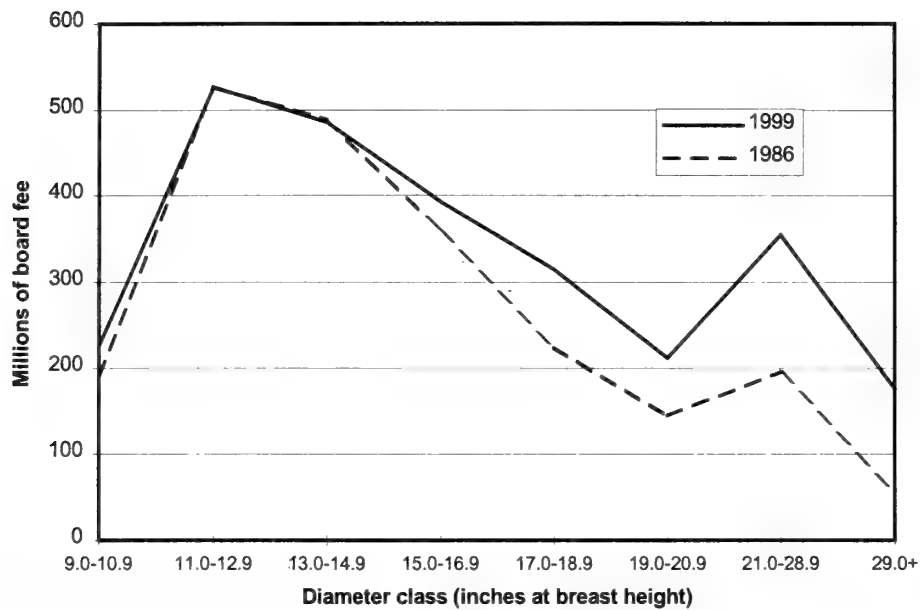
Table 79.--Net volume of sawtimber trees on timberland by species and diameter class, Lower Eastern Shore Unit, Maryland, 1986

| Species           | (In millions of board feet)              |           |           |           |           |           |           |       |         |      | All classes | SE |
|-------------------|--|-----------|-----------|-----------|-----------|-----------|-----------|-------|---------|------|-------------|----|
|                   | Diameter class (inches at breast height) |           |           |           |           |           |           |       |         |      |             |    |
|                   | 9.0-10.9                                 | 11.0-12.9 | 13.0-14.9 | 15.0-16.9 | 17.0-18.9 | 19.0-20.9 | 21.0-28.9 | 29.0+ |         |      |             |    |
| Loblolly pine     | 185.1                                    | 231.0     | 203.3     | 127.5     | 72.4      | 19.6      | 22.8      | .0    | 861.7   | 11.6 |             |    |
| Virginia pine     | 5.2                                      | 6.0       | 6.2       | 4.7       | .0        | .0        | .0        | .0    | 22.1    | 65.8 |             |    |
| Other softwoods   | .9                                       | .9        | 1.7       | 1.8       | 6.8       | 1.6       | 2.0       | .0    | 15.8    | 83.9 |             |    |
| Total softwoods   | 191.2                                    | 237.9     | 211.2     | 134.0     | 79.3      | 21.2      | 24.8      | .0    | 899.6   | 11.2 |             |    |
| Red maple         | .0                                       | 79.5      | 81.3      | 44.6      | 47.0      | 35.5      | 65.5      | 41.8  | 395.1   | 14.7 |             |    |
| Hickory           | .0                                       | 2.1       | .0        | .0        | .0        | .0        | .0        | .0    | 2.1     | 81.8 |             |    |
| Beech             | .0                                       | 10.7      | 11.2      | 5.6       | .0        | 4.1       | 1.2       | .0    | 32.8    | 48.1 |             |    |
| Sweetgum          | .0                                       | 49.3      | 57.5      | 43.9      | 20.4      | 12.7      | 10.5      | 1.4   | 195.7   | 19.2 |             |    |
| Yellow-poplar     | .0                                       | 5.6       | 1.9       | 4.4       | 1.5       | 8.0       | 31.1      | 5.5   | 58.0    | 47.7 |             |    |
| Blackgum          | .0                                       | 21.3      | 21.2      | 19.0      | 14.2      | 14.6      | 13.6      | .0    | 104.0   | 25.1 |             |    |
| Ash-walnut-cherry | .0                                       | 7.7       | 5.2       | 2.0       | 3.5       | 5.3       | .0        | .0    | 23.6    | 51.9 |             |    |
| Select white oaks | .0                                       | 57.2      | 46.2      | 46.9      | 22.9      | 20.2      | 24.1      | 3.8   | 221.4   | 17.9 |             |    |
| Select red oaks   | .0                                       | 1.2       | 3.3       | 2.1       | 1.8       | .0        | 2.8       | .0    | 11.3    | 44.1 |             |    |
| Other red oaks    | .0                                       | 46.2      | 46.9      | 55.6      | 32.0      | 17.4      | 21.8      | 2.5   | 222.6   | 15.2 |             |    |
| Other hardwoods   | .0                                       | 7.4       | 2.8       | .0        | 1.5       | 5.1       | .0        | .0    | 16.7    | 44.4 |             |    |
| Total hardwoods   | .0                                       | 288.1     | 277.6     | 224.0     | 144.9     | 122.9     | 170.8     | 55.0  | 1,283.4 | 10.4 |             |    |
| All species       | 191.2                                    | 526.0     | 488.8     | 358.0     | 224.2     | 144.2     | 195.5     | 55.0  | 2,183.0 | 7.0  |             |    |
| SE                | 11.7                                     | 7.7       | 7.7       | 11.2      | 13.0      | 17.9      | 17.2      | 28.4  | 7.0     |      |             |    |

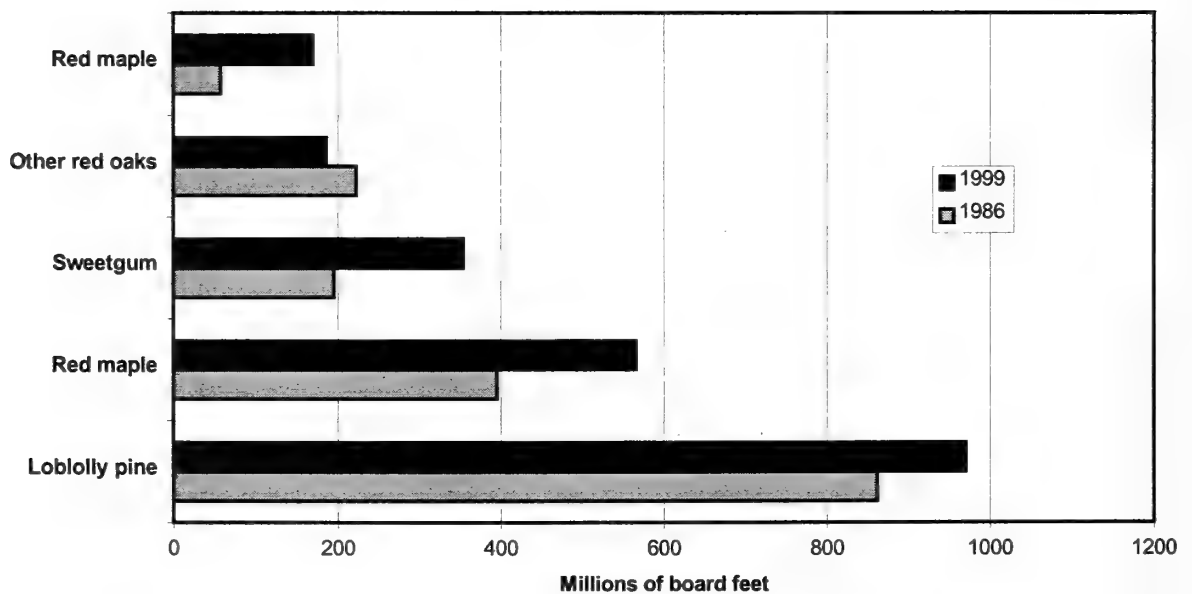
Table 80.--Net volume of sawtimber trees on timberland by species and diameter class, Lower Eastern Shore Unit, Maryland, 1999

| Species                | (In millions of board feet)              |               |               |               |               |               |               |              |           |           | All classes    | SE          |
|------------------------|--|---------------|---------------|---------------|---------------|---------------|---------------|--------------|-----------|-----------|----------------|-------------|
|                        | Diameter class (inches at breast height) |               |               |               |               |               |               |              |           |           |                |             |
|                        | 9.0-<br>10.9                             | 11.0-<br>12.9 | 13.0-<br>14.9 | 15.0-<br>16.9 | 17.0-<br>18.9 | 19.0-<br>20.9 | 21.0-<br>28.9 | 29.0+        |           |           |                |             |
| White/red pine         | .0                                       | 2.2           | .0            | .0            | .0            | .0            | .0            | .0           | .0        | .0        | 2.2            | 100.0       |
| Loblolly pine          | 224.6                                    | 248.6         | 192.7         | 152.5         | 70.3          | 39.7          | 41.6          | .0           | .0        | .0        | 969.9          | 13.8        |
| Virginia pine          | .8                                       | 2.4           | .0            | 3.9           | .0            | .0            | .0            | .0           | .0        | .0        | 7.1            | 71.1        |
| Other softwoods        | .0                                       | .8            | 4.9           | .0            | 2.4           | 3.3           | 16.8          | .0           | .0        | .0        | 28.3           | 65.6        |
| <b>Total softwoods</b> | <b>225.4</b>                             | <b>254.0</b>  | <b>197.6</b>  | <b>156.4</b>  | <b>72.6</b>   | <b>43.0</b>   | <b>58.5</b>   | <b>.0</b>    | <b>.0</b> | <b>.0</b> | <b>1,007.5</b> | <b>13.5</b> |
| Red maple              | .0                                       | 87.4          | 78.3          | 82.0          | 55.3          | 64.6          | 94.6          | 103.9        | .0        | .0        | 566.1          | 21.0        |
| Hickory                | .0                                       | 2.8           | 4.9           | .0            | .0            | .0            | .0            | .0           | .0        | .0        | 7.7            | 100.0       |
| Beech                  | .0                                       | 3.5           | 1.4           | 7.6           | 13.2          | .0            | .0            | .0           | .0        | .0        | 25.7           | 49.8        |
| Sweetgum               | .0                                       | 66.5          | 79.4          | 65.2          | 45.2          | 21.7          | 75.9          | .0           | .0        | .0        | 353.9          | 19.7        |
| Yellow-poplar          | .0                                       | 10.0          | 17.3          | .0            | 18.5          | .0            | 69.2          | 54.9         | .0        | .0        | 169.9          | 39.5        |
| Blackgum               | .0                                       | 27.8          | 31.1          | 14.7          | 27.3          | 13.0          | 20.2          | .0           | .0        | .0        | 134.2          | 29.2        |
| Ash-walnut-cherry      | .0                                       | 8.7           | 3.6           | .0            | 9.5           | .0            | 10.8          | .0           | .0        | .0        | 32.6           | 52.4        |
| Select white oaks      | .0                                       | 23.4          | 20.6          | 30.1          | 34.3          | 23.6          | 5.4           | .0           | .0        | .0        | 137.4          | 30.6        |
| Select red oaks        | .0                                       | 3.5           | 4.5           | .0            | .0            | .0            | .0            | .0           | .0        | .0        | 7.9            | 59.1        |
| Other white oaks       | .0                                       | 3.1           | .0            | .0            | .0            | .0            | .0            | .0           | .0        | .0        | 3.1            | 72.6        |
| Other red oaks         | .0                                       | 27.5          | 31.7          | 23.0          | 28.8          | 37.4          | 20.1          | 17.6         | .0        | .0        | 186.1          | 24.1        |
| Black locust           | .0                                       | .0            | 1.9           | .0            | .0            | .0            | .0            | .0           | .0        | .0        | 1.9            | 100.0       |
| Other hardwoods        | .0                                       | 8.4           | 13.5          | 13.8          | 10.2          | 8.0           | .0            | .0           | .0        | .0        | 53.8           | 45.5        |
| <b>Total hardwoods</b> | <b>.0</b>                                | <b>272.5</b>  | <b>288.3</b>  | <b>236.5</b>  | <b>242.2</b>  | <b>168.4</b>  | <b>296.2</b>  | <b>176.4</b> | <b>.0</b> | <b>.0</b> | <b>1,680.5</b> | <b>13.9</b> |
| <b>All species</b>     | <b>225.4</b>                             | <b>526.6</b>  | <b>485.9</b>  | <b>392.9</b>  | <b>314.9</b>  | <b>211.4</b>  | <b>354.7</b>  | <b>176.4</b> | <b>.0</b> | <b>.0</b> | <b>2,688.1</b> | <b>8.9</b>  |
| SE                     | 15.3                                     | 9.0           | 10.8          | 11.8          | 17.9          | 25.9          | 22.2          | 42.9         |           |           | 8.9            |             |

## Net volume of sawtimber trees on timberland, Lower Eastern Shore Unit, Maryland, 1986 and 1999



## Net volume of sawtimber trees on timberland, top 5 species, Lower Eastern Shore Unit, Maryland, 1986 and 1999





# MARYLAND WESTERN UNIT

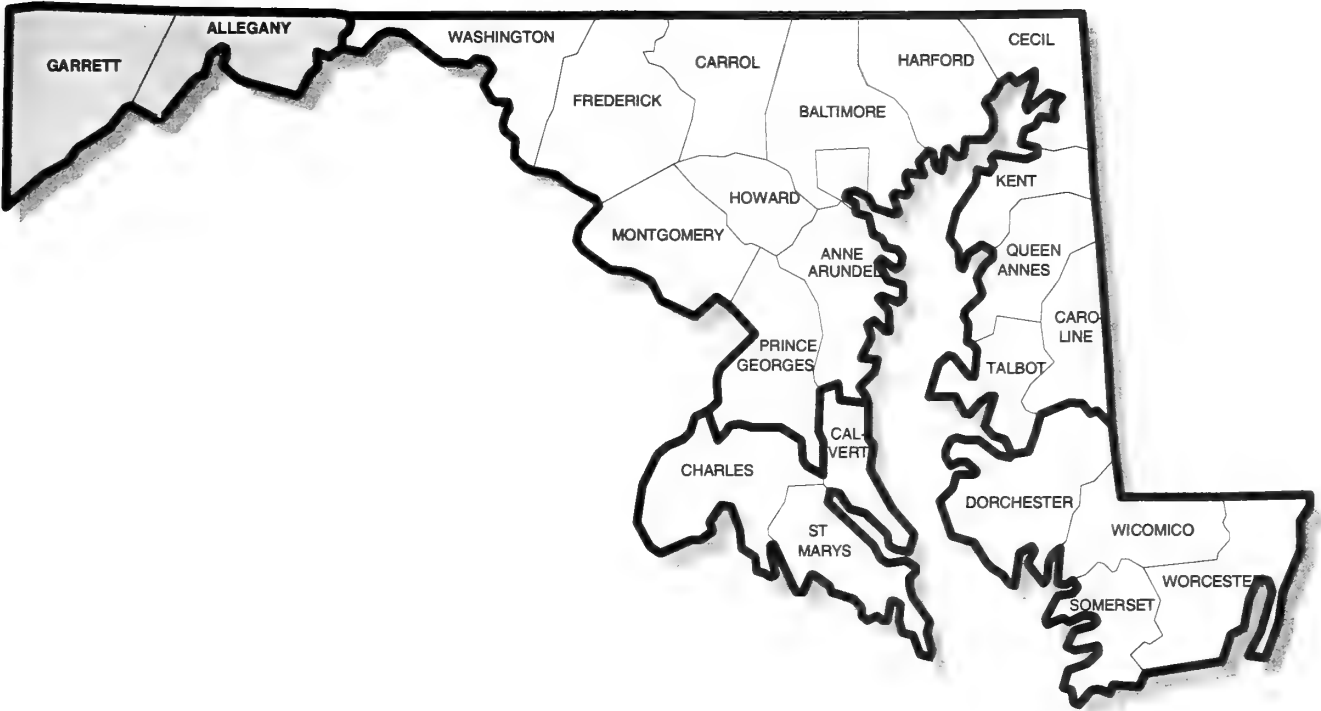


Table 81.--Area of timberland by forest type, forest-type group, and stand-size class, Western Unit, Maryland, 1986

(In thousands of acres)

| Forest type                    | Stand-size class |             |                      |             | All classes | SE    |
|--------------------------------|------------------|-------------|----------------------|-------------|-------------|-------|
|                                | Saw-timber       | Pole-timber | Sapling and seedling | Non-stocked |             |       |
| Red pine                       | 3.0              | 6.3         | 4.4                  | .0          | 13.7        | 51.0  |
| White pine                     | .0               | 3.7         | .0                   | .0          | 3.7         | 100.0 |
| Hemlock                        | 6.9              | .0          | .0                   | .0          | 6.9         | 71.0  |
| White/red pine group           | 9.9              | 10.0        | 4.4                  | .0          | 24.3        | 38.3  |
| Virginia pine                  | 9.0              | 7.4         | .0                   | .0          | 16.4        | 53.6  |
| Loblolly/shortleaf group       | 9.0              | 7.4         | .0                   | .0          | 16.4        | 53.6  |
| Virginia pine/oak              | .0               | 2.3         | .0                   | .0          | 2.3         | 100.0 |
| Oak/pine group                 | .0               | 2.3         | .0                   | .0          | 2.3         | 100.0 |
| Chestnut oak                   | 16.7             | 7.3         | .0                   | .0          | 24.0        | 37.8  |
| White oak/red oak/hickory      | 33.9             | 28.5        | .0                   | .0          | 62.4        | 22.6  |
| White oak                      | 6.1              | 20.0        | .0                   | .0          | 26.1        | 37.7  |
| Northern red oak               | 10.0             | .0          | .0                   | .0          | 10.0        | 59.0  |
| Black locust                   | .0               | 10.3        | 7.1                  | .0          | 17.4        | 44.8  |
| Sassafras/persimmon            | .0               | 2.5         | .0                   | .0          | 2.5         | 100.0 |
| Red maple/central hardwood     | 6.2              | 3.1         | 3.0                  | .0          | 12.4        | 50.5  |
| Mixed central hardwoods        | 87.5             | 69.6        | 22.4                 | .0          | 179.5       | 11.1  |
| Oak/hickory group              | 160.4            | 141.4       | 32.5                 | .0          | 334.3       | 6.1   |
| River birch/sycamore           | 3.9              | .0          | .0                   | .0          | 3.9         | 100.0 |
| Elm/ash/red maple group        | 3.9              | .0          | .0                   | .0          | 3.9         | 100.0 |
| Sugar maple/beech/yellow birch | 27.2             | 13.3        | 3.5                  | .0          | 44.0        | 26.7  |
| Black Cherry                   | 3.0              | 7.4         | 3.6                  | 4.8         | 18.8        | 43.6  |
| Red maple/northern hardwoods   | .0               | 6.8         | .0                   | .0          | 6.8         | 71.1  |
| Mixed northern hardwoods       | 10.6             | 19.0        | 14.2                 | .0          | 43.8        | 28.5  |
| Northern hardwoods group       | 40.8             | 46.4        | 21.3                 | 4.8         | 113.2       | 15.9  |
| Aspen                          | .0               | 3.0         | .0                   | .0          | 3.0         | 100.0 |
| Aspen/birch group              | .0               | 3.0         | .0                   | .0          | 3.0         | 100.0 |
| All forest types               | 224.0            | 210.5       | 58.2                 | 4.8         | 497.4       | 2.0   |
| SE                             | 9.0              | 9.6         | 23.9                 | 100.0       | 2.0         |       |

Table 82.--Area of timberland by forest type, forest-type group, and stand-size class, Western Unit, Maryland, 1999

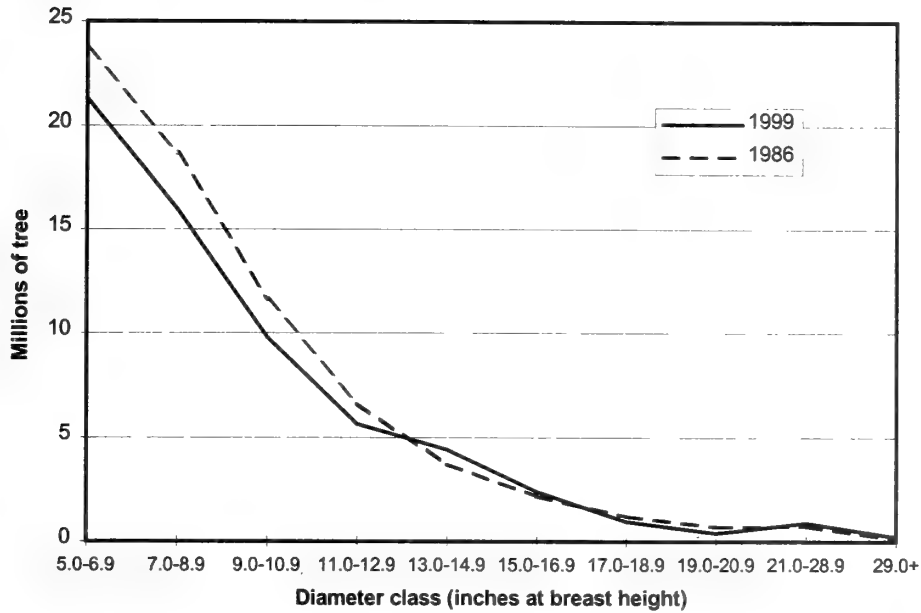
(In thousands of acres)

| Forest type                    | Stand-size class |             |                      |             | All classes | SE    |
|--------------------------------|------------------|-------------|----------------------|-------------|-------------|-------|
|                                | Saw-timber       | Pole-timber | Sapling and seedling | Non-stocked |             |       |
| Red pine                       | 6.1              | 8.5         | .0                   | .0          | 14.6        | 57.5  |
| White pine                     | .0               | .0          | .9                   | .0          | .9          | 100.0 |
| White/red pine group           | 6.1              | 8.5         | .9                   | .0          | 15.5        | 54.6  |
| Norway spruce                  | 3.2              | .0          | .0                   | .0          | 3.2         | 100.0 |
| Spruce/fir group               | 3.2              | .0          | .0                   | .0          | 3.2         | 100.0 |
| Virginia pine                  | 2.3              | .0          | .0                   | .0          | 2.3         | 100.0 |
| Loblolly/shortleaf group       | 2.3              | .0          | .0                   | .0          | 2.3         | 100.0 |
| Chestnut oak                   | 10.6             | 4.3         | .0                   | .0          | 14.8        | 58.4  |
| White oak/red oak/hickory      | 47.0             | 8.1         | .0                   | .0          | 55.1        | 32.1  |
| White oak                      | 8.0              | 18.0        | .0                   | .0          | 25.9        | 53.5  |
| Northern red oak               | 8.1              | .0          | .0                   | .0          | 8.1         | 100.0 |
| Black locust                   | 3.7              | .0          | .0                   | .0          | 3.7         | 100.0 |
| Black walnut                   | .0               | 1.1         | .0                   | .0          | 1.1         | 98.8  |
| Red maple/central hardwood     | 4.9              | .0          | .0                   | .0          | 4.9         | 100.0 |
| Mixed central hardwoods        | 92.8             | 43.6        | 29.9                 | .0          | 166.4       | 15.8  |
| Oak/hickory group              | 175.1            | 75.1        | 29.9                 | .0          | 280.1       | 10.5  |
| Black ash/Amer. elm/red maple  | .0               | 11.9        | .0                   | .0          | 11.9        | 100.0 |
| Red maple(upland)              | 8.1              | .0          | .0                   | .0          | 8.1         | 100.0 |
| River birch/sycamore           | 6.1              | .0          | .0                   | .0          | 6.1         | 100.0 |
| Elm/ash/red maple group        | 14.2             | 11.9        | .0                   | .0          | 26.1        | 59.9  |
| Sugar maple/beech/yellow birch | 51.2             | 4.9         | 6.0                  | .0          | 62.2        | 32.8  |
| Black cherry                   | 4.3              | 23.2        | 5.5                  | .0          | 32.9        | 40.4  |
| Red maple/northern hardwoods   | 8.1              | 6.0         | .0                   | .9          | 15.0        | 67.6  |
| Pin cherry/reverting field     | .0               | .0          | 3.0                  | .0          | 3.0         | 81.1  |
| Mixed northern hardwoods       | 1.8              | 8.8         | 9.8                  | .0          | 20.3        | 45.3  |
| Northern hardwoods group       | 65.4             | 42.9        | 24.3                 | .9          | 133.4       | 19.0  |
| All forest types               | 266.3            | 138.4       | 55.1                 | .9          | 460.6       | 4.0   |
| SE                             | 10.3             | 18.4        | 30.6                 | 100.0       | 4.0         |       |

Table 83.--Number of live trees (1.0+ inches d.b.h.) on forest land by species and diameter group, Western Unit, Maryland, 1999

| Species                        | (In thousands of trees) |               |               |                    | SE             |             |
|--------------------------------|-------------------------|---------------|---------------|--------------------|----------------|-------------|
|                                | Diameter                |               |               |                    |                |             |
|                                | 1.0-4.9                 | 5.0-10.9      | 11.0-20.9     | 21+                |                |             |
|                                |                         |               |               | <b>All Classes</b> |                |             |
| White/red pine                 | 1,755                   | 6,017         | 527           | 0                  | 8,299          | 48.3        |
| Virginia pine                  | 1,819                   | 1,175         | 557           | 0                  | 3,551          | 46.0        |
| Other yellow pines             | 0                       | 227           | 175           | 0                  | 402            | 62.7        |
| Other softwoods                | 3,528                   | 1,468         | 407           | 26                 | 5,429          | 46.3        |
| <b>Total softwoods</b>         | <b>7,102</b>            | <b>8,887</b>  | <b>1,665</b>  | <b>26</b>          | <b>17,681</b>  | <b>29.8</b> |
| Red maple                      | 48,898                  | 8,185         | 2,476         | 224                | 59,783         | 17.3        |
| Sugar maple                    | 15,787                  | 4,266         | 919           | 170                | 21,143         | 24.4        |
| Hickory                        | 8,623                   | 2,210         | 517           | 29                 | 11,379         | 24.0        |
| Beech                          | 1,063                   | 335           | 172           | 0                  | 1,570          | 68.3        |
| Yellow-poplar                  | 4,092                   | 305           | 362           | 55                 | 4,814          | 72.3        |
| Blackgum                       | 4,066                   | 719           | 158           | 0                  | 4,943          | 49.9        |
| Ash-walnut-cherry              | 50,953                  | 8,160         | 1,354         | 108                | 60,576         | 20.1        |
| Select white oaks              | 5,496                   | 5,481         | 2,265         | 268                | 13,511         | 21.0        |
| Select red oaks                | 12,779                  | 2,203         | 2,202         | 111                | 17,295         | 33.8        |
| Other white oaks               | 7,259                   | 4,180         | 1,721         | 134                | 13,293         | 27.2        |
| Other red oaks                 | 8,630                   | 3,247         | 1,538         | 170                | 13,586         | 27.5        |
| Blacklocust                    | 8,996                   | 2,260         | 466           | 36                 | 11,758         | 32.0        |
| Other hardwoods                | 31,202                  | 4,132         | 887           | 145                | 36,366         | 25.7        |
| <b>Noncommercial hardwoods</b> | <b>53,095</b>           | <b>1,999</b>  | <b>134</b>    | <b>0</b>           | <b>55,227</b>  | <b>21.9</b> |
| <b>Total hardwoods</b>         | <b>260,941</b>          | <b>47,682</b> | <b>15,172</b> | <b>1,452</b>       | <b>325,247</b> | <b>8.8</b>  |
| <b>All species</b>             | <b>268,043</b>          | <b>56,569</b> | <b>16,837</b> | <b>1,478</b>       | <b>342,928</b> | <b>8.4</b>  |
| <b>SE</b>                      | <b>11.0</b>             | <b>8.0</b>    | <b>6.9</b>    | <b>19.6</b>        | <b>8.4</b>     |             |

## Number of growing-stock trees on timberland, Western Unit, Maryland, 1986 and 1999



## Number of growing-stock trees on timberland, top 5 species, Western Unit, Maryland, 1986 and 1999

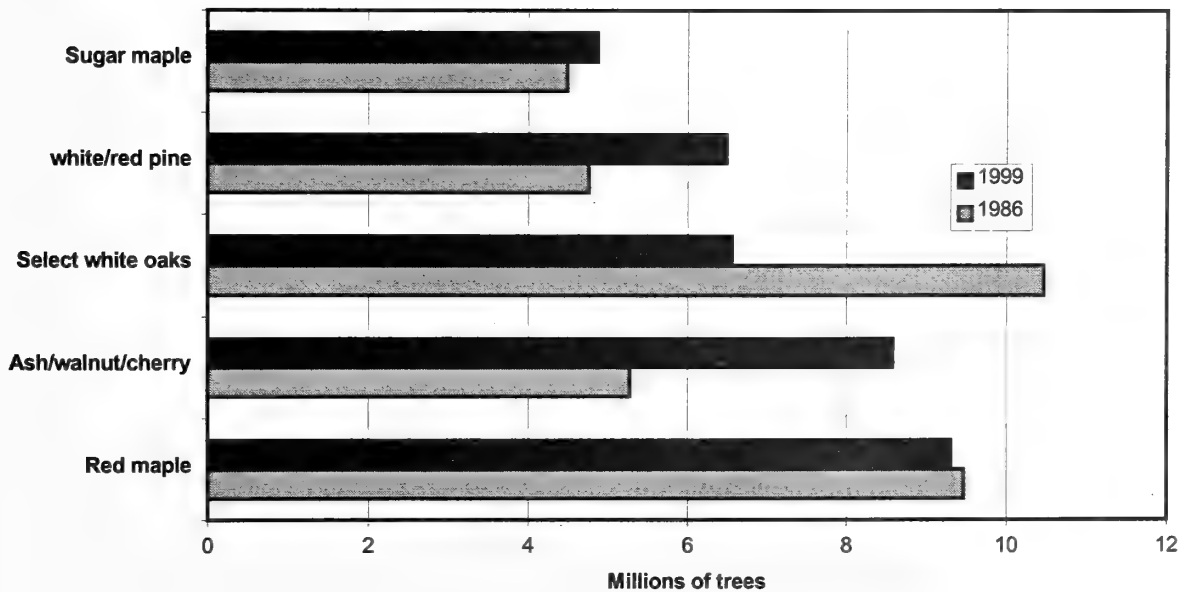


Table 84. --Number of growing-stock trees (5.0+ inches d.b.h.) on timberland by species and diameter class, Western Unit, Maryland, 1986

| Species            | Diameter class (inches at breast height) |         |          |           |           |           |           |           |           |       |   | All classes | SE     |      |
|--------------------|--|---------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-------|---|-------------|--------|------|
|                    | (In thousands of trees)                  |         |          |           |           |           |           |           |           |       |   |             |        |      |
|                    | 5.0-6.9                                  | 7.0-8.9 | 9.0-10.9 | 11.0-12.9 | 13.0-14.9 | 15.0-16.9 | 17.0-18.9 | 19.0-20.9 | 21.0-28.9 | 29.0+ |   |             |        |      |
| White/red pine     | 2,415                                    | 1,611   | 474      | 185       | 45        | 22        | 0         | 0         | 6         | 0     | 0 | 0           | 4,757  | 57.4 |
| Virginia pine      | 581                                      | 535     | 487      | 226       | 76        | 7         | 0         | 0         | 0         | 0     | 0 | 0           | 1,910  | 32.5 |
| Other yellow pines | 129                                      | 164     | 120      | 133       | 51        | 24        | 9         | 0         | 0         | 0     | 0 | 0           | 632    | 34.5 |
| Other softwoods    | 807                                      | 826     | 255      | 211       | 137       | 120       | 73        | 51        | 42        | 0     | 0 | 0           | 2,523  | 27.4 |
| Total softwoods    | 3,932                                    | 3,136   | 1,337    | 755       | 309       | 172       | 83        | 57        | 42        | 0     | 0 | 0           | 9,823  | 30.1 |
| Red maple          | 4,194                                    | 2,487   | 1,283    | 839       | 325       | 171       | 77        | 65        | 19        | 0     | 0 | 0           | 9,461  | 13.3 |
| Sugar maple        | 1,941                                    | 1,055   | 590      | 384       | 171       | 169       | 43        | 83        | 43        | 9     | 0 | 0           | 4,488  | 17.4 |
| Hickory            | 1,337                                    | 834     | 576      | 301       | 219       | 100       | 56        | 8         | 6         | 0     | 0 | 0           | 3,436  | 16.2 |
| Beech              | 235                                      | 135     | 137      | 105       | 49        | 22        | 20        | 7         | 0         | 0     | 0 | 0           | 711    | 52.5 |
| Yellow-poplar      | 269                                      | 45      | 14       | 78        | 85        | 29        | 18        | 0         | 0         | 0     | 0 | 0           | 537    | 49.2 |
| Blackgum           | 283                                      | 85      | 76       | 12        | 17        | 21        | 41        | 7         | 0         | 0     | 0 | 0           | 542    | 28.6 |
| Ash-walnut-cherry  | 1,879                                    | 1,488   | 981      | 352       | 293       | 171       | 65        | 28        | 6         | 13    | 0 | 0           | 5,277  | 23.3 |
| Select white oaks  | 3,442                                    | 3,048   | 2,026    | 824       | 386       | 302       | 210       | 67        | 145       | 9     | 0 | 0           | 10,460 | 17.9 |
| Select red oaks    | 1,338                                    | 1,163   | 1,185    | 1,144     | 800       | 472       | 209       | 185       | 249       | 33    | 0 | 0           | 6,779  | 10.2 |
| Other white oaks   | 1,553                                    | 2,400   | 1,601    | 811       | 505       | 253       | 159       | 58        | 112       | 14    | 0 | 0           | 7,465  | 15.2 |
| Other red oaks     | 715                                      | 1,097   | 715      | 488       | 252       | 169       | 135       | 81        | 68        | 24    | 0 | 0           | 3,745  | 19.5 |
| Black locust       | 967                                      | 684     | 291      | 113       | 62        | 22        | 55        | 26        | 9         | 0     | 0 | 0           | 2,230  | 30.2 |
| Other hardwoods    | 1,636                                    | 979     | 830      | 414       | 246       | 119       | 18        | 34        | 48        | 9     | 0 | 0           | 4,333  | 19.2 |
| Total hardwoods    | 19,791                                   | 15,501  | 10,304   | 5,867     | 3,410     | 2,019     | 1,106     | 651       | 705       | 110   | 0 | 0           | 59,464 | 5.4  |
| All species        | 23,723                                   | 18,637  | 11,641   | 6,622     | 3,719     | 2,192     | 1,188     | 708       | 747       | 110   | 0 | 0           | 69,287 | 5.7  |
| SE                 | 8.6                                      | 9.4     | 7.1      | 7.0       | 8.0       | 8.1       | 11.2      | 13.5      | 14.2      | 25.2  | 0 | 0           | 5.7    |      |

Table 85.--Number of growing-stock trees (5.0+ inches d.b.h.) on timberland by species and diameter class, Western Unit, Maryland, 1999

(In thousands of trees)

| Species            | Diameter class (inches at breast height) |         |          |           |           |           |           |           |           |       |   | All classes | SE |        |      |
|--------------------|--|---------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-------|---|-------------|----|--------|------|
|                    | 5.0-6.9                                  | 7.0-8.9 | 9.0-10.9 | 11.0-12.9 | 13.0-14.9 | 15.0-16.9 | 17.0-18.9 | 19.0-20.9 | 21.0-28.9 | 29.0+ |   |             |    |        |      |
| White/red pine     | 1,912                                    | 2,757   | 1,297    | 425       | 77        | 0         | 25        | 0         | 0         | 0     | 0 | 0           | 0  | 6,494  | 55.9 |
| Virginia pine      | 231                                      | 232     | 133      | 97        | 0         | 61        | 0         | 0         | 0         | 0     | 0 | 0           | 0  | 755    | 51.2 |
| Other yellow pines | 59                                       | 118     | 29       | 29        | 37        | 0         | 0         | 0         | 0         | 0     | 0 | 0           | 0  | 272    | 87.6 |
| Other softwoods    | 558                                      | 563     | 195      | 158       | 81        | 68        | 75        | 0         | 0         | 0     | 0 | 0           | 0  | 1,698  | 39.9 |
| Total softwoods    | 2,761                                    | 3,670   | 1,655    | 711       | 195       | 129       | 99        | 0         | 0         | 0     | 0 | 0           | 0  | 9,219  | 40.1 |
| Red maple          | 4,297                                    | 1,846   | 902      | 730       | 942       | 240       | 123       | 49        | 172       | 0     | 0 | 0           | 0  | 9,302  | 15.0 |
| Sugar maple        | 1,766                                    | 1,415   | 681      | 621       | 134       | 85        | 25        | 0         | 72        | 73    | 0 | 0           | 0  | 4,871  | 22.4 |
| Hickory            | 1,033                                    | 541     | 455      | 224       | 134       | 122       | 37        | 0         | 29        | 0     | 0 | 0           | 0  | 2,575  | 22.4 |
| Beech              | 100                                      | 160     | 0        | 98        | 0         | 0         | 0         | 0         | 0         | 0     | 0 | 0           | 0  | 358    | 70.7 |
| Yellow-poplar      | 183                                      | 37      | 61       | 87        | 88        | 110       | 26        | 26        | 55        | 0     | 0 | 0           | 0  | 671    | 43.3 |
| Blackgum           | 451                                      | 158     | 73       | 37        | 0         | 49        | 0         | 0         | 0         | 0     | 0 | 0           | 0  | 768    | 38.4 |
| Ash-walnut-cherry  | 3,994                                    | 2,321   | 1,292    | 449       | 253       | 202       | 0         | 0         | 0         | 0     | 0 | 0           | 0  | 8,583  | 28.3 |
| Select white oaks  | 937                                      | 1,434   | 1,729    | 818       | 785       | 330       | 161       | 99        | 268       | 0     | 0 | 0           | 0  | 6,561  | 24.9 |
| Select red oaks    | 608                                      | 849     | 559      | 920       | 487       | 254       | 62        | 100       | 37        | 49    | 0 | 0           | 0  | 3,925  | 24.1 |
| Other white oaks   | 1,097                                    | 1,449   | 699      | 305       | 502       | 355       | 207       | 37        | 0         | 0     | 0 | 0           | 0  | 4,651  | 21.8 |
| Other red oaks     | 1,329                                    | 586     | 817      | 280       | 445       | 404       | 124       | 98        | 134       | 0     | 0 | 0           | 0  | 4,217  | 25.5 |
| Black locust       | 809                                      | 614     | 272      | 175       | 167       | 29        | 0         | 0         | 36        | 0     | 0 | 0           | 0  | 2,102  | 26.3 |
| Other hardwoods    | 1,945                                    | 860     | 614      | 198       | 305       | 72        | 85        | 0         | 72        | 37    | 0 | 0           | 0  | 4,187  | 22.0 |
| Total hardwoods    | 18,550                                   | 12,270  | 8,153    | 4,941     | 4,242     | 2,252     | 850       | 408       | 876       | 230   | 0 | 0           | 0  | 52,773 | 7.2  |
| All species        | 21,311                                   | 15,940  | 9,808    | 5,651     | 4,437     | 2,381     | 949       | 408       | 876       | 230   | 0 | 0           | 0  | 61,991 | 7.9  |
| SE                 | 9.5                                      | 13.5    | 12.4     | 11.0      | 13.6      | 14.3      | 24.5      | 43.1      | 25.7      | 46.4  | 0 | 0           | 0  | 7.9    |      |

Table 86.--Net volume of all live trees on timberland by species and diameter class, Western Unit, Maryland, 1986  
(In millions of cubic feet)

| Species                        | Diameter class (inches at breast height) |              |              |              |              |             |             |             |             |             | All classes | SE           |             |
|--------------------------------|--|--------------|--------------|--------------|--------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|-------------|
|                                | 5.0-6.9                                  | 7.0-8.9      | 9.0-10.9     | 11.0-12.9    | 13.0-14.9    | 15.0-16.9   | 17.0-18.9   | 19.0-20.9   | 21.0-28.9   | 29.0+       |             |              |             |
| White/red pine                 | 8.8                                      | 12.3         | 6.0          | 3.6          | 1.0          | .7          | .0          | .3          | .0          | .0          | .0          | 32.8         | 54.5        |
| Virginia pine                  | 1.6                                      | 3.4          | 5.5          | 4.0          | 1.9          | .2          | .0          | .0          | .0          | .0          | .0          | 16.6         | 39.5        |
| Other yellow pines             | .4                                       | 1.1          | 1.6          | 2.4          | 1.2          | .8          | .4          | .0          | .0          | .0          | .0          | 7.9          | 32.5        |
| Other softwoods                | 2.0                                      | 4.8          | 2.7          | 3.4          | 3.5          | 3.7         | 3.2         | 2.9         | 3.4         | .0          | .0          | 29.7         | 41.5        |
| <b>Total softwoods</b>         | <b>12.9</b>                              | <b>21.7</b>  | <b>15.8</b>  | <b>13.5</b>  | <b>7.6</b>   | <b>5.3</b>  | <b>3.6</b>  | <b>3.3</b>  | <b>3.4</b>  | <b>.0</b>   | <b>.0</b>   | <b>87.0</b>  | <b>27.4</b> |
| Red maple                      | 11.2                                     | 16.9         | 17.3         | 16.7         | 8.9          | 6.4         | 3.7         | 4.0         | 2.5         | .3          | .3          | 87.9         | 12.8        |
| Sugar maple                    | 6.5                                      | 7.9          | 9.2          | 8.2          | 4.8          | 6.8         | 2.9         | 5.9         | 4.4         | 3.4         | 3.4         | 60.1         | 18.5        |
| Hickory                        | 3.7                                      | 5.8          | 7.6          | 6.6          | 6.6          | 4.1         | 3.0         | .7          | .6          | .0          | .0          | 38.6         | 16.8        |
| Beech                          | .7                                       | 1.0          | 1.5          | 2.3          | 1.4          | .9          | 1.1         | .5          | .5          | .0          | .0          | 9.9          | 47.9        |
| Yellow-poplar                  | .9                                       | .3           | .2           | 1.7          | 2.8          | 1.3         | 1.1         | .3          | .0          | .0          | .0          | 8.6          | 41.9        |
| Blackgum                       | .7                                       | .5           | .9           | .3           | .5           | .9          | 1.8         | .4          | .0          | .0          | .0          | 6.0          | 28.5        |
| Ash-walnut-cherry              | 6.7                                      | 10.9         | 13.5         | 8.1          | 9.4          | 6.4         | 3.2         | 1.9         | .6          | 1.6         | 1.6         | 62.3         | 17.6        |
| Select white oaks              | 8.2                                      | 17.6         | 22.2         | 14.8         | 9.7          | 11.8        | 9.8         | 3.9         | 14.3        | 2.1         | 2.1         | 114.4        | 13.8        |
| Select red oaks                | 3.6                                      | 7.7          | 13.8         | 21.6         | 21.7         | 18.8        | 10.1        | 11.6        | 22.5        | 6.8         | 6.8         | 138.1        | 9.9         |
| Other white oaks               | 4.2                                      | 14.7         | 18.7         | 15.1         | 13.0         | 9.4         | 7.3         | 3.1         | 9.3         | 2.5         | 2.5         | 97.1         | 14.7        |
| Other red oaks                 | 1.7                                      | 6.7          | 8.2          | 9.3          | 6.9          | 6.3         | 6.3         | 5.4         | 7.0         | 4.9         | 4.9         | 62.7         | 13.6        |
| Blacklocust                    | 2.7                                      | 4.4          | 4.4          | 3.0          | 2.1          | 1.4         | 3.1         | 1.8         | .8          | .0          | .0          | 23.7         | 18.4        |
| Other hardwoods                | 5.2                                      | 6.9          | 11.7         | 8.0          | 7.4          | 3.9         | .8          | 2.1         | 5.2         | 2.7         | 2.7         | 53.7         | 19.9        |
| <b>Noncommercial hardwoods</b> | <b>2.4</b>                               | <b>3.6</b>   | <b>1.6</b>   | <b>1.1</b>   | <b>1.0</b>   | <b>.0</b>   | <b>.0</b>   | <b>.0</b>   | <b>.0</b>   | <b>.0</b>   | <b>.0</b>   | <b>9.7</b>   | <b>25.5</b> |
| <b>Total hardwoods</b>         | <b>58.1</b>                              | <b>105.0</b> | <b>131.0</b> | <b>116.7</b> | <b>96.2</b>  | <b>78.4</b> | <b>54.2</b> | <b>41.4</b> | <b>67.6</b> | <b>24.2</b> | <b>24.2</b> | <b>772.7</b> | <b>4.4</b>  |
| <b>All species</b>             | <b>71.0</b>                              | <b>126.6</b> | <b>146.8</b> | <b>130.2</b> | <b>103.8</b> | <b>83.7</b> | <b>57.8</b> | <b>44.7</b> | <b>71.0</b> | <b>24.2</b> | <b>24.2</b> | <b>859.7</b> | <b>4.2</b>  |
| SE                             | 8.9                                      | 9.6          | 6.6          | 6.7          | 7.9          | 8.0         | 11.1        | 13.1        | 14.0        | 20.4        | 20.4        | 4.2          | 4.2         |



Table 87.--Net volume of live trees on timberland by species and diameter class, Western Unit, Maryland, 1999

| Species                 | (in millions of cubic feet)              |             |              |               |               |               |               |               |               |       |       |    |       | All classes | SE   |
|-------------------------|--|-------------|--------------|---------------|---------------|---------------|---------------|---------------|---------------|-------|-------|----|-------|-------------|------|
|                         | Diameter class (inches at breast height) |             |              |               |               |               |               |               |               |       |       |    |       |             |      |
|                         | 5.0-<br>6.9                              | 7.0-<br>8.9 | 9.0-<br>10.9 | 11.0-<br>12.9 | 13.0-<br>14.9 | 15.0-<br>16.9 | 17.0-<br>18.9 | 19.0-<br>20.9 | 21.0-<br>28.9 | 29.0+ |       |    |       |             |      |
| White/red pine          | 7.6                                      | 21.3        | 16.6         | 8.0           | 1.8           | .0            | 1.2           | .0            | .0            | .0    | .0    | .0 | .0    | 56.4        | 53.0 |
| Virginia pine           | .8                                       | 1.3         | 1.9          | 1.4           | .0            | 1.6           | .0            | .0            | .0            | .0    | .0    | .0 | .0    | 7.0         | 45.1 |
| Other yellow pines      | .2                                       | .8          | .3           | .4            | .8            | .0            | .0            | .0            | .0            | .0    | .0    | .0 | .0    | 2.6         | 75.3 |
| Other softwoods         | 1.6                                      | 3.6         | 2.3          | 3.0           | 2.1           | 2.1           | 3.0           | .0            | .0            | .0    | .0    | .0 | .0    | 17.7        | 40.4 |
| Total softwoods         | 10.2                                     | 27.0        | 21.0         | 12.8          | 4.7           | 3.7           | 4.1           | .0            | .0            | .0    | .0    | .0 | .0    | 83.6        | 37.1 |
| Red maple               | 12.7                                     | 14.1        | 12.1         | 15.8          | 26.6          | 9.0           | 7.5           | 2.6           | 12.9          | .0    | 113.4 | .0 | 113.4 | 21.8        | 21.8 |
| Sugar maple             | 6.2                                      | 10.4        | 10.7         | 12.4          | 3.8           | 4.6           | 1.5           | .0            | 7.8           | 14.8  | 72.1  | .0 | 72.1  | 28.3        | 28.3 |
| Hickory                 | 3.3                                      | 3.9         | 6.1          | 4.7           | 4.1           | 4.7           | 2.4           | .0            | 2.4           | .0    | 31.6  | .0 | 31.6  | 23.1        | 23.1 |
| Beech                   | .4                                       | 1.2         | .0           | 2.1           | .0            | .0            | .0            | .0            | .0            | .0    | 3.7   | .0 | 3.7   | 82.7        | 82.7 |
| Yellow-poplar           | .4                                       | .3          | .9           | 2.4           | 2.9           | 5.0           | 1.4           | 2.0           | 4.7           | .0    | 20.0  | .0 | 20.0  | 51.6        | 51.6 |
| Blackgum                | 1.4                                      | .9          | .9           | .4            | .0            | 1.8           | .0            | .0            | .0            | .0    | 5.5   | .0 | 5.5   | 43.0        | 43.0 |
| Ash-walnut-cherry       | 14.0                                     | 18.7        | 18.3         | 11.2          | 7.4           | 10.4          | .0            | 1.2           | 1.5           | 5.6   | 88.3  | .0 | 88.3  | 26.4        | 26.4 |
| Select white oaks       | 3.2                                      | 10.5        | 21.7         | 15.1          | 22.0          | 11.7          | 8.7           | 6.4           | 19.3          | .0    | 118.8 | .0 | 118.8 | 21.4        | 21.4 |
| Select red oaks         | 1.7                                      | 5.5         | 6.5          | 15.5          | 13.1          | 10.4          | 3.3           | 6.6           | 2.9           | 7.8   | 73.4  | .0 | 73.4  | 25.2        | 25.2 |
| Other white oaks        | 3.2                                      | 8.9         | 7.6          | 5.0           | 12.4          | 10.7          | 7.6           | 1.9           | .0            | .0    | 57.1  | .0 | 57.1  | 21.5        | 21.5 |
| Other red oaks          | 3.8                                      | 3.7         | 8.7          | 5.0           | 12.5          | 16.1          | 5.2           | 5.6           | 13.9          | .0    | 74.6  | .0 | 74.6  | 23.7        | 23.7 |
| Blacklocust             | 2.5                                      | 4.3         | 4.6          | 3.6           | 4.5           | .5            | .0            | .0            | 1.4           | .0    | 21.4  | .0 | 21.4  | 28.4        | 28.4 |
| Other hardwoods         | 6.0                                      | 6.4         | 8.6          | 4.0           | 9.8           | 2.4           | 3.8           | .4            | 7.7           | 6.0   | 54.9  | .0 | 54.9  | 32.3        | 32.3 |
| Noncommercial hardwoods | 2.2                                      | 1.7         | 1.0          | .5            | .4            | 1.1           | .0            | .0            | .0            | .0    | 7.0   | .0 | 7.0   | 33.7        | 33.7 |
| Total hardwoods         | 60.9                                     | 90.3        | 107.7        | 98.0          | 119.5         | 88.5          | 41.5          | 26.7          | 74.5          | 34.2  | 741.8 | .0 | 741.8 | 7.8         | 7.8  |
| All species             | 71.1                                     | 117.4       | 128.7        | 110.8         | 124.2         | 92.2          | 45.6          | 26.7          | 74.5          | 34.2  | 825.5 | .0 | 825.5 | 7.1         | 7.1  |
| SE                      | 10.6                                     | 14.6        | 12.4         | 10.7          | 13.4          | 14.3          | 24.3          | 39.7          | 25.5          | 44.6  | 7.1   | .0 | 7.1   |             |      |

Table 88.--Net volume of growing-stock trees on timberland by species and diameter class, Western Unit, Maryland, 1986

(In millions of cubic feet)

| Species            | Diameter class (inches at breast height) |         |          |           |           |           |           |           |           |       | All classes | SE   |
|--------------------|--|---------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-------|-------------|------|
|                    | 5.0-6.9                                  | 7.0-8.9 | 9.0-10.9 | 11.0-12.9 | 13.0-14.9 | 15.0-16.9 | 17.0-18.9 | 19.0-20.9 | 21.0-28.9 | 29.0+ |             |      |
| White/red pine     | 8.8                                      | 12.1    | 5.8      | 3.5       | 1.0       | .7        | .0        | .3        | .0        | .0    | 32.3        | 55.1 |
| Virginia pine      | 1.5                                      | 3.3     | 5.5      | 3.9       | 1.9       | .2        | .0        | .0        | .0        | .0    | 16.3        | 40.1 |
| Other yellow pines | .4                                       | 1.0     | 1.4      | 2.3       | 1.2       | .8        | .4        | .0        | .0        | .0    | 7.6         | 32.7 |
| Other softwoods    | 2.0                                      | 4.8     | 2.5      | 3.2       | 3.5       | 3.7       | 3.2       | 2.9       | 3.4       | .0    | 29.3        | 41.7 |
| Total softwoods    | 12.8                                     | 21.3    | 15.2     | 12.9      | 7.6       | 5.3       | 3.6       | 3.3       | 3.4       | .0    | 85.4        | 27.5 |
| Red maple          | 10.2                                     | 15.5    | 15.2     | 16.2      | 8.7       | 6.2       | 3.7       | 3.6       | 1.7       | .0    | 81.0        | 13.4 |
| Sugar maple        | 6.3                                      | 7.4     | 8.4      | 8.0       | 4.6       | 6.8       | 2.4       | 5.5       | 3.5       | 1.7   | 54.5        | 19.1 |
| Hickory            | 3.6                                      | 5.7     | 7.4      | 6.5       | 6.6       | 4.1       | 2.9       | .7        | .6        | .0    | 38.0        | 17.0 |
| Beech              | .6                                       | .8      | 1.5      | 2.0       | 1.4       | .9        | 1.1       | .5        | .0        | .0    | 8.7         | 49.2 |
| Yellow-poplar      | .9                                       | .3      | .2       | 1.7       | 2.8       | 1.3       | 1.1       | .0        | .0        | .0    | 8.3         | 43.1 |
| Blackgum           | .6                                       | .5      | .9       | .3        | .5        | .7        | 1.8       | .4        | .0        | .0    | 5.8         | 29.6 |
| Ash-walnut-cherry  | 5.5                                      | 9.9     | 12.2     | 7.4       | 8.3       | 6.4       | 3.2       | 1.9       | .6        | 1.6   | 57.0        | 18.8 |
| Select white oaks  | 7.8                                      | 17.3    | 21.6     | 14.8      | 9.7       | 10.6      | 9.8       | 3.9       | 13.0      | 1.2   | 109.7       | 13.8 |
| Select red oaks    | 3.4                                      | 7.3     | 13.8     | 21.6      | 21.2      | 17.9      | 9.8       | 11.2      | 21.7      | 5.2   | 133.2       | 10.2 |
| Other white oaks   | 3.9                                      | 14.1    | 17.7     | 14.5      | 12.8      | 8.4       | 6.8       | 3.1       | 7.9       | 2.0   | 91.3        | 14.4 |
| Other red oaks     | 1.6                                      | 6.6     | 8.1      | 9.2       | 6.7       | 6.3       | 6.3       | 4.9       | 6.5       | 3.9   | 60.2        | 13.9 |
| Black locust       | 2.2                                      | 3.5     | 3.1      | 1.9       | 1.6       | .7        | 2.6       | 1.5       | .6        | .0    | 17.7        | 20.7 |
| Other hardwoods    | 4.9                                      | 6.4     | 11.2     | 8.0       | 6.9       | 3.9       | .8        | 2.1       | 4.3       | 1.7   | 50.0        | 20.5 |
| Total hardwoods    | 51.4                                     | 95.3    | 121.5    | 112.0     | 91.8      | 74.4      | 52.2      | 39.3      | 60.2      | 17.4  | 715.5       | 4.6  |
| All species        | 64.2                                     | 116.6   | 136.7    | 124.9     | 99.4      | 79.7      | 55.8      | 42.6      | 63.6      | 17.4  | 800.9       | 4.4  |
| SE                 | 9.8                                      | 10.4    | 7.0      | 7.0       | 8.2       | 8.1       | 11.1      | 13.6      | 14.7      | 25.1  | 4.4         |      |

Table 89.--Net volume of growing-stock trees on timberland by species and diameter class, Western Unit, Maryland, 1999

(In millions of cubic feet)

| Species            | Diameter class (inches at breast height) |         |          |           |           |           |           |           |           |       | All classes | SE    |      |
|--------------------|--|---------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-------|-------------|-------|------|
|                    | 5.0-6.9                                  | 7.0-8.9 | 9.0-10.9 | 11.0-12.9 | 13.0-14.9 | 15.0-16.9 | 17.0-18.9 | 19.0-20.9 | 21.0-28.9 | 29.0+ |             |       |      |
| White/red pine     | 7.5                                      | 21.3    | 16.3     | 8.0       | 1.8       | .0        | 1.2       | .0        | .0        | .0    | .0          | 56.1  | 52.9 |
| Virginia pine      | .7                                       | 1.3     | 1.7      | 1.4       | .0        | 1.6       | .0        | .0        | .0        | .0    | .0          | 6.6   | 44.8 |
| Other yellow pines | .2                                       | .8      | .3       | .4        | .8        | .0        | .0        | .0        | .0        | .0    | .0          | 2.6   | 75.3 |
| Other softwoods    | 1.6                                      | 3.5     | 2.0      | 3.0       | 2.1       | 2.1       | 3.0       | .0        | .0        | .0    | .0          | 17.3  | 41.2 |
| Total softwoods    | 10.0                                     | 26.9    | 20.3     | 12.8      | 4.7       | 3.7       | 4.1       | .0        | .0        | .0    | .0          | 82.6  | 37.4 |
| Red maple          | 12.3                                     | 13.2    | 12.0     | 14.7      | 26.1      | 8.3       | 5.7       | 2.6       | 11.4      | .0    | .0          | 106.3 | 22.0 |
| Sugar maple        | 6.0                                      | 10.1    | 9.7      | 12.4      | 3.8       | 3.5       | 1.5       | .0        | 7.8       | 14.8  | .0          | 69.6  | 29.0 |
| Hickory            | 3.2                                      | 3.9     | 6.1      | 4.7       | 4.1       | 4.7       | 2.4       | .0        | 2.4       | .0    | .0          | 31.6  | 23.2 |
| Beech              | .4                                       | 1.2     | .0       | 1.6       | .0        | .0        | .0        | .0        | .0        | .0    | .0          | 3.2   | 80.3 |
| Yellow-poplar      | .4                                       | .3      | .7       | 2.2       | 2.9       | 5.0       | 1.4       | 2.0       | 4.7       | .0    | .0          | 19.6  | 51.6 |
| Blackgum           | 1.3                                      | .9      | .9       | .4        | .0        | 1.8       | .0        | .0        | .0        | .0    | .0          | 5.5   | 43.6 |
| Ash-walnut-cherry  | 13.5                                     | 17.7    | 17.7     | 9.3       | 7.0       | 7.8       | .0        | .0        | .0        | 5.6   | .0          | 78.5  | 27.5 |
| Select white oaks  | 3.1                                      | 10.3    | 21.7     | 15.1      | 22.0      | 11.7      | 8.7       | 6.4       | 19.3      | .0    | .0          | 118.5 | 21.4 |
| Select red oaks    | 1.6                                      | 5.5     | 6.5      | 15.5      | 13.1      | 9.3       | 3.3       | 6.6       | 2.9       | 7.8   | .0          | 72.3  | 25.2 |
| Other white oaks   | 3.0                                      | 8.8     | 7.1      | 5.0       | 11.8      | 10.7      | 7.6       | 1.9       | .0        | .0    | .0          | 55.8  | 21.7 |
| Other red oaks     | 3.6                                      | 3.7     | 8.7      | 5.0       | 11.9      | 16.1      | 5.2       | 5.6       | 11.0      | .0    | .0          | 70.8  | 24.6 |
| Black locust       | 2.2                                      | 4.2     | 3.9      | 3.1       | 4.2       | .5        | .0        | .0        | 1.4       | .0    | .0          | 19.5  | 30.4 |
| Other hardwoods    | 5.5                                      | 6.2     | 8.6      | 3.8       | 9.3       | 2.4       | 3.8       | .0        | 7.7       | 6.0   | .0          | 53.2  | 33.1 |
| Total hardwoods    | 56.2                                     | 85.9    | 103.7    | 93.0      | 116.0     | 81.9      | 39.6      | 25.2      | 68.6      | 34.2  | .0          | 704.3 | 8.0  |
| All species        | 66.2                                     | 112.8   | 124.0    | 105.9     | 120.7     | 85.5      | 43.8      | 25.2      | 68.6      | 34.2  | .0          | 786.8 | 7.3  |
| SE                 | 11.1                                     | 15.2    | 12.7     | 11.0      | 13.8      | 14.2      | 25.4      | 42.2      | 26.8      | 44.6  | .0          | 7.3   |      |

Table 90.--Net volume of sawtimber trees on timberland by species and diameter class, Western Unit, Maryland, 1986

(In millions of board feet)

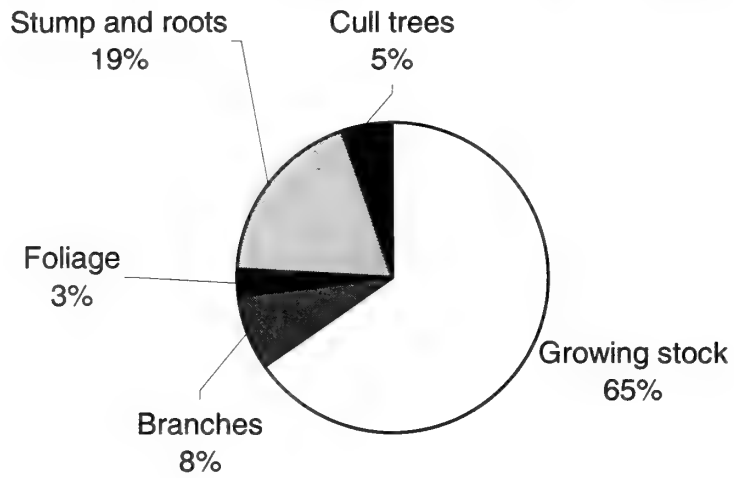
| Species                 | Diameter class (inches at breast height) |              |              |              |              |              |              |             | All classes    | SE          |
|-------------------------|--|--------------|--------------|--------------|--------------|--------------|--------------|-------------|----------------|-------------|
|                         | 9.0-10.9                                 | 11.0-12.9    | 13.0-14.9    | 15.0-16.9    | 17.0-18.9    | 19.0-20.9    | 21.0-28.9    | 29.0+       |                |             |
| White/red pine          | 19.2                                     | 14.0         | 4.5          | 2.9          | .0           | 1.7          | .0           | .0          | 42.3           | 51.1        |
| Virginia pine           | 17.1                                     | 14.9         | 8.0          | .9           | .0           | .0           | .0           | .0          | 40.9           | 52.1        |
| Other yellow pines      | 4.6                                      | 9.0          | 5.3          | 3.4          | 1.8          | .0           | .0           | .0          | 24.1           | 37.6        |
| Other softwoods         | 6.7                                      | 11.6         | 11.4         | 15.1         | 14.7         | 14.1         | 16.8         | .0          | 90.4           | 53.0        |
| <b>Total softwoods.</b> | <b>47.7</b>                              | <b>49.4</b>  | <b>29.3</b>  | <b>22.3</b>  | <b>16.5</b>  | <b>15.8</b>  | <b>16.8</b>  | <b>.0</b>   | <b>197.8</b>   | <b>30.1</b> |
| Red maple               | .0                                       | 55.7         | 33.6         | 23.9         | 15.6         | 15.5         | 8.4          | .0          | 152.8          | 17.8        |
| Sugar maple             | .0                                       | 28.5         | 16.3         | 26.7         | 9.5          | 24.6         | 18.3         | 7.2         | 131.1          | 23.3        |
| Hickory                 | .0                                       | 22.2         | 25.3         | 16.4         | 12.7         | 3.2          | 2.6          | .0          | 82.4           | 20.4        |
| Beech                   | .0                                       | 7.3          | 5.6          | 3.6          | 4.7          | 2.2          | .0           | .0          | 23.5           | 45.1        |
| Yellow-poplar           | .0                                       | 6.0          | 11.3         | 5.4          | 5.0          | .0           | .0           | .0          | 27.9           | 44.3        |
| Blackgum                | .0                                       | .9           | 1.7          | 3.1          | 7.6          | 1.9          | .0           | .0          | 15.3           | 40.1        |
| Ash-walnut-cherry       | .0                                       | 25.5         | 31.6         | 24.5         | 13.7         | 6.8          | 2.7          | 8.0         | 112.8          | 20.4        |
| Select white oaks       | .0                                       | 52.2         | 38.5         | 45.4         | 42.9         | 16.7         | 60.9         | 5.8         | 262.5          | 15.4        |
| Select red oaks         | .0                                       | 74.1         | 81.9         | 75.8         | 43.0         | 50.7         | 107.9        | 25.7        | 459.1          | 11.9        |
| Other white oaks        | .0                                       | 50.9         | 46.5         | 31.5         | 27.2         | 11.8         | 35.7         | 9.0         | 212.6          | 17.9        |
| Other red oaks          | .0                                       | 30.9         | 25.7         | 26.4         | 27.0         | 22.2         | 32.5         | 17.8        | 182.6          | 15.1        |
| Black locust            | .0                                       | 6.6          | 6.3          | 2.8          | 11.1         | 6.6          | 2.6          | .0          | 35.9           | 26.7        |
| Other hardwoods         | .0                                       | 29.8         | 28.6         | 17.7         | 3.6          | 9.2          | 18.7         | 8.3         | 115.8          | 22.3        |
| <b>Total hardwoods</b>  | <b>.0</b>                                | <b>390.7</b> | <b>352.9</b> | <b>303.4</b> | <b>223.7</b> | <b>171.4</b> | <b>290.4</b> | <b>81.8</b> | <b>1,814.3</b> | <b>6.0</b>  |
| <b>All species</b>      | <b>47.7</b>                              | <b>440.1</b> | <b>382.3</b> | <b>325.7</b> | <b>240.2</b> | <b>187.2</b> | <b>307.2</b> | <b>81.8</b> | <b>2,012.2</b> | <b>5.9</b>  |
| SE                      | 29.2                                     | 7.1          | 8.2          | 8.0          | 11.2         | 13.7         | 15.0         | 25.0        | 5.9            |             |

Table 91.--Net volume of sawtimber trees on timberland by species and diameter class, Western Unit, Maryland, 1999

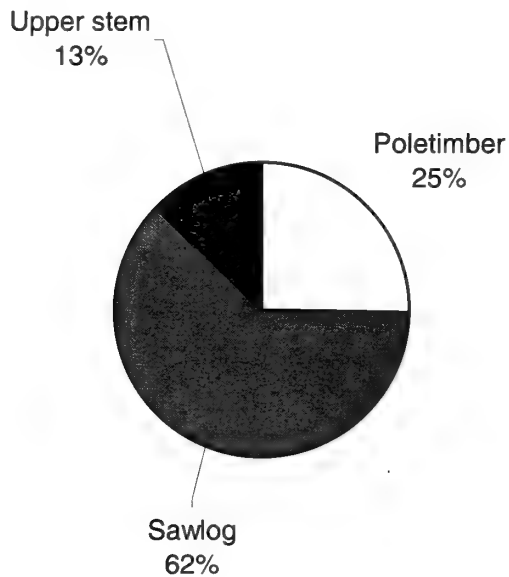
(In millions of board feet)

| Species            | Diameter class (inches at breast height) |               |               |               |               |               |               |       |       |       | All classes | SE    |
|--------------------|--|---------------|---------------|---------------|---------------|---------------|---------------|-------|-------|-------|-------------|-------|
|                    | 9.0-<br>10.9                             | 11.0-<br>12.9 | 13.0-<br>14.9 | 15.0-<br>16.9 | 17.0-<br>18.9 | 19.0-<br>20.9 | 21.0-<br>28.9 | 29.0+ |       |       |             |       |
| White/red pine     | 56.0                                     | 34.6          | 8.1           | .0            | 6.2           | .0            | .0            | .0    | .0    | .0    | 104.9       | 45.2  |
| Virginia pine      | 5.5                                      | 5.9           | .0            | 6.2           | .0            | .0            | .0            | .0    | .0    | .0    | 17.6        | 45.5  |
| Other yellow pines | 1.0                                      | 1.7           | 3.5           | .0            | .0            | .0            | .0            | .0    | .0    | .0    | 6.2         | 71.5  |
| Other softwoods    | 6.3                                      | 11.8          | 9.3           | 9.6           | 12.6          | .0            | .0            | .0    | .0    | .0    | 49.6        | 46.0  |
| Total softwoods    | 68.8                                     | 53.9          | 21.0          | 15.8          | 18.8          | .0            | .0            | .0    | .0    | .0    | 178.3       | 32.7  |
| Red maple          | .0                                       | 58.2          | 108.3         | 30.7          | 29.5          | 10.3          | 57.8          | .0    | .0    | .0    | 294.8       | 30.6  |
| Sugar maple        | .0                                       | 48.0          | 13.4          | 13.9          | 5.5           | .0            | 37.3          | 48.9  | .0    | .0    | 167.1       | 40.6  |
| Hickory            | .0                                       | 19.3          | 16.4          | 21.7          | 9.3           | .0            | 11.9          | .0    | .0    | .0    | 78.4        | 30.6  |
| Beech              | .0                                       | 6.1           | .0            | .0            | .0            | .0            | .0            | .0    | .0    | .0    | 6.1         | 100.0 |
| Yellow-poplar      | .0                                       | 8.5           | 12.2          | 20.4          | 4.5           | 8.6           | 19.0          | .0    | .0    | .0    | 73.1        | 54.5  |
| Blackgum           | .0                                       | 1.5           | .0            | 9.0           | .0            | .0            | .0            | .0    | .0    | .0    | 10.5        | 87.3  |
| Ash-walnut-cherry  | .0                                       | 32.9          | 28.9          | 32.5          | .0            | .0            | .0            | 30.9  | .0    | .0    | 125.1       | 32.7  |
| Select white oaks  | .0                                       | 60.1          | 95.7          | 55.0          | 33.9          | 29.1          | 80.9          | .0    | .0    | .0    | 354.8       | 22.7  |
| Select red oaks    | .0                                       | 59.1          | 52.9          | 38.3          | 16.1          | 32.0          | 14.4          | 44.4  | .0    | .0    | 257.3       | 30.0  |
| Other white oaks   | .0                                       | 18.4          | 42.8          | 41.3          | 26.7          | 6.7           | .0            | .0    | .0    | .0    | 136.0       | 27.5  |
| Other red oaks     | .0                                       | 19.7          | 48.6          | 67.3          | 21.4          | 28.2          | 58.7          | .0    | .0    | .0    | 243.9       | 31.6  |
| Black locust       | .0                                       | 10.7          | 12.9          | 2.1           | .0            | .0            | 6.6           | .0    | .0    | .0    | 32.2        | 36.9  |
| Other hardwoods    | .0                                       | 14.9          | 41.4          | 11.9          | 15.8          | .0            | 36.7          | 30.7  | .0    | .0    | 151.4       | 42.7  |
| Total hardwoods    | .0                                       | 357.4         | 473.3         | 344.2         | 162.7         | 115.0         | 323.3         | 154.9 | .0    | .0    | 1,930.7     | 10.6  |
| All species        | 68.8                                     | 411.3         | 494.3         | 359.9         | 181.5         | 115.0         | 323.3         | 154.9 | 154.9 | 154.9 | 2,109.0     | 9.4   |
| SE                 | 48.7                                     | 11.3          | 14.1          | 14.5          | 26.1          | 42.2          | 27.4          | 46.0  | 46.0  | 46.0  | 9.4         |       |

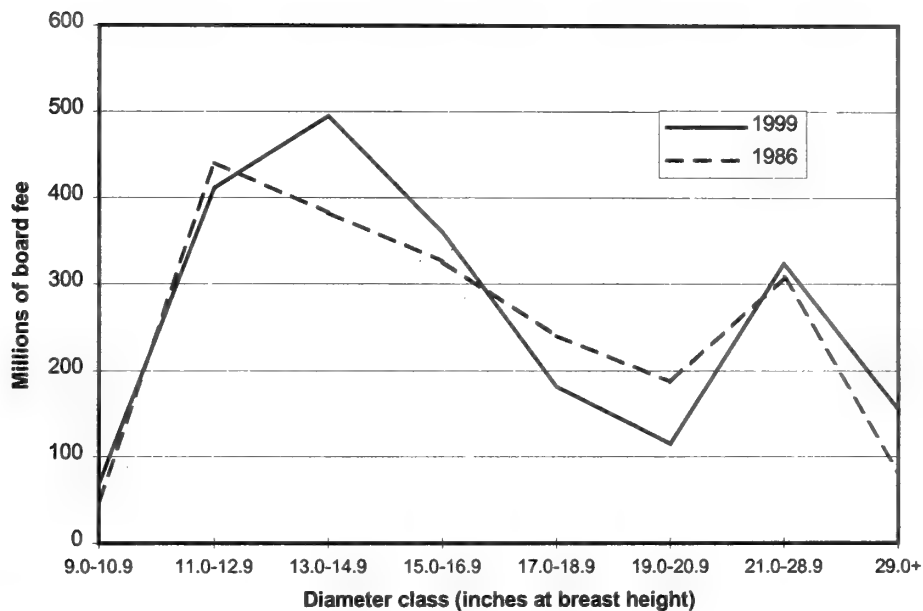
## Biomass of all timber on timberland by class of timber and component, Maryland, 1999



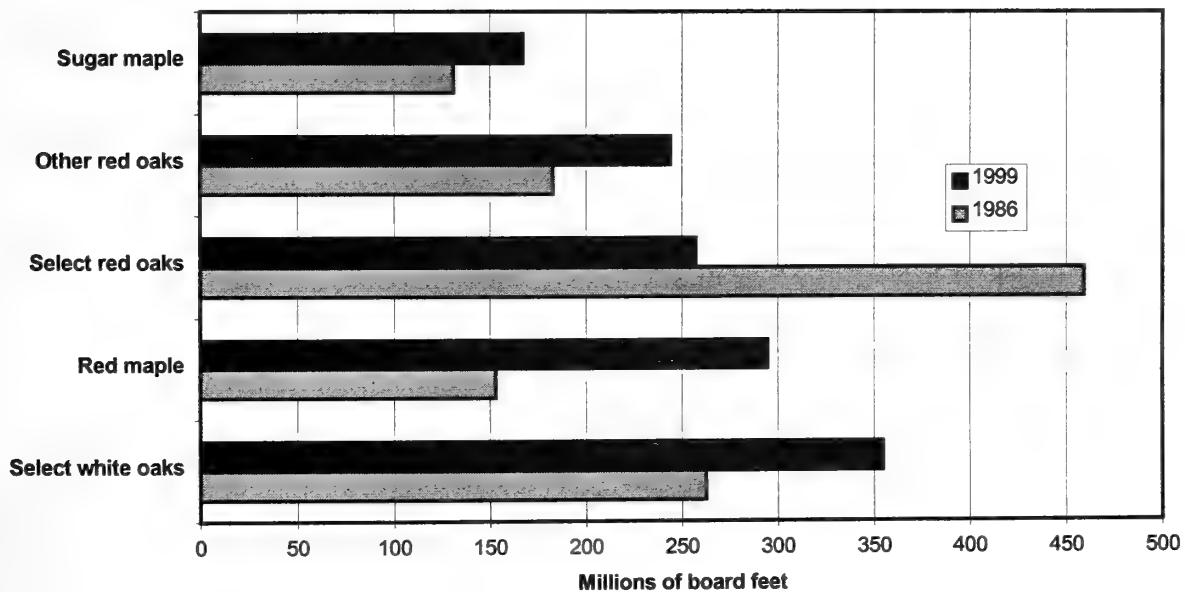
## Biomass of growing stock on timberland by component, Maryland, 1999



## Net volume of sawtimber trees on timberland, Western Unit, Maryland, 1986 and 1999



## Net volume of sawtimber trees on timberland, top 5 species, Western Unit, Maryland, 1986 and 1999



# MARYLAND COUNTY TABLES

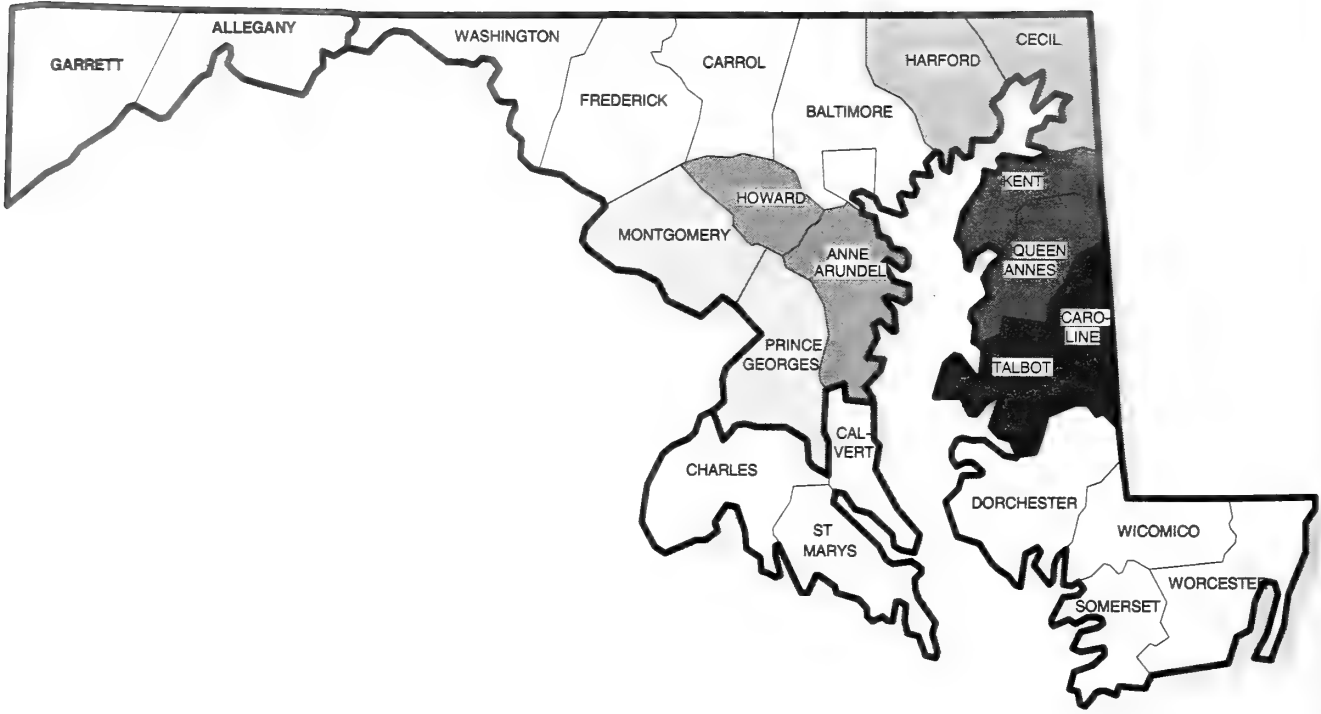




Table 92.--Land area by county and land class, Maryland, 1999  
(In thousands of acres)

| County                    | Land class        |       |                   |       |                   |    |                     |    |              |         | All classes |                   |                |
|---------------------------|-------------------|-------|-------------------|-------|-------------------|----|---------------------|----|--------------|---------|-------------|-------------------|----------------|
|                           | Timberland: Rural |       | Timberland: Urban |       | Timberland: Total |    | Reserved productive |    | Other forest |         |             | Total forest land | Nonforest land |
|                           |                   |       |                   |       |                   |    |                     |    |              |         |             |                   |                |
| Baltimore                 | 75.1              | 23.7  | 98.7              | 18.5  | .0                | .0 | .0                  | .0 | .0           | 117.3   | 317.6       | 434.8             |                |
| Carroll                   | 52.3              | 10.9  | 63.2              | .0    | .0                | .0 | .0                  | .0 | .0           | 63.2    | 224.2       | 287.5             |                |
| Frederick                 | 93.7              | .0    | 93.7              | 33.6  | .0                | .0 | .0                  | .0 | .0           | 127.3   | 297.0       | 424.3             |                |
| Washington                | 86.1              | .0    | 86.1              | 21.4  | .0                | .0 | .0                  | .0 | .0           | 107.5   | 185.7       | 293.2             |                |
| Anne Arundel/Howard       | 95.9              | 26.6  | 122.6             | 19.6  | .0                | .0 | .0                  | .0 | .0           | 142.1   | 285.5       | 427.6             |                |
| Caroline/Talbot           | 107.3             | .0    | 107.3             | .0    | .0                | .0 | .0                  | .0 | .0           | 107.3   | 269.9       | 377.2             |                |
| Cecil/Harford             | 151.4             | 22.8  | 174.2             | .0    | 1.7               | .0 | .0                  | .0 | .0           | 176.0   | 328.7       | 504.7             |                |
| Kent/Queen Annes          | 101.8             | .0    | 101.8             | .0    | .0                | .0 | .0                  | .0 | .0           | 101.8   | 315.2       | 417.1             |                |
| Montgomery/Prince Georges | 154.2             | 35.3  | 189.5             | 38.2  | 7.5               | .0 | .0                  | .0 | .0           | 235.2   | 392.7       | 627.8             |                |
| Central Unit              | 917.9             | 119.3 | 1,037.2           | 131.3 | 9.2               | .0 | .0                  | .0 | .0           | 1,177.7 | 2,616.4     | 3,794.1           |                |
| Calvert                   | 63.3              | 12.6  | 75.8              | .0    | .0                | .0 | .0                  | .0 | .0           | 75.8    | 61.9        | 137.7             |                |
| Charles                   | 195.0             | 2.0   | 197.0             | .0    | .0                | .0 | .0                  | .0 | .0           | 197.0   | 98.1        | 295.1             |                |
| St. Mary's                | 103.9             | 4.6   | 108.5             | .0    | .0                | .0 | .0                  | .0 | .0           | 108.5   | 122.7       | 231.2             |                |
| Southern Unit             | 362.2             | 19.1  | 381.3             | .0    | .0                | .0 | .0                  | .0 | .0           | 381.3   | 282.7       | 664.0             |                |
| Dorchester                | 132.8             | .0    | 132.8             | .0    | 4.8               | .0 | .0                  | .0 | .0           | 137.6   | 219.2       | 356.9             |                |
| Somerset                  | 87.8              | .0    | 87.8              | .0    | .0                | .0 | .0                  | .0 | .0           | 87.8    | 121.6       | 209.4             |                |
| Wicomico                  | 115.4             | .0    | 115.4             | .0    | .0                | .0 | .0                  | .0 | .0           | 115.4   | 126.0       | 241.4             |                |
| Worcester                 | 156.7             | .0    | 156.7             | .0    | .0                | .0 | .0                  | .0 | .0           | 156.7   | 146.2       | 302.9             |                |
| Lower Eastern Shore       | 492.8             | .0    | 492.8             | .0    | 4.8               | .0 | .0                  | .0 | .0           | 497.6   | 613.0       | 1,110.6           |                |
| Allegany                  | 175.2             | .0    | 175.2             | 36.1  | .0                | .0 | .0                  | .0 | .0           | 211.4   | 60.9        | 272.2             |                |
| Garrett                   | 285.4             | .0    | 285.4             | 12.4  | .0                | .0 | .0                  | .0 | .0           | 297.8   | 117.0       | 414.8             |                |
| Western Unit              | 460.6             | .0    | 460.6             | 48.5  | .0                | .0 | .0                  | .0 | .0           | 509.1   | 177.9       | 687.0             |                |
| All counties              | 2,233.5           | 138.5 | 2,371.9           | 179.8 | 14.1              | .0 | .0                  | .0 | .0           | 2,565.8 | 3,690.0     | 6,255.8           |                |

Table 93.--Area of all forest land by county and forest-type group, Maryland, 1999  
(In thousands of acres)

| County                    | Forest-type group |            |                    |          |             |                 |                   |                    |             |         |      | All type groups | SE |
|---------------------------|-------------------|------------|--------------------|----------|-------------|-----------------|-------------------|--------------------|-------------|---------|------|-----------------|----|
|                           | White/red pine    | Spruce/fir | Loblolly/shortleaf | Oak/pine | Oak/hickory | Oak/gum/cypress | Elm/ash/red maple | Northern hardwoods | Aspen/birch |         |      |                 |    |
| Baltimore                 | .0                | .0         | 5.8                | .0       | 85.9        | .0              | 1.8               | 21.9               | 1.8         | 117.3   | 9.3  |                 |    |
| Carroll                   | 2.9               | .0         | .0                 | .0       | 46.2        | .0              | .0                | 14.2               | .0          | 63.2    | 14.3 |                 |    |
| Frederick                 | .0                | .0         | .0                 | .0       | 120.4       | .0              | 6.9               | .0                 | .0          | 127.3   | 5.8  |                 |    |
| Washington                | 5.3               | .0         | .0                 | 10.7     | 70.2        | .0              | 5.3               | 16.1               | .0          | 107.5   | 7.4  |                 |    |
| Anne Arundel/Howard       | 1.0               | .0         | 18.6               | 4.3      | 100.3       | .0              | 13.9              | 4.1                | .0          | 142.1   | 9.3  |                 |    |
| Caroline/Talbot           | .0                | .0         | 35.4               | 16.0     | 45.9        | 5.3             | 4.8               | .0                 | .0          | 107.3   | 7.6  |                 |    |
| Cecil/Harford             | .0                | .0         | .0                 | 3.0      | 145.0       | .0              | 10.5              | 17.4               | .0          | 176.0   | 7.4  |                 |    |
| Kent/Queen Annes          | .0                | .0         | 3.0                | 15.8     | 65.4        | 6.5             | 8.9               | 2.2                | .0          | 101.8   | 7.0  |                 |    |
| Montgomery/Prince Georges | .0                | 1.2        | 1.4                | 23.3     | 176.3       | 17.4            | 15.6              | .0                 | .0          | 235.2   | 5.3  |                 |    |
| Central Unit              | 9.2               | 1.2        | 64.1               | 73.1     | 855.5       | 29.3            | 67.7              | 76.0               | 1.8         | 1,177.7 | 2.6  |                 |    |
| Calvert                   | .0                | .0         | .0                 | 5.1      | 56.0        | 6.0             | 8.7               | .0                 | .0          | 75.8    | 6.5  |                 |    |
| Charles                   | .0                | .0         | 7.9                | 24.2     | 130.2       | 20.1            | 4.1               | 10.5               | .0          | 197.0   | 4.2  |                 |    |
| St. Mary's                | .0                | .0         | 29.5               | 19.5     | 53.0        | 6.4             | .0                | .0                 | .0          | 108.5   | 6.0  |                 |    |
| Southern Unit             | .0                | .0         | 37.4               | 48.9     | 239.2       | 32.5            | 12.8              | 10.5               | .0          | 381.3   | 3.1  |                 |    |
| Dorchester                | .0                | .0         | 50.8               | 27.7     | 20.7        | 29.9            | 8.6               | .0                 | .0          | 137.6   | 5.5  |                 |    |
| Somerset                  | .0                | .0         | 67.5               | 1.3      | 16.3        | .0              | 2.6               | .0                 | .0          | 87.8    | 8.2  |                 |    |
| Wicomico                  | .0                | .0         | 23.2               | 20.4     | 56.8        | 15.2            | .0                | .0                 | .0          | 115.4   | 4.9  |                 |    |
| Worcester                 | .0                | .0         | 37.2               | 58.2     | 23.7        | 25.6            | 12.0              | .0                 | .0          | 156.7   | 7.4  |                 |    |
| Lower Eastern Shore       | .0                | .0         | 178.7              | 107.6    | 117.5       | 70.6            | 23.2              | .0                 | .0          | 497.6   | 3.3  |                 |    |
| Allegany                  | .0                | .0         | 14.4               | .0       | 144.3       | .0              | 12.1              | 40.5               | .0          | 211.4   | 4.5  |                 |    |
| Garrett                   | 15.5              | 3.2        | .0                 | .0       | 161.9       | .0              | 20.1              | 97.1               | .0          | 297.8   | 2.3  |                 |    |
| Western Unit              | 15.5              | 3.2        | 14.4               | .0       | 306.2       | .0              | 32.2              | 137.7              | .0          | 509.1   | 2.3  |                 |    |
| All counties              | 24.7              | 4.4        | 294.6              | 229.6    | 1,518.4     | 132.3           | 135.8             | 224.2              | 1.8         | 2,565.8 | 1.5  |                 |    |
| SE                        | 42.3              | 78.2       | 10.9               | 14.4     | 3.8         | 19.4            | 19.8              | 14.8               | 100.0       | 1.5     |      |                 |    |

Table 94.--Area of all forest land by county and stand-size class, Maryland, 1999

(In thousands of acres)

| County                    | Stand-size class |             |                      |             | All classes | SE   |
|---------------------------|------------------|-------------|----------------------|-------------|-------------|------|
|                           | Saw-timber       | Pole-timber | Sapling and seedling | Non-stocked |             |      |
| Baltimore                 | 89.1             | 12.1        | 16.1                 | .0          | 117.3       | 9.3  |
| Carroll                   | 54.6             | 8.6         | .0                   | .0          | 63.2        | 14.3 |
| Frederick                 | 100.1            | 20.8        | .0                   | 6.4         | 127.3       | 5.8  |
| Washington                | 85.4             | 5.3         | 10.0                 | 6.8         | 107.5       | 7.4  |
| Anne Arundel/Howard       | 93.2             | 33.3        | 12.8                 | 2.8         | 142.1       | 9.3  |
| Caroline/Talbot           | 40.4             | 29.8        | 35.5                 | 1.5         | 107.3       | 7.6  |
| Cecil/Harford             | 134.6            | 32.6        | 8.7                  | .0          | 176.0       | 7.4  |
| Kent/Queen Annes          | 76.0             | 17.4        | 8.4                  | .0          | 101.8       | 7.0  |
| Montgomery/Prince Georges | 169.3            | 34.9        | 22.1                 | 8.9         | 235.2       | 5.3  |
| Central Unit              | 842.7            | 194.8       | 113.8                | 26.5        | 1,177.7     | 2.6  |
| Calvert                   | 62.0             | 4.6         | 9.2                  | .0          | 75.8        | 6.5  |
| Charles                   | 140.3            | 38.8        | 17.8                 | .0          | 197.0       | 4.2  |
| St. Mary's                | 97.3             | 10.3        | .9                   | .0          | 108.5       | 6.0  |
| Southern Unit             | 299.7            | 53.7        | 27.9                 | .0          | 381.3       | 3.1  |
| Dorchester                | 79.7             | 39.0        | 19.0                 | .0          | 137.6       | 5.5  |
| Somerset                  | 36.4             | 27.0        | 24.4                 | .0          | 87.8        | 8.2  |
| Wicomico                  | 79.6             | 9.0         | 25.3                 | 1.6         | 115.4       | 4.9  |
| Worcester                 | 74.9             | 66.4        | 15.4                 | .0          | 156.7       | 7.4  |
| Lower Eastern Shore       | 270.5            | 141.5       | 84.0                 | 1.6         | 497.6       | 3.3  |
| Allegany                  | 118.3            | 62.5        | 30.5                 | .0          | 211.4       | 4.5  |
| Garrett                   | 184.4            | 87.9        | 24.6                 | .9          | 297.8       | 2.3  |
| Western Unit              | 302.8            | 150.4       | 55.1                 | .9          | 509.1       | 2.3  |
| All counties              | 1,715.6          | 540.5       | 280.7                | 28.9        | 2,565.8     | 1.5  |
| SE                        | 3.2              | 9.1         | 12.9                 | 34.6        | 1.5         |      |

Table 95.--Area of timberland by county and ownership class, Maryland, 1999

(In thousands of acres)

| County                    | Ownership class |              |                 |               | All classes | SE   |
|---------------------------|-----------------|--------------|-----------------|---------------|-------------|------|
|                           | National Forest | Other public | Forest industry | Other private |             |      |
| Baltimore                 | .0              | 22.5         | .0              | 76.2          | 98.7        | 12.5 |
| Carroll                   | .0              | 4.4          | .0              | 58.9          | 63.2        | 14.3 |
| Frederick                 | .0              | 11.4         | .0              | 82.3          | 93.7        | 15.3 |
| Washington                | .0              | 12.2         | 5.3             | 68.6          | 86.1        | 13.6 |
| Anne Arundel/Howard       | .0              | 14.1         | .0              | 108.4         | 122.6       | 12.1 |
| Caroline/Talbot           | .0              | .0           | 4.4             | 102.9         | 107.3       | 7.6  |
| Cecil/Harford             | .0              | 26.5         | .0              | 147.7         | 174.2       | 7.5  |
| Kent/Queen Annes          | .0              | 9.7          | .0              | 92.1          | 101.8       | 7.0  |
| Montgomery/Prince Georges | .0              | 52.6         | .0              | 136.9         | 189.5       | 8.9  |
| Central Unit              | .0              | 153.4        | 9.7             | 874.1         | 1,037.2     | 3.6  |
| Calvert                   | .0              | .0           | .0              | 75.8          | 75.8        | 6.5  |
| Charles                   | .0              | 33.5         | .0              | 163.4         | 197.0       | 4.2  |
| St. Mary's                | .0              | 22.4         | .0              | 86.1          | 108.5       | 6.0  |
| Southern Unit             | .0              | 55.9         | .0              | 325.4         | 381.3       | 3.1  |
| Dorchester                | .0              | 7.9          | 31.8            | 93.1          | 132.8       | 6.3  |
| Somerset                  | .0              | 8.3          | 25.5            | 54.1          | 87.8        | 8.2  |
| Wicomico                  | .0              | 10.8         | 3.2             | 101.5         | 115.4       | 4.9  |
| Worcester                 | .0              | 13.4         | 17.8            | 125.4         | 156.7       | 7.4  |
| Lower Eastern Shore       | .0              | 40.4         | 78.3            | 374.0         | 492.8       | 3.4  |
| Allegany                  | .0              | 65.0         | .0              | 110.2         | 175.2       | 8.4  |
| Garrett                   | .0              | 106.8        | .0              | 178.6         | 285.4       | 3.9  |
| Western Unit              | .0              | 171.8        | .0              | 288.8         | 460.6       | 4.0  |
| All counties              | .0              | 421.6        | 88.0            | 1,862.3       | 2,371.9     | 1.9  |
| SE                        | .0              | 10.7         | 24.6            | 3.2           | 1.9         |      |

Table 96.---Area of timberland by county and forest-type group, Maryland, 1999  
(In thousands of acres)

| County                    | Forest-type group |            |                    |          |             |                 |                   |                    |             |         | All type groups | SE |
|---------------------------|-------------------|------------|--------------------|----------|-------------|-----------------|-------------------|--------------------|-------------|---------|-----------------|----|
|                           | White/red pine    | Spruce/fir | Loblolly/shortleaf | Oak/pine | Oak/hickory | Oak/gum/cypress | Elm/ash/red maple | Northern hardwoods | Aspen/birch |         |                 |    |
| Baltimore                 | .0                | .0         | 5.8                | .0       | 67.3        | .0              | 1.8               | 21.9               | 1.8         | 98.7    | 12.5            |    |
| Carroll                   | 2.9               | .0         | .0                 | .0       | 46.2        | .0              | .0                | 14.2               | .0          | 63.2    | 14.3            |    |
| Frederick                 | .0                | .0         | .0                 | .0       | 89.1        | .0              | 4.6               | .0                 | .0          | 93.7    | 15.3            |    |
| Washington                | 5.3               | .0         | .0                 | 10.7     | 64.9        | .0              | .0                | 5.3                | .0          | 86.1    | 13.6            |    |
| Anne Arundel/Howard       | 1.0               | .0         | 18.6               | 4.3      | 80.7        | .0              | 13.9              | 4.1                | .0          | 122.6   | 12.1            |    |
| Caroline/Talbot           | .0                | .0         | 35.4               | 16.0     | 45.9        | 5.3             | 4.8               | .0                 | .0          | 107.3   | 7.6             |    |
| Cecil/Harford             | .0                | .0         | .0                 | 3.0      | 145.0       | .0              | 8.7               | 17.4               | .0          | 174.2   | 7.5             |    |
| Kent/Queen Annes          | .0                | .0         | 3.0                | 15.8     | 65.4        | 6.5             | 8.9               | 2.2                | .0          | 101.8   | 7.0             |    |
| Montgomery/Prince Georges | .0                | .0         | 1.4                | 23.3     | 146.7       | 10.0            | 8.2               | .0                 | .0          | 189.5   | 8.9             |    |
| Central Unit              | 9.2               | .0         | 64.1               | 73.1     | 751.1       | 21.8            | 50.9              | 65.2               | 1.8         | 1,037.2 | 3.6             |    |
| Calvert                   | .0                | .0         | .0                 | 5.1      | 56.0        | 6.0             | 8.7               | .0                 | .0          | 75.8    | 6.5             |    |
| Charles                   | .0                | .0         | 7.9                | 24.2     | 130.2       | 20.1            | 4.1               | 10.5               | .0          | 197.0   | 4.2             |    |
| St. Mary's                | .0                | .0         | 29.5               | 19.5     | 53.0        | 6.4             | .0                | .0                 | .0          | 108.5   | 6.0             |    |
| Southern Unit             | .0                | .0         | 37.4               | 48.9     | 239.2       | 32.5            | 12.8              | 10.5               | .0          | 381.3   | 3.1             |    |
| Dorchester                | .0                | .0         | 50.8               | 27.7     | 20.7        | 29.9            | 3.8               | .0                 | .0          | 132.8   | 6.3             |    |
| Somerset                  | .0                | .0         | 67.5               | 1.3      | 16.3        | .0              | 2.6               | .0                 | .0          | 87.8    | 8.2             |    |
| Wicomico                  | .0                | .0         | 23.2               | 20.4     | 56.8        | 15.2            | .0                | .0                 | .0          | 115.4   | 4.9             |    |
| Worcester                 | .0                | .0         | 37.2               | 58.2     | 23.7        | 25.6            | 12.0              | .0                 | .0          | 156.7   | 7.4             |    |
| Lower Eastern Shore       | .0                | .0         | 178.7              | 107.6    | 117.5       | 70.6            | 18.4              | .0                 | .0          | 492.8   | 3.4             |    |
| Allegany                  | .0                | .0         | 2.3                | .0       | 126.3       | .0              | 6.1               | 40.5               | .0          | 175.2   | 8.4             |    |
| Garrett                   | 15.5              | 3.2        | .0                 | .0       | 153.8       | .0              | 20.1              | 92.9               | .0          | 285.4   | 3.9             |    |
| Western Unit              | 15.5              | 3.2        | 2.3                | .0       | 280.1       | .0              | 26.1              | 133.4              | .0          | 460.6   | 4.0             |    |
| All counties              | 24.7              | 3.2        | 282.6              | 229.6    | 1,387.9     | 124.8           | 108.2             | 209.1              | 1.8         | 2,371.9 | 1.9             |    |
| SE                        | 42.3              | 100.0      | 10.9               | 14.4     | 4.3         | 19.6            | 22.7              | 15.5               | 100.0       | 1.9     |                 |    |

Table 97.--Area of timberland by county and stand-size class, Maryland, 1999

(In thousands of acres)

| County                    | Stand-size class |             |                      |             | All classes | SE   |
|---------------------------|------------------|-------------|----------------------|-------------|-------------|------|
|                           | Saw-timber       | Pole-timber | Sapling and seedling | Non-stocked |             |      |
| Baltimore                 | 70.5             | 12.1        | 16.1                 | .0          | 98.7        | 12.5 |
| Carroll                   | 54.6             | 8.6         | .0                   | .0          | 63.2        | 14.3 |
| Frederick                 | 73.6             | 13.7        | .0                   | 6.4         | 93.7        | 15.3 |
| Washington                | 69.3             | 5.3         | 10.0                 | 1.5         | 86.1        | 13.6 |
| Anne Arundel/Howard       | 79.9             | 27.1        | 12.8                 | 2.8         | 122.6       | 12.1 |
| Caroline/Talbot           | 40.4             | 29.8        | 35.5                 | 1.5         | 107.3       | 7.6  |
| Cecil/Harford             | 134.6            | 30.8        | 8.7                  | .0          | 174.2       | 7.5  |
| Kent/Queen Annes          | 76.0             | 17.4        | 8.4                  | .0          | 101.8       | 7.0  |
| Montgomery/Prince Georges | 139.5            | 27.6        | 14.6                 | 7.8         | 189.5       | 8.9  |
| Central Unit              | 738.5            | 172.4       | 106.3                | 20.0        | 1,037.2     | 3.6  |
| Calvert                   | 62.0             | 4.6         | 9.2                  | .0          | 75.8        | 6.5  |
| Charles                   | 140.3            | 38.8        | 17.8                 | .0          | 197.0       | 4.2  |
| St. Mary's                | 97.3             | 10.3        | .9                   | .0          | 108.5       | 6.0  |
| Southern Unit             | 299.7            | 53.7        | 27.9                 | .0          | 381.3       | 3.1  |
| Dorchester                | 79.7             | 39.0        | 14.1                 | .0          | 132.8       | 6.3  |
| Somerset                  | 36.4             | 27.0        | 24.4                 | .0          | 87.8        | 8.2  |
| Wicomico                  | 79.6             | 9.0         | 25.3                 | 1.6         | 115.4       | 4.9  |
| Worcester                 | 74.9             | 66.4        | 15.4                 | .0          | 156.7       | 7.4  |
| Lower Eastern Shore       | 270.5            | 141.5       | 79.2                 | 1.6         | 492.8       | 3.4  |
| Allegany                  | 94.3             | 50.5        | 30.5                 | .0          | 175.2       | 8.4  |
| Garrett                   | 172.0            | 87.9        | 24.6                 | .9          | 285.4       | 3.9  |
| Western Unit              | 266.3            | 138.4       | 55.1                 | .9          | 460.6       | 4.0  |
| All counties              | 1,575.0          | 506.1       | 268.4                | 22.5        | 2,371.9     | 1.9  |
| SE                        | 3.6              | 9.5         | 13.1                 | 37.9        | 1.9         |      |

Table 98.--Area of timberland by county and cubic-foot stand-volume class of growing-stock trees, Maryland, 1999

(In thousands of acres)

| County                    | Stand-volume class (cubic feet per acre) |         |           |           |           |       | All classes | SE   |
|---------------------------|--|---------|-----------|-----------|-----------|-------|-------------|------|
|                           | 0-499                                    | 500-999 | 1000-1499 | 1500-1999 | 2000-2499 | 2500+ |             |      |
| Baltimore                 | 15.5                                     | .0      | 12.4      | 15.7      | 15.7      | 39.4  | 98.7        | 12.5 |
| Carroll                   | 1.4                                      | 4.4     | 13.2      | 5.8       | 8.5       | 30.0  | 63.2        | 14.3 |
| Frederick                 | 6.4                                      | .0      | 11.4      | 19.9      | 11.4      | 44.5  | 93.7        | 15.3 |
| Washington                | 6.3                                      | 18.3    | 5.3       | 8.1       | 26.8      | 21.5  | 86.1        | 13.6 |
| Anne Arundel/Howard       | 6.7                                      | 8.9     | 23.4      | 10.3      | 20.8      | 52.4  | 122.6       | 12.1 |
| Caroline/Talbot           | 35.7                                     | 3.1     | 22.1      | 18.5      | 3.3       | 24.5  | 107.3       | 7.6  |
| Cecil/Harford             | 8.7                                      | 19.7    | 16.1      | 14.2      | 26.8      | 88.7  | 174.2       | 7.5  |
| Kent/Queen Annes          | 13.8                                     | 10.8    | 10.2      | 13.2      | 9.8       | 44.0  | 101.8       | 7.0  |
| Montgomery/Prince Georges | 30.0                                     | 20.1    | 24.8      | 29.0      | 32.7      | 52.8  | 189.5       | 8.9  |
| Central Unit              | 124.6                                    | 85.2    | 139.0     | 134.7     | 155.8     | 397.9 | 1,037.2     | 3.6  |
| Calvert                   | 4.7                                      | 6.0     | 6.0       | 12.0      | 15.7      | 31.4  | 75.8        | 6.5  |
| Charles                   | 16.6                                     | 18.7    | 8.8       | 33.8      | 12.7      | 106.4 | 197.0       | 4.2  |
| St. Mary's                | .9                                       | 4.6     | 5.0       | 14.4      | 20.9      | 62.8  | 108.5       | 6.0  |
| Southern Unit             | 22.1                                     | 29.3    | 19.9      | 60.2      | 49.3      | 200.6 | 381.3       | 3.1  |
| Dorchester                | 23.2                                     | 17.8    | 21.0      | 16.0      | 24.4      | 30.5  | 132.8       | 6.3  |
| Somerset                  | 24.4                                     | .0      | 22.7      | 15.1      | 5.3       | 20.4  | 87.8        | 8.2  |
| Wicomico                  | 22.9                                     | 3.6     | 10.6      | 21.0      | 26.3      | 31.1  | 115.4       | 4.9  |
| Worcester                 | 25.8                                     | 16.4    | 1.3       | 47.6      | 15.6      | 50.0  | 156.7       | 7.4  |
| Lower Eastern Shore       | 96.3                                     | 37.8    | 55.6      | 99.7      | 71.5      | 131.9 | 492.8       | 3.4  |
| Allegany                  | 14.5                                     | 67.7    | 28.9      | 22.2      | 18.9      | 23.1  | 175.2       | 8.4  |
| Garrett                   | 38.3                                     | 24.0    | 33.4      | 60.3      | 39.7      | 89.6  | 285.4       | 3.9  |
| Western Unit              | 52.8                                     | 91.7    | 62.4      | 82.5      | 58.5      | 112.8 | 460.6       | 4.0  |
| All counties              | 295.7                                    | 244.0   | 276.8     | 377.2     | 335.1     | 843.2 | 2,371.9     | 1.9  |
| SE                        | 12.1                                     | 14.3    | 13.6      | 11.1      | 12.5      | 6.3   | 1.9         |      |

Table 99.--Area of timberland by county and stocking class of growing-stock trees, Maryland, 1999

(In thousands of acres)

| County                    | Stocking class |                |                    |               |              | All classes | SE   |
|---------------------------|----------------|----------------|--------------------|---------------|--------------|-------------|------|
|                           | Nonstocked     | Poorly stocked | Moderately stocked | Fully stocked | Over-stocked |             |      |
| Baltimore                 | .0             | 13.3           | 44.4               | 35.5          | 5.6          | 98.7        | 12.5 |
| Carroll                   | .0             | 11.8           | 22.8               | 24.2          | 4.4          | 63.2        | 14.3 |
| Frederick                 | 6.4            | .0             | 33.7               | 47.6          | 6.0          | 93.7        | 15.3 |
| Washington                | 6.3            | 13.0           | 24.2               | 42.8          | .0           | 86.1        | 13.6 |
| Anne Arundel/Howard       | 2.8            | 11.7           | 41.2               | 65.2          | 1.8          | 122.6       | 12.1 |
| Caroline/Talbot           | 1.5            | .0             | 39.8               | 53.5          | 12.4         | 107.3       | 7.6  |
| Cecil/Harford             | .0             | 15.3           | 59.4               | 96.2          | 3.4          | 174.2       | 7.5  |
| Kent/Queen Annes          | .9             | 13.2           | 33.3               | 49.0          | 5.4          | 101.8       | 7.0  |
| Montgomery/Prince Georges | 7.8            | 43.8           | 59.1               | 74.5          | 4.3          | 189.5       | 8.9  |
| Central Unit              | 25.7           | 122.1          | 357.8              | 488.4         | 43.2         | 1,037.2     | 3.6  |
| Calvert                   | .0             | 10.5           | 18.0               | 47.4          | .0           | 75.8        | 6.5  |
| Charles                   | .0             | 16.6           | 62.9               | 114.9         | 2.5          | 197.0       | 4.2  |
| St. Mary's                | .0             | 4.6            | 26.4               | 57.1          | 20.5         | 108.5       | 6.0  |
| Southern Unit             | .0             | 31.7           | 107.3              | 219.4         | 23.0         | 381.3       | 3.1  |
| Dorchester                | .0             | 18.3           | 28.3               | 75.6          | 10.6         | 132.8       | 6.3  |
| Somerset                  | .0             | 3.5            | 20.8               | 35.4          | 28.2         | 87.8        | 8.2  |
| Wicomico                  | 1.6            | 6.1            | 25.9               | 74.2          | 7.6          | 115.4       | 4.9  |
| Worcester                 | .0             | 10.4           | 39.0               | 105.0         | 2.3          | 156.7       | 7.4  |
| Lower Eastern Shore       | 1.6            | 38.2           | 114.0              | 290.3         | 48.7         | 492.8       | 3.4  |
| Allegany                  | 1.5            | 29.7           | 63.0               | 74.9          | 6.1          | 175.2       | 8.4  |
| Garrett                   | 6.4            | 39.8           | 76.8               | 145.9         | 16.4         | 285.4       | 3.9  |
| Western Unit              | 7.9            | 69.6           | 139.8              | 220.8         | 22.5         | 460.6       | 4.0  |
| All counties              | 35.2           | 261.5          | 718.9              | 1,218.9       | 137.5        | 2,371.9     | 1.9  |
| SE                        | 30.1           | 14.2           | 7.4                | 5.0           | 16.6         | 1.9         |      |



Table 100.--Area of timberland by county and site-productivity class, Maryland, 1999

(In thousands of acres)

| County                    | Productivity class(cuft/a/yr) |                  |                 |                 | All classes | SE   |
|---------------------------|-------------------------------|------------------|-----------------|-----------------|-------------|------|
|                           | Very good<br>(120+)           | Good<br>(85-119) | Fair<br>(50-84) | Poor<br>(20-49) |             |      |
| Baltimore                 | 23.2                          | 16.2             | 47.6            | 11.7            | 98.7        | 12.5 |
| Carroll                   | .0                            | 14.3             | 40.3            | 8.6             | 63.2        | 14.3 |
| Frederick                 | .0                            | 37.4             | 45.4            | 10.9            | 93.7        | 15.3 |
| Washington                | 10.7                          | 13.0             | 40.2            | 22.2            | 86.1        | 13.6 |
| Anne Arundel/Howard       | 8.9                           | 40.9             | 43.0            | 29.7            | 122.6       | 12.1 |
| Caroline/Talbot           | 7.4                           | 14.4             | 55.7            | 29.8            | 107.3       | 7.6  |
| Cecil/Harford             | 27.7                          | 37.5             | 71.0            | 38.0            | 174.2       | 7.5  |
| Kent/Queen Annes          | .9                            | 19.2             | 32.3            | 49.5            | 101.8       | 7.0  |
| Montgomery/Prince Georges | 27.1                          | 46.5             | 49.0            | 66.9            | 189.5       | 8.9  |
| Central Unit              | 105.9                         | 239.4            | 424.5           | 267.4           | 1,037.2     | 3.6  |
| Calvert                   | 4.5                           | 2.2              | 9.0             | 60.2            | 75.8        | 6.5  |
| Charles                   | .0                            | 20.8             | 54.0            | 122.2           | 197.0       | 4.2  |
| St. Mary's                | 11.0                          | 19.8             | 22.4            | 55.3            | 108.5       | 6.0  |
| Southern Unit             | 15.5                          | 42.8             | 85.4            | 237.7           | 381.3       | 3.1  |
| Dorchester                | 9.2                           | 9.7              | 52.3            | 61.6            | 132.8       | 6.3  |
| Somerset                  | 3.9                           | 17.6             | 37.0            | 29.3            | 87.8        | 8.2  |
| Wicomico                  | .0                            | 15.8             | 53.6            | 46.0            | 115.4       | 4.9  |
| Worcester                 | 28.2                          | 14.2             | 46.8            | 67.5            | 156.7       | 7.4  |
| Lower Eastern Shore       | 41.3                          | 57.3             | 189.8           | 204.4           | 492.8       | 3.4  |
| Allegany                  | .0                            | 25.7             | 61.0            | 88.5            | 175.2       | 8.4  |
| Garrett                   | 28.4                          | 50.7             | 128.9           | 77.4            | 285.4       | 3.9  |
| Western Unit              | 28.4                          | 76.4             | 189.9           | 165.9           | 460.6       | 4.0  |
| All counties              | 191.0                         | 415.9            | 889.6           | 875.4           | 2,371.9     | 1.9  |
| SE                        | 17.5                          | 10.3             | 6.4             | 6.3             | 1.9         |      |

Table 101.--Biomass of all timber on forest land, by county, class of timber, and component, Maryland, 1999  
(In thousands of dry tons)

| County                    | Growing stock trees |          |         |                 |            | Total timber | SE   |
|---------------------------|---------------------|----------|---------|-----------------|------------|--------------|------|
|                           | Growing stock       | Branches | Foliage | Stump and roots | Cull trees |              |      |
| Baltimore                 | 7,864               | 874      | 238     | 2,221           | 473        | 11,670       | 12.7 |
| Carroll                   | 3,488               | 399      | 110     | 1,009           | 318        | 5,323        | 15.9 |
| Frederick                 | 9,088               | 1,005    | 256     | 2,585           | 472        | 13,406       | 11.6 |
| Washington                | 4,989               | 571      | 169     | 1,423           | 1,127      | 8,279        | 13.9 |
| Anne Arundel/Howard       | 9,223               | 1,084    | 334     | 2,685           | 511        | 13,838       | 13.6 |
| Caroline/Talbot           | 3,739               | 500      | 214     | 1,133           | 270        | 5,857        | 21.1 |
| Cecil/Harford             | 10,761              | 1,206    | 317     | 3,081           | 1,084      | 16,450       | 9.5  |
| Kent/Queen Annes          | 5,780               | 663      | 201     | 1,646           | 808        | 9,097        | 12.1 |
| Montgomery/Prince Georges | 12,690              | 1,428    | 389     | 3,634           | 1,273      | 19,415       | 9.3  |
| Central Unit              | 67,622              | 7,729    | 2,227   | 19,419          | 6,336      | 103,335      | 4.2  |
| Calvert                   | 4,811               | 547      | 146     | 1,391           | 248        | 7,143        | 15.5 |
| Charles                   | 11,361              | 1,344    | 415     | 3,328           | 400        | 16,847       | 7.3  |
| St. Mary's                | 6,432               | 847      | 336     | 1,951           | 187        | 9,753        | 8.1  |
| Southern Unit             | 22,604              | 2,737    | 898     | 6,670           | 835        | 33,743       | 5.4  |
| Dorchester                | 5,193               | 709      | 316     | 1,584           | 396        | 8,198        | 13.4 |
| Somerset                  | 2,995               | 426      | 214     | 923             | 60         | 4,617        | 16.2 |
| Wicomico                  | 5,397               | 671      | 241     | 1,597           | 475        | 8,381        | 12.0 |
| Worcester                 | 7,249               | 939      | 374     | 2,175           | 548        | 11,285       | 14.2 |
| Lower Eastern Shore       | 20,834              | 2,744    | 1,146   | 6,279           | 1,479      | 32,482       | 7.1  |
| Allegany                  | 7,851               | 931      | 285     | 2,306           | 997        | 12,370       | 9.3  |
| Garrett                   | 14,142              | 1,713    | 559     | 4,196           | 1,831      | 22,442       | 6.5  |
| Western Unit              | 21,993              | 2,644    | 844     | 6,502           | 2,828      | 34,812       | 5.3  |
| All counties              | 133,054             | 15,854   | 5,115   | 38,871          | 11,479     | 204,373      | 2.7  |
| SE                        | 2.9                 | 2.7      | 2.9     | 2.8             | 8.3        | 2.7          |      |

Table 102.--Biomass of all timber on timberland, by county, class of timber, and component, Maryland, 1999  
(In thousands of dry tons)

| County                    | Growing stock trees |          |         |                 | Total timber |         | SE   |
|---------------------------|---------------------|----------|---------|-----------------|--------------|---------|------|
|                           | Growing stock       | Branches | Foliage | Stump and roots | Cull trees   |         |      |
| Baltimore                 | 6,397               | 716      | 197     | 1,814           | 382          | 9,507   | 16.7 |
| Carroll                   | 3,488               | 399      | 110     | 1,009           | 318          | 5,323   | 15.9 |
| Frederick                 | 6,309               | 707      | 183     | 1,813           | 222          | 9,234   | 20.3 |
| Washington                | 4,014               | 464      | 142     | 1,150           | 663          | 6,433   | 17.6 |
| Anne Arundel/Howard       | 7,844               | 922      | 288     | 2,279           | 502          | 11,835  | 16.4 |
| Caroline/Talbot           | 3,739               | 500      | 214     | 1,133           | 270          | 5,857   | 21.1 |
| Cecil/Harford             | 10,761              | 1,206    | 317     | 3,081           | 1,084        | 16,450  | 9.5  |
| Kent/Queen Annes          | 5,780               | 663      | 201     | 1,646           | 808          | 9,097   | 12.1 |
| Montgomery/Prince Georges | 9,896               | 1,124    | 314     | 2,848           | 727          | 14,909  | 13.3 |
| Central Unit              | 58,228              | 6,701    | 1,965   | 16,775          | 4,975        | 88,645  | 5.2  |
| Calvert                   | 4,811               | 547      | 146     | 1,391           | 248          | 7,143   | 15.5 |
| Charles                   | 11,361              | 1,344    | 415     | 3,328           | 400          | 16,847  | 7.3  |
| St. Mary's                | 6,432               | 847      | 336     | 1,951           | 187          | 9,753   | 8.1  |
| Southern Unit             | 22,604              | 2,737    | 898     | 6,670           | 835          | 33,743  | 5.4  |
| Dorchester                | 5,193               | 709      | 316     | 1,584           | 396          | 8,198   | 13.4 |
| Somerset                  | 2,995               | 426      | 214     | 923             | 60           | 4,617   | 16.2 |
| Wicomico                  | 5,397               | 671      | 241     | 1,597           | 475          | 8,381   | 12.0 |
| Worcester                 | 7,249               | 939      | 374     | 2,175           | 548          | 11,285  | 14.2 |
| Lower Eastern Shore       | 20,834              | 2,744    | 1,146   | 6,279           | 1,479        | 32,482  | 7.1  |
| Allegany                  | 6,469               | 754      | 219     | 1,888           | 777          | 10,107  | 12.9 |
| Garrett                   | 13,342              | 1,618    | 530     | 3,964           | 1,501        | 20,956  | 7.7  |
| Western Unit              | 19,811              | 2,371    | 749     | 5,852           | 2,278        | 31,063  | 6.7  |
| All counties              | 121,477             | 14,554   | 4,758   | 35,577          | 9,568        | 185,934 | 3.1  |
| SE                        | 3.3                 | 3.1      | 3.2     | 3.2             | 8.1          | 3.1     |      |

Table 103.--Biomass of growing stock on timberland, by county and component, Maryland, 1999  
(In thousands of dry tons)

| County                    | Growing stock |        |            | Total<br>growing stock | SE   |
|---------------------------|---------------|--------|------------|------------------------|------|
|                           | Poletimber    | Sawlog | Upper stem |                        |      |
| Baltimore                 | 964           | 4,560  | 874        | 6,397                  | 17.4 |
| Carroll                   | 821           | 2,186  | 481        | 3,488                  | 17.2 |
| Frederick                 | 1,210         | 4,220  | 879        | 6,309                  | 20.7 |
| Washington                | 669           | 2,763  | 581        | 4,014                  | 18.6 |
| Anne Arundel/Howard       | 1,702         | 5,141  | 1,001      | 7,844                  | 17.8 |
| Caroline/Talbot           | 1,282         | 2,048  | 409        | 3,739                  | 21.5 |
| Cecil/Harford             | 2,301         | 7,018  | 1,442      | 10,761                 | 10.3 |
| Kent/Queen Annes          | 937           | 4,046  | 797        | 5,780                  | 12.2 |
| Montgomery/Prince Georges | 1,865         | 6,697  | 1,334      | 9,896                  | 13.9 |
| Central Unit              | 11,750        | 38,680 | 7,798      | 58,228                 | 5.4  |
| Calvert                   | 974           | 3,205  | 632        | 4,811                  | 16.4 |
| Charles                   | 2,964         | 6,923  | 1,475      | 11,361                 | 7.5  |
| St. Mary's                | 1,558         | 4,056  | 818        | 6,432                  | 8.2  |
| Southern Unit             | 5,496         | 14,183 | 2,925      | 22,604                 | 5.6  |
| Dorchester                | 1,781         | 2,870  | 542        | 5,193                  | 14.4 |
| Somerset                  | 1,032         | 1,648  | 314        | 2,995                  | 16.9 |
| Wicomico                  | 1,535         | 3,220  | 642        | 5,397                  | 12.1 |
| Worcester                 | 2,450         | 4,003  | 795        | 7,249                  | 13.8 |
| Lower Eastern Shore       | 6,799         | 11,742 | 2,293      | 20,834                 | 7.2  |
| Allegany                  | 2,156         | 3,550  | 763        | 6,469                  | 13.9 |
| Garrett                   | 4,421         | 7,310  | 1,611      | 13,342                 | 8.2  |
| Western Unit              | 6,578         | 10,859 | 2,374      | 19,811                 | 7.2  |
| All counties              | 30,622        | 75,465 | 15,390     | 121,477                | 3.3  |
| SE                        | 3.7           | 4.1    | 3.8        | 3.3                    |      |

Table 104.--Biomass of all trees and shrubs on timberland, by county and class of material, Maryland, 1999  
(In thousands of dry tons)

| County                    | Non-timber |                     |          |           |        | Total trees and shrubs | SE   |
|---------------------------|------------|---------------------|----------|-----------|--------|------------------------|------|
|                           | Timber     | Salvable dead trees | Saplings | Seedlings | Shrubs |                        |      |
| Baltimore                 | 9,507      | 7                   | 351      | 50        | 43     | 9,959                  | 16.0 |
| Carroll                   | 5,323      | 17                  | 279      | 55        | 17     | 5,691                  | 15.8 |
| Frederick                 | 9,234      | 59                  | 292      | 82        | 19     | 9,686                  | 20.0 |
| Washington                | 6,433      | 22                  | 183      | 111       | 16     | 6,765                  | 17.4 |
| Anne Arundel/Howard       | 11,835     | 95                  | 591      | 47        | 35     | 12,603                 | 15.7 |
| Caroline/Talbot           | 5,857      | 16                  | 804      | 80        | 24     | 6,781                  | 18.4 |
| Cecil/Harford             | 16,450     | 8                   | 787      | 63        | 49     | 17,357                 | 9.1  |
| Kent/Queen Annes          | 9,097      | 68                  | 557      | 41        | 15     | 9,778                  | 11.3 |
| Montgomery/Prince Georges | 14,909     | 73                  | 608      | 99        | 52     | 15,741                 | 12.8 |
| Central Unit              | 88,645     | 366                 | 4,452    | 627       | 271    | 94,362                 | 4.9  |
| Calvert                   | 7,143      | 60                  | 449      | 63        | 19     | 7,734                  | 14.8 |
| Charles                   | 16,847     | 89                  | 1,122    | 123       | 81     | 18,263                 | 6.7  |
| St. Mary's                | 9,753      | 39                  | 499      | 96        | 53     | 10,441                 | 7.4  |
| Southern Unit             | 33,743     | 188                 | 2,071    | 283       | 153    | 36,438                 | 5.1  |
| Dorchester                | 8,198      | 38                  | 963      | 66        | 13     | 9,278                  | 12.5 |
| Somerset                  | 4,617      | 32                  | 982      | 56        | 4      | 5,691                  | 14.4 |
| Wicomico                  | 8,381      | 47                  | 866      | 58        | 7      | 9,361                  | 11.3 |
| Worcester                 | 11,285     | 18                  | 1,054    | 84        | 40     | 12,481                 | 13.2 |
| Lower Eastern Shore       | 32,482     | 135                 | 3,865    | 264       | 65     | 36,811                 | 6.6  |
| Allegany                  | 10,107     | 62                  | 1,231    | 127       | 20     | 11,548                 | 11.7 |
| Garrett                   | 20,956     | 127                 | 1,817    | 263       | 121    | 23,284                 | 7.1  |
| Western Unit              | 31,063     | 189                 | 3,049    | 391       | 141    | 34,832                 | 6.1  |
| All counties              | 185,934    | 878                 | 13,437   | 1,565     | 630    | 202,443                | 2.9  |
| SE                        | 3.1        | 14.2                | 5.3      | 6.0       | 9.8    | 2.9                    |      |

Table 105.--Net volume of growing-stock trees on timberland by county and forest-type group, Maryland, 1999  
(In millions of cubic feet)

| County                    | Forest-type group |            |                    |          |             |                 |                   |                    |             |         | All type groups | SE |
|---------------------------|-------------------|------------|--------------------|----------|-------------|-----------------|-------------------|--------------------|-------------|---------|-----------------|----|
|                           | White/red pine    | Spruce/fir | Loblolly/shortleaf | Oak/pine | Oak/hickory | Oak/gum/cypress | Elm/ash/red maple | Northern hardwoods | Aspen/birch |         |                 |    |
| Baltimore                 | .0                | .0         | 17.3               | .0       | 207.0       | .0              | 18.0              | 16.3               | 3.8         | 262.3   | 18.5            |    |
| Carroll                   | 10.2              | .0         | .0                 | 113.6    | .0          | 18.8            | .0                | 18.8               | .0          | 142.6   | 17.3            |    |
| Frederick                 | .0                | .0         | .0                 | 238.8    | .0          | 17.6            | .0                | .0                 | .0          | 256.4   | 22.1            |    |
| Washington                | 7.3               | .0         | .0                 | 15.3     | 143.2       | .0              | 4.1               | 4.1                | .0          | 170.0   | 19.5            |    |
| Anne Arundel/Howard       | 1.0               | .0         | 42.9               | 9.1      | 202.6       | .0              | 55.7              | 12.0               | .0          | 323.3   | 18.4            |    |
| Caroline/Talbot           | .0                | .0         | 59.1               | 19.5     | 60.5        | 13.4            | 1.5               | .0                 | .0          | 154.0   | 17.6            |    |
| Cecil/Harford             | .0                | .0         | .0                 | 9.9      | 389.2       | .0              | 7.8               | 35.3               | .0          | 442.2   | 10.5            |    |
| Kent/Queen Annes          | .0                | .0         | 9.0                | 43.2     | 132.9       | 21.2            | 9.3               | 1.2                | .0          | 216.8   | 12.6            |    |
| Montgomery/Prince Georges | .0                | .0         | 4.4                | 32.4     | 304.8       | 26.4            | 11.5              | .0                 | .0          | 379.4   | 14.1            |    |
| Central Unit              | 18.5              | .0         | 132.7              | 129.4    | 1,792.4     | 61.0            | 121.3             | 87.8               | 3.8         | 2,347.0 | 5.6             |    |
| Calvert                   | .0                | .0         | .0                 | 13.0     | 150.1       | 18.0            | 8.8               | .0                 | .0          | 189.9   | 12.6            |    |
| Charles                   | .0                | .0         | 10.9               | 61.7     | 324.5       | 52.2            | 7.3               | 33.8               | .0          | 490.5   | 8.2             |    |
| St. Mary's                | .0                | .0         | 106.1              | 61.3     | 146.6       | 12.7            | .0                | .0                 | .0          | 326.7   | 9.8             |    |
| Southern Unit             | .0                | .0         | 117.0              | 136.0    | 621.2       | 82.9            | 16.2              | 33.8               | .0          | 1,007.0 | 5.6             |    |
| Dorchester                | .0                | .0         | 70.8               | 58.1     | 50.3        | 50.3            | 3.6               | .0                 | .0          | 233.0   | 10.9            |    |
| Somerset                  | .0                | .0         | 85.2               | 8.0      | 41.6        | .0              | 9.8               | .0                 | .0          | 144.6   | 13.3            |    |
| Wicomico                  | .0                | .0         | 41.9               | 30.5     | 126.2       | 27.4            | .0                | .0                 | .0          | 226.0   | 11.8            |    |
| Worcester                 | .0                | .0         | 64.4               | 113.5    | 29.7        | 82.5            | 37.5              | .0                 | .0          | 327.7   | 13.1            |    |
| Lower Eastern Shore       | .0                | .0         | 262.4              | 210.1    | 247.8       | 160.2           | 50.8              | .0                 | .0          | 931.3   | 6.4             |    |
| Allegany                  | .0                | .0         | 2.0                | .0       | 174.3       | .0              | 6.1               | 62.6               | .0          | 244.9   | 14.6            |    |
| Garrett                   | 50.7              | 9.9        | .0                 | .0       | 318.6       | .0              | 27.8              | 134.9              | .0          | 541.9   | 8.4             |    |
| Western Unit              | 50.7              | 9.9        | 2.0                | .0       | 492.9       | .0              | 33.9              | 197.5              | .0          | 786.8   | 7.3             |    |
| All counties              | 69.2              | 9.9        | 514.0              | 475.5    | 3,154.3     | 304.0           | 222.3             | 319.1              | 3.8         | 5,072.2 | 3.3             |    |
| SE                        | 48.2              | 100.0      | 14.5               | 16.0     | 5.3         | 22.8            | 30.6              | 20.5               | 100.0       | 3.3     |                 |    |

Table 106.--Net volume of growing-stock trees on timberland by county and stand-size class, Maryland, 1999

(In millions of cubic feet)

| County                    | Stand-size class |             |                      |             | All classes | SE   |
|---------------------------|------------------|-------------|----------------------|-------------|-------------|------|
|                           | Saw-timber       | Pole-timber | Sapling and seedling | Non-stocked |             |      |
| Baltimore                 | 238.5            | 18.2        | 5.6                  | .0          | 262.3       | 18.5 |
| Carroll                   | 128.2            | 14.5        | .0                   | .0          | 142.6       | 17.3 |
| Frederick                 | 221.7            | 33.2        | .0                   | 1.5         | 256.4       | 22.1 |
| Washington                | 163.9            | 2.7         | 3.4                  | .0          | 170.0       | 19.5 |
| Anne Arundel/Howard       | 273.1            | 40.3        | 9.0                  | .9          | 323.3       | 18.4 |
| Caroline/Talbot           | 102.4            | 45.6        | 5.7                  | .2          | 154.0       | 17.6 |
| Cecil/Harford             | 385.7            | 52.5        | 4.0                  | .0          | 442.2       | 10.5 |
| Kent/Queen Annes          | 204.5            | 11.7        | .6                   | .0          | 216.8       | 12.6 |
| Montgomery/Prince Georges | 351.8            | 26.3        | 1.3                  | .0          | 379.4       | 14.1 |
| Central Unit              | 2,069.7          | 245.1       | 29.7                 | 2.6         | 2,347.0     | 5.6  |
| Calvert                   | 176.5            | 8.7         | 4.7                  | .0          | 189.9       | 12.6 |
| Charles                   | 411.8            | 72.3        | 6.4                  | .0          | 490.5       | 8.2  |
| St. Mary's                | 312.4            | 14.1        | .1                   | .0          | 326.7       | 9.8  |
| Southern Unit             | 900.8            | 95.1        | 11.1                 | .0          | 1,007.0     | 5.6  |
| Dorchester                | 185.2            | 43.8        | 4.0                  | .0          | 233.0       | 10.9 |
| Somerset                  | 94.1             | 47.7        | 2.8                  | .0          | 144.6       | 13.3 |
| Wicomico                  | 209.6            | 10.4        | 5.8                  | .2          | 226.0       | 11.8 |
| Worcester                 | 221.9            | 103.4       | 2.4                  | .0          | 327.7       | 13.1 |
| Lower Eastern Shore       | 710.8            | 205.2       | 15.0                 | .2          | 931.3       | 6.4  |
| Allegany                  | 171.0            | 59.4        | 14.5                 | .0          | 244.9       | 14.6 |
| Garrett                   | 379.2            | 161.3       | 1.4                  | .0          | 541.9       | 8.4  |
| Western Unit              | 550.2            | 220.8       | 15.8                 | .0          | 786.8       | 7.3  |
| All counties              | 4,231.4          | 766.3       | 71.7                 | 2.8         | 5,072.2     | 3.3  |
| SE                        | 4.3              | 11.6        | 21.3                 | 63.8        | 3.3         |      |

Table 107.--Net volume of growing-stock and sawtimber trees on timberland by county and species group, Maryland, 1999  
(In millions of cubic/board feet)

| County                    | Growing stock and sawtimber |                 |                |                |         |         |                 |                |                |          |
|---------------------------|-----------------------------|-----------------|----------------|----------------|---------|---------|-----------------|----------------|----------------|----------|
|                           | Pine                        | Other softwoods | Soft hardwoods | Hard hardwoods | Total   | Pine    | Other softwoods | Soft hardwoods | Hard hardwoods | Total    |
| Baltimore                 | 13.5                        | 4.4             | 147.1          | 97.3           | 262.3   | 44.4    | 21.9            | 569.0          | 381.2          | 1,016.5  |
| Carroll                   | 3.6                         | .0              | 49.0           | 90.0           | 142.6   | 14.1    | .0              | 161.2          | 281.3          | 456.6    |
| Frederick                 | .2                          | .0              | 100.6          | 155.6          | 256.4   | .0      | .0              | 395.1          | 504.8          | 899.9    |
| Washington                | 13.7                        | 5.4             | 50.7           | 100.2          | 170.0   | 56.9    | 10.0            | 188.6          | 309.8          | 565.4    |
| Anne Arundel/Howard       | 39.8                        | .0              | 194.5          | 89.0           | 323.3   | 107.4   | .0              | 697.7          | 305.4          | 1,110.5  |
| Caroline/Talbot           | 58.8                        | 2.5             | 56.2           | 36.5           | 154.0   | 178.6   | 5.9             | 142.5          | 113.6          | 440.6    |
| Cecil/Harford             | 4.5                         | .1              | 264.8          | 172.9          | 442.2   | 15.0    | .0              | 844.4          | 654.6          | 1,514.0  |
| Kent/Queen Annes          | 31.2                        | .0              | 120.6          | 65.0           | 216.8   | 99.7    | .0              | 441.8          | 239.3          | 780.7    |
| Montgomery/Prince Georges | 22.0                        | 1.1             | 189.8          | 166.4          | 379.4   | 55.5    | .4              | 669.8          | 588.4          | 1,314.1  |
| Central Unit              | 187.2                       | 13.6            | 1,173.3        | 972.9          | 2,347.0 | 571.6   | 38.2            | 4,110.2        | 3,378.4        | 8,098.4  |
| Calvert                   | 7.7                         | .0              | 92.3           | 89.8           | 189.9   | 29.2    | .0              | 298.8          | 318.7          | 646.7    |
| Charles                   | 43.7                        | .8              | 249.9          | 196.1          | 490.5   | 128.0   | 1.2             | 771.2          | 658.3          | 1,558.8  |
| St. Mary's                | 111.3                       | .0              | 131.8          | 83.5           | 326.7   | 409.6   | .0              | 408.7          | 242.3          | 1,060.6  |
| Southern Unit             | 162.7                       | .8              | 474.1          | 369.5          | 1,007.0 | 566.9   | 1.2             | 1,478.6        | 1,219.4        | 3,266.1  |
| Dorchester                | 108.6                       | .1              | 69.8           | 54.4           | 233.0   | 324.4   | .0              | 165.6          | 169.3          | 659.3    |
| Somerset                  | 80.8                        | .0              | 56.5           | 7.3            | 144.6   | 177.6   | .0              | 186.2          | 16.1           | 379.9    |
| Wicomico                  | 56.9                        | .5              | 124.1          | 44.6           | 226.0   | 194.2   | 1.6             | 414.2          | 104.7          | 714.6    |
| Worcester                 | 100.5                       | 6.7             | 177.5          | 43.0           | 327.7   | 283.1   | 26.7            | 495.5          | 129.1          | 934.3    |
| Lower Eastern Shore       | 346.7                       | 7.3             | 428.0          | 149.2          | 931.3   | 979.2   | 28.3            | 1,261.4        | 419.1          | 2,688.1  |
| Allegany                  | 10.9                        | .2              | 45.4           | 188.4          | 244.9   | 33.6    | .0              | 126.2          | 490.0          | 649.8    |
| Garrett                   | 54.4                        | 17.1            | 204.7          | 265.7          | 541.9   | 95.2    | 49.6            | 513.5          | 801.0          | 1,459.2  |
| Western Unit              | 65.3                        | 17.3            | 250.1          | 454.1          | 786.8   | 128.7   | 49.6            | 639.7          | 1,291.0        | 2,109.0  |
| All counties              | 761.9                       | 39.1            | 2,325.5        | 1,945.7        | 5,072.2 | 2,246.4 | 117.3           | 7,490.0        | 6,307.9        | 16,161.5 |



Table 108.--Net volume of sawtimber trees on timberland by county and forest-type group, Maryland, 1999

| County                    | (In millions of board feet) |            |                    |          |             |                 |                   |                    |             |                 |      |  |  | SE |
|---------------------------|-----------------------------|------------|--------------------|----------|-------------|-----------------|-------------------|--------------------|-------------|-----------------|------|--|--|----|
|                           | Forest-type group           |            |                    |          |             |                 |                   |                    |             |                 |      |  |  |    |
|                           | White/red pine              | Spruce/fir | Loblolly/shortleaf | Oak/pine | Oak/hickory | Oak/gum/cypress | Elm/ash/red maple | Northern hardwoods | Aspen/birch | All type groups |      |  |  |    |
| Baltimore                 | .0                          | .0         | 56.0               | .0       | 831.1       | .0              | 79.9              | 45.4               | 4.2         | 1,016.5         | 21.0 |  |  |    |
| Carroll                   | 42.4                        | .0         | .0                 | .0       | 368.7       | .0              | .0                | 45.5               | .0          | 456.6           | 19.3 |  |  |    |
| Frederick                 | .0                          | .0         | .0                 | .0       | 820.5       | .0              | 79.4              | .0                 | .0          | 899.9           | 25.4 |  |  |    |
| Washington                | 23.6                        | .0         | .0                 | 50.8     | 476.3       | .0              | .0                | 14.7               | .0          | 565.4           | 23.3 |  |  |    |
| Anne Arundel/Howard       | 3.7                         | .0         | 106.0              | 28.5     | 712.5       | .0              | 208.0             | 51.8               | .0          | 1,110.5         | 22.2 |  |  |    |
| Caroline/Talbot           | .0                          | .0         | 163.6              | 51.2     | 182.9       | 42.8            | .0                | 114.0              | .0          | 440.6           | 22.7 |  |  |    |
| Cecil/Harford             | .0                          | .0         | .0                 | 40.6     | 1,356.2     | .0              | 3.2               | 5.3                | .0          | 1,514.0         | 14.2 |  |  |    |
| Kent/Queen Annes          | .0                          | .0         | 16.5               | 149.0    | 496.9       | 78.7            | 34.2              | 5.3                | .0          | 780.7           | 14.5 |  |  |    |
| Montgomery/Prince Georges | .0                          | .0         | 2.7                | 80.0     | 1,063.1     | 124.3           | 43.9              | .0                 | .0          | 1,314.1         | 16.1 |  |  |    |
| Central Unit              | 69.7                        | .0         | 344.9              | 400.2    | 6,308.2     | 245.9           | 448.5             | 276.8              | 4.2         | 8,098.4         | 6.7  |  |  |    |
| Calvert                   | .0                          | .0         | .0                 | 33.2     | 532.7       | 54.4            | 26.3              | .0                 | .0          | 646.7           | 16.7 |  |  |    |
| Charles                   | .0                          | .0         | 19.1               | 208.6    | 1,087.6     | 169.7           | 7.1               | 66.8               | .0          | 1,558.8         | 10.3 |  |  |    |
| St. Mary's                | .0                          | .0         | 357.0              | 206.6    | 470.0       | 26.9            | .0                | .0                 | .0          | 1,060.6         | 13.8 |  |  |    |
| Southern Unit             | .0                          | .0         | 376.1              | 448.5    | 2,090.4     | 251.0           | 33.4              | 66.8               | .0          | 3,266.1         | 7.4  |  |  |    |
| Dorchester                | .0                          | .0         | 174.4              | 151.0    | 156.0       | 168.2           | 9.6               | .0                 | .0          | 659.3           | 13.5 |  |  |    |
| Somerset                  | .0                          | .0         | 174.9              | 36.9     | 135.2       | .0              | 32.9              | .0                 | .0          | 379.9           | 18.7 |  |  |    |
| Wicomico                  | .0                          | .0         | 124.0              | 86.4     | 424.9       | 79.3            | .0                | .0                 | .0          | 714.6           | 15.2 |  |  |    |
| Worcester                 | .0                          | .0         | 189.6              | 238.5    | 93.9        | 287.7           | 124.5             | .0                 | .0          | 934.3           | 19.3 |  |  |    |
| Lower Eastern Shore       | .0                          | .0         | 662.9              | 512.9    | 810.0       | 535.2           | 167.0             | .0                 | .0          | 2,688.1         | 8.9  |  |  |    |
| Allegany                  | .0                          | .0         | 4.4                | .0       | 445.4       | .0              | 30.7              | 169.3              | .0          | 649.8           | 19.2 |  |  |    |
| Garrett                   | 72.1                        | 39.0       | .0                 | .0       | 928.0       | .0              | 99.7              | 320.3              | .0          | 1,459.2         | 10.5 |  |  |    |
| Western Unit              | 72.1                        | 39.0       | 4.4                | .0       | 1,373.4     | .0              | 130.5             | 489.6              | .0          | 2,109.0         | 9.4  |  |  |    |
| All counties              | 141.8                       | 39.0       | 1,388.2            | 1,361.6  | 10,582.1    | 1,032.2         | 779.4             | 833.1              | 4.2         | 16,161.5        | 4.2  |  |  |    |
| SE                        | 46.0                        | 100.0      | 17.7               | 17.7     | 6.1         | 25.0            | 33.8              | 22.2               | 100.0       | 4.2             |      |  |  |    |

Table 109.--Net volume of sawtimber trees on timberland by county and stand-size class, Maryland, 1999

(In millions of board feet)

| County                    | Stand-size class |             |                      |             | All classes | SE   |
|---------------------------|------------------|-------------|----------------------|-------------|-------------|------|
|                           | Saw-timber       | Pole-timber | Sapling and seedling | Non-stocked |             |      |
| Baltimore                 | 971.2            | 26.1        | 19.3                 | .0          | 1,016.5     | 21.0 |
| Carroll                   | 431.4            | 25.2        | .0                   | .0          | 456.6       | 19.3 |
| Frederick                 | 834.0            | 60.5        | .0                   | 5.4         | 899.9       | 25.4 |
| Washington                | 555.1            | 1.7         | 8.5                  | .0          | 565.4       | 23.3 |
| Anne Arundel/Howard       | 1,034.5          | 47.1        | 28.9                 | .0          | 1,110.5     | 22.2 |
| Caroline/Talbot           | 358.5            | 74.6        | 7.5                  | .0          | 440.6       | 22.7 |
| Cecil/Harford             | 1,445.3          | 68.7        | .0                   | .0          | 1,514.0     | 14.2 |
| Kent/Queen Annes          | 765.5            | 15.2        | .0                   | .0          | 780.7       | 14.5 |
| Montgomery/Prince Georges | 1,280.5          | 32.2        | 1.4                  | .0          | 1,314.1     | 16.1 |
| Central Unit              | 7,676.1          | 351.4       | 65.6                 | 5.4         | 8,098.4     | 6.7  |
| Calvert                   | 625.3            | 17.0        | 4.4                  | .0          | 646.7       | 16.7 |
| Charles                   | 1,426.0          | 116.6       | 16.1                 | .0          | 1,558.8     | 10.3 |
| St. Mary's                | 1,029.5          | 31.1        | .0                   | .0          | 1,060.6     | 13.8 |
| Southern Unit             | 3,080.9          | 164.6       | 20.6                 | .0          | 3,266.1     | 7.4  |
| Dorchester                | 572.4            | 75.5        | 11.4                 | .0          | 659.3       | 13.5 |
| Somerset                  | 330.4            | 46.1        | 3.3                  | .0          | 379.9       | 18.7 |
| Wicomico                  | 692.0            | 9.8         | 12.8                 | .0          | 714.6       | 15.2 |
| Worcester                 | 778.7            | 152.0       | 3.6                  | .0          | 934.3       | 19.3 |
| Lower Eastern Shore       | 2,373.5          | 283.4       | 31.1                 | .0          | 2,688.1     | 8.9  |
| Allegany                  | 537.5            | 87.4        | 24.9                 | .0          | 649.8       | 19.2 |
| Garrett                   | 1,221.5          | 237.7       | .0                   | .0          | 1,459.2     | 10.5 |
| Western Unit              | 1,759.0          | 325.1       | 24.9                 | .0          | 2,109.0     | 9.4  |
| All counties              | 14,889.5         | 1,124.5     | 142.1                | 5.4         | 16,161.5    | 4.2  |
| SE                        | 4.7              | 13.3        | 31.1                 | 100.0       | 4.2         |      |





Frieswyk, Thomas S. 2001. **Forest statistics for Maryland: 1986 and 1999.**

Resour. Bull. NE-154. Newtown Square, PA: U.S. Department of Agriculture,  
Forest Service, Northeastern Research Station. 164 p.

A statistical report on the fifth forest inventory of Maryland (1998-1999). Findings are displayed in 109 tables containing estimates of forest area, numbers of trees, wildlife habitat, timber volume, growth, change, and biomass. Data are presented at three levels: state, geographic unit and county.

**Keywords:** Forest survey; inventory; area; volume; growth; change; biomass





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