

ABSTRACT

A new measure of the forest resource has been added to the fourth forest inventory of Maryland. The inventory, which was conducted in 1985-86, included estimates of aboveground tree biomass on timberland. There are approximately 265 million green tons of wood and bark in the aboveground portion of all trees, an average of 109 green tons per acre statewide. Approximately 63 percent or 167 million green tons is in growing stock, and nearly 37 percent or 98 million green tons is nongrowing-stock (growing-stock tops, saplings, cull trees, and salvable dead trees) material.

FOREWORD

The fourth inventory of Maryland was under the overall direction of John R. Peters, Project Leader of the Forest Inventory and Analysis Unit. Thomas W. Birch assisted in the development and administration of the operating plan. Charles T. Scott was responsible for the design of the inventory and sample selection. David J. Alerich supervised the interpretation of aerial photos and collection of data. He was assisted by Joseph G. Reddan. Members of the field staff were:

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Thomas S. Frieswyk and Dawn M. DiGiovanni applied FINSYS (Forest INventory SYStem), a generalized data processing system, to the specific needs of the Maryland inventory and produced summary tables for the state and counties. Thomas W. Birch and Dawn M. DiGiovanni were instrumental in assuring that the area estimates were consistent with the two previous inventories. Rosemary K. Venit produced graphics and was involved in rewriting parts of the FINSYS table generating routine.

Marie Pennestri was responsible for administrative and secretarial services. Dorelle Smith typed the text for this report.

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Biomass Statistics for Maryland--1986

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Highlights

All Trees

- Dry weight averages 56 percent of green weight for all species on a statewide basis.
- There are more than 265 million green tons of aboveground biomass in all trees. Over 98 percent, or 260 million green tons, is in live trees.
- Growing stock accounts for 167 million tons, 63 percent of the net green weight of all trees.
- Nongrowing stock accounts for 98 million tons, or 37 percent of the net green weight of all trees. Fifty-nine percent of the nongrowing stock is in growing-stock tops, 16 percent is in rough and rotten cull trees, 20 percent is in saplings, and 5 percent is in salvable dead trees.
- Hardwoods make up 86 percent, or 227 million green tons, of the net aboveground biomass of all trees.
- Net aboveground biomass for all trees averages 109 green tons per acre in Maryland, and ranges from a low of 83 green tons per acre in Wicomico County to a high of 146 green tons per acre in Caroline/Talbot Counties.

All Live Trees

- Sawtimber stands contain 216 million green tons, or 83 percent, of aboveground biomass of all-live trees.
- The Oak/hickory forest-type group contains the largest amount of aboveground tree biomass (170 million green tons).
- Red maple is the leading species in terms of aboveground biomass as well as cubic-foot volume. This species accounts for 11 percent of the aboveground biomass of all live trees. Loblolly pine is the leading softwood species and accounts for 8 percent of the aboveground biomass.

Cull and Salvable Dead

- Cull and salvable dead trees average 8.2 green tons per acre of timberland, and range from a low of 3 green tons per acre in Wicomico County to a high of 14 green tons per acre in Allegany County.
- The Elm/ash/red maple forest-type group has the highest average tons per acre (13.3) of cull and salvable dead material. The Loblolly/shortleaf group has the lowest average at just 3.1 tons per acre.

Introduction

The USDA Forest Service completed the fourth inventory of Maryland's forest resources in 1986. Previous inventories were conducted in 1950, 1964, and 1976.

The inventories are conducted 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 statistics presented in this report are a summary of data collected on new field plots established during the fourth inventory and on a remeasured subsample of plots established during the previous inventories. The new-plot sample consisted of 602 ground plots randomly selected from 18,355 photo points classified by land use and cubic-foot volume class. The remeasured sample consisted of 550 plots from the third survey. A total of 1,152 points was sampled for an average of one plot for every 5,465 acres of land area.

Data were collected, processed, and analyzed by the Forest Inventory and Analysis staff. A complete list of available biomass tables is included in this report. These tables are available on microfiche by state, geographic unit (Fig. 1), and county.

Other tables or additional information may be developed. For further information, contact the Forest Inventory and Analysis Unit, USDA Forest Service, 100 Matsonford Road, Radnor, PA 19087 (215-975-4074).

Methods

Traditionally, forest resource data have been collected to describe the forest in terms of its timber production capabilities. Board-foot and cubic-foot measures of volume (Fig. 2) were and are adequate for that purpose.

Although timber production is still considered by many to be the primary use of forest land, there are many data users that are also interested in how the resource can be used for energy production, fiber-based products, wildlife, or recreation. Because board-foot and cubic-foot volume estimates do not describe the forest resource broadly enough, biomass estimates have been built into the standard USDA Forest Service inventory procedure (Fig. 2).

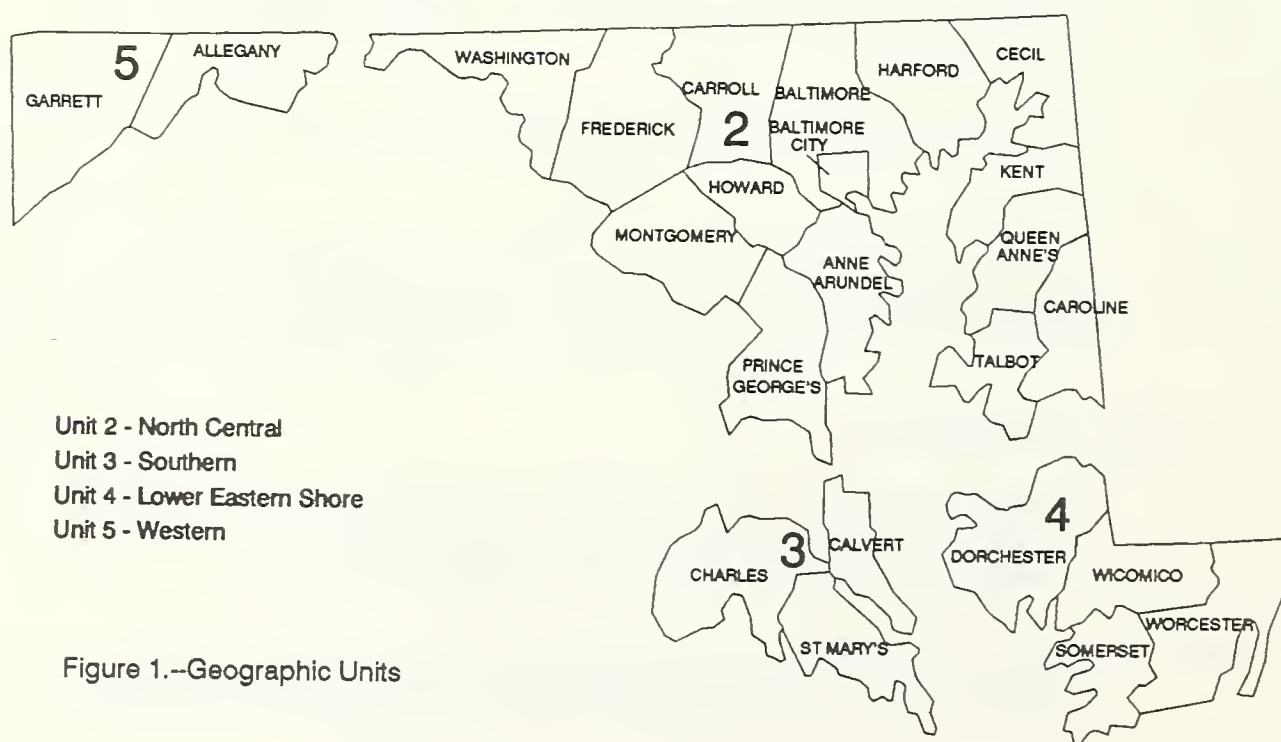


Figure 1.--Geographic Units

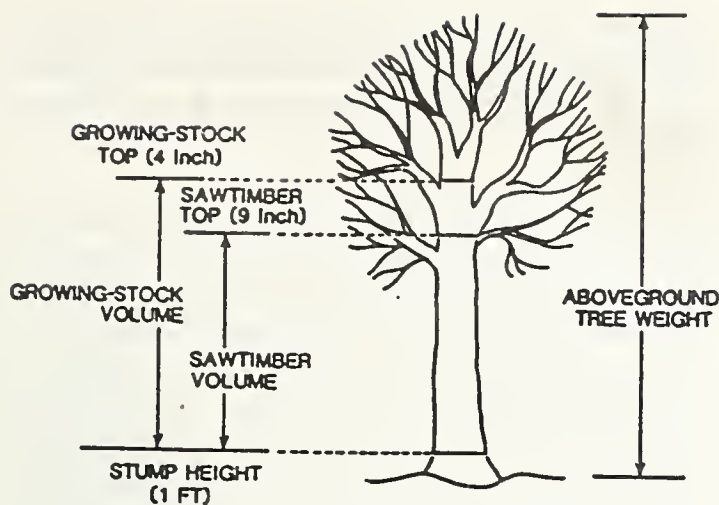


Figure 2.--Volume and weight relationships of hardwood aboveground tree biomass components.

Users of biomass data are interested in both green and dry weight as well as in the weight of various tree components. Two criteria were established for selecting a set of biomass equations to cover the species encountered in the Northeast. First, the biomass equations must provide both green weight and dry weight, and second, the selected equations must use only diameter at breast height as an independent variable.

Three sets of regression equations were chosen from the literature that fit the two criteria: Monteith (1979) collected data from New York, Wiant and others (1977) collected data from West Virginia, and Young and others collected data from Maine. The equations cover the range of species encountered in the Northeast. Where a regression equation for a species has been published by more than one author, Young and others (1980) is used as the primary source, followed by Wiant and others (1977) and Monteith (1979).

Young and others (1980) is the source of tree biomass regression functions for softwoods: balsam fir, eastern white pine, red pine, spruce, hemlock, northern white-cedar, and larch. The source of tree-biomass regression functions for hardwoods is: red maple, yellow birch, and aspen from Young and others (1980); sugar maple, American beech, and white ash from Monteith (1979); hickory, yellow-poplar, black cherry, white oak, scarlet oak, chestnut oak, northern red oak, and black oak from Wiant and others (1977).

Although all of the equations provide an estimate of total tree biomass (above stump), each equation uses different standards. Monteith's equation (3) assumes a 1-foot stump, whereas Wiant's (2) and Young's (1) equations assume a 6-inch stump. Also, foliage weight may be included or ignored depending on which equation is being used:

$$\ln Y = b_0 + b_1 \ln(D) \quad (1)$$

$$\text{LOG}_{10} Y = \text{LOG}_{10} b_0 + b_1 \text{LOG}_{10}(D) \quad (2)$$

where:

Y = green weight in pounds

D = diameter at breast height in inches

$$Y = b_0 + b_1(D) + b_2(D)^2 \quad (3)$$

where:

Y = green weight in kilograms

D = diameter at breast height in millimeters

The weights in stumps and foliage are commonly quite small, and in the case of foliage weight, variation is too great to develop meaningful averages (Keays 1971). Therefore, biomass statistics resulting from the use of the selected equations may be slightly over- or under-estimated depending on the species. The form of the equations is shown in the previous tabulation and the regression coefficients can be found on page 9.

All species that did not have specific biomass coefficients were grouped with species that had similar green and dry densities. (See page 10.)

The weight of the merchantable stem was derived by multiplying the total tree weight by a calculated percentage. The percentage is diameter and softwood/hardwood dependent and is based on historical inventory data. The estimate for tops and branches was developed by taking the difference between above-stump biomass from the weight regression equations and the independent estimate of merchantable stem biomass.

Estimates of area, volume, and aboveground tree biomass have been summarized in this report. The statistics are presented by forest-type group, species or species group, and diameter group and are provided at the state and county level.

Reliability of Estimates

The data in this report were based on a carefully designed sample of forest conditions throughout Maryland. The field crews did not measure every tree nor examine every acre in the State and so the data are estimates. Therefore, zeros in any table cell indicate that the condition did not appear in the sample, or that the amount encountered was negligible. They do not necessarily mean that the condition does not exist.

There are two important sources of error to consider when looking at the estimates provided in this report: (1) the error associated with estimation from sample plots, and (2) the error associated with combining independent estimates. Some of the errors associated with estimation from sample plots are included in the tables and are called sampling error. We are not able to calculate a value for the error associated with combining independent estimates.

Briefly, here is an example of how the sampling error is used to indicate reliability. The estimate of above-ground biomass of all trees on timberland in Maryland is 265 million green tons. It has an associated sampling error of 2.7 percent, or 7.2 million green tons. This means that if the survey were repeated, the odds are 2 to 1 (66 percent probability) that the estimate would be between 257.8 and 272.2 million green tons (265 ± 7.2). Similarly, the odds are 19 to 1 (95 percent probability) that the estimate would be within ± 14.4 million green tons.

State estimates have the smallest sampling errors and therefore are the most reliable. Geographic unit estimates are the next most reliable followed by county estimates. For example, the sampling error of aboveground tree biomass for Maryland is 2.7 percent, while the sampling error for Allegany County is 5.7 percent. County estimates are expected to be considerably less reliable than state estimates. The state estimates are based on a larger sample than county estimates, and as the sample size used to obtain the estimate decreases in relation to the population size, the sampling error is expected to increase.

Some of the estimates have sampling errors that are greater than 25 percent and may not be useable. Any estimate with a sampling error of 50 percent or more would not be significantly different from zero,

and those estimates with errors between 25 and 50 percent are suspect. Therefore, any estimates that have errors exceeding 25 percent should be used with caution.

The second important source of error occurs when two independent estimates are used to derive a third estimate. The biomass in tops and branches has been derived in this manner. The estimate of the merchantable stem biomass was subtracted from the estimate of total above-stump biomass to yield and estimate of the biomass in tops and branches. Consequently, the estimates of tops and branches should be used with caution.

Definition of Terms

Board foot. A unit of lumber measurement 1 foot long, 1 foot wide, and 1 inch thick, or its equivalent.

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

Cull tree. A rough tree or a rotten tree.

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 weight. The weight of wood and bark, oven-dry basis. It is usually expressed in pounds or tons.

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 1 acre.

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

Forest-type group. A combination of forest types that share closely associated species or site requirements. The many forest types in Maryland were combined into the following major forest-type groups (the descriptions apply to forests in Maryland):

a. *White/red pine*--forests in which white pine, hemlock, or red pine make up the plurality of the stocking, singly or in combination; common associates include maple, oak, and yellow-poplar.

b. *Spruce/fir*--forests in which red spruce, northern white-cedar, balsam fir, white spruce, black spruce, or tamarack, singly or in combination, make up a plurality of the stocking; common associates include paper birch, red maple, aspen, white pine, hemlock, and sugar maple.

c. *Loblolly/shortleaf pine group*--forests in which loblolly, shortleaf or other southern yellow pines (except longleaf or slash pine) singly or in combination, comprise a plurality of the stocking; common associates include oaks, red maple, and blackgum.

d. *Oak/pine*--forests in which northern red oak or white ash, singly or in combination, make up a plurality of the stocking but where pine or eastern red-cedar contributes 25 to 50 percent of the stocking; Virginia and loblolly pine, southern red oak, hickory, and blackgum are associates.

e. *Oak/hickory*--forests in which upland oaks, red maple (when associated with central hardwoods), or hawthorn, singly or in combination, make up a plurality of the stocking and in which white pine makes up less than 25 percent of the stocking; common associates include hard pine, ash, yellow-poplar, beech, blackgum, sugar maple, and red maple.

f. *Oak/gum/cypress*--bottomland forests in which wet-site oaks, sweetgum, or baldcypress, singly or in combination, comprise a plurality of the stocking and in which pine comprises less than 25 percent of the stocking; common associates include American elm, red maple, blackgum, and green ash.

g. *Elm/ash/red maple*--forests in which black ash, elm, red maple (when growing on wet sites), willow, or green ash, singly or in combination, make up a plurality of the stocking; common associates include bottomland oak, blackgum, river birch, and silver maple.

h. *Northern hardwoods*--forests in which sugar maple, beech, yellow birch, red maple (when

associated with northern hardwoods), pin cherry, or black cherry, singly or in combination, make up a plurality of the stocking; common associates include red maple, northern red oak, hemlock, white ash, and basswood.

Geographic unit. A county or a group of counties within a state that is large enough to provide an adequate sample that will yield statistically reliable estimates of timberland area, volume, and components of change.

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

Green ton stand-volume class. A classification of forest land in terms of net green weight of the aboveground components of all live trees per unit area. It is usually expressed in green tons per acre.

Green weight. The weight of wood and bark as it would be if it had been recently cut. It is usually expressed in pounds or tons.

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 5.0 inches d.b.h. and larger from a 1-foot stump to a minimum 4.0-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.

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

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 1/8 statute mile wide; and lakes, reservoirs, and ponds less than 40 acres in area. (b) Forest Inventory and Analysis: same as (a) except that the minimum width of streams, and so on, is 120 feet, and the minimum size of lakes, and so on, is 1 acre.

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

Noncommercial forest land. Productive-reserved, urban, and unproductive forest land.

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, residential areas, and highways.

Nonsalvable dead tree. A dead tree with most or all of its bark missing that is at least 5.0 inches in diameter at breast height and is at least 10 feet in height.

Ownership class. A classification of forest land based upon 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.

Poletimber stand. A stand-size class of forest land that is stocked with at least 10 percent of full stocking with all 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. Live trees of commercial species meeting regional specifications of soundness and form and at least 5.0 inches d.b.h., but smaller than sawtimber trees.

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 trees. A tree at least 5.0 inches in d.b.h. that has recently died and still has intact bark.

The tree 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 deviation and are calculated as the square root of the variance, divided by the estimate, and multiplied by 100.

Saplings. Live trees 1.0 inch through 4.9 inches d.b.h.

Sapling-seedling stand. A stand-size class of forest land that is stocked with at least 10 percent of full stocking with all 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 diameter inside bark of 6 inches for softwoods and 8 inches for hardwoods.

Sawlog portion. That part of the bole of a sawtimber tree between the stump and the sawlog top; that is, the merchantable height.

Sawlog top. The point on the bole of a sawtimber tree above which a sawlog cannot be produced. The minimum sawlog top is 7.0 inches diameter outside bark (d.o.b.) for softwoods and 9.0 inches d.o.b. for hardwoods.

Sawtimber stand. A stand-size class of forest land that is stocked with at least 10 percent of full stocking with all 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 trees. Live trees of commercial species at least 9.0 inches d.b.h. for softwoods or 11.0 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.

Seedlings. Live trees less than 1.0-inch d.b.h. and at least 1 foot in height.

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

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

Stand area class. The area, contiguous to the plot, that is of the same overall stand size and major type group (hardwood, softwood, or uniform mixture of both).

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

Stocking. The degree of occupancy of land by trees, measured by basal area and/or number of trees in a stand compared to the basal area and/or number of trees required to fully use the growth potential of the land (or the stocking standard). In the Eastern United States this standard is 75 square feet of basal area per acre for trees 5.0 inches d.b.h. and larger, or its equivalent in numbers of trees per acre for seedlings and saplings.

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 59, moderately stocked = 60 to 99, fully stocked = 100 to 129, and overstocked = 130 to 160.

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.

Top. The wood and bark of a tree above the merchantable height (or above the point on the stem 4.0 inches in diameter outside bark). It generally includes the uppermost stem, branches, and twigs of the tree, but not the foliage.

Tree class. A classification of the quality or condition of trees for sawlog production. Tree class for sawtimber trees is based on their present condition. Tree class for poletimber trees is a prospective determination--a forecast of their potential quality when they reach sawtimber size (11.0 inches d.b.h. for hardwoods, 9.0 inches d.b.h. for softwoods).

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

Upper-stem portion. That part of the main stem or fork of a sawtimber tree above the sawlog top to a diameter of 4.0 inches outside bark, or to the point where the main stem or fork breaks into limbs.

References

- Keays, J.L. 1971. **Complete-tree utilization, an analysis of the literature, part II: foliage.** Info. Rep. VP-X-70. Vancouver: Canadian Forest Service, Forest Products Laboratory. 94 p.
- Powell, Douglas S., Kingsley, Neal P. 1980. **The forest resources of Maryland.** Resour. Bull. NE-61. Broomall, PA: U.S. Department of Agriculture, Forest Service, Northeastern Forest Experiment Station. 103 p.
- Monteith, Douglas B. 1979. **Whole tree weight tables for New York.** AFRI Res. Rep. No. 40. Syracuse, NY: State University of New York, College of Environmental Science and Forestry, Applied Forestry Institute. 64 p.
- Scott, Charles T. 1979. **Northeastern forest survey board-foot volume equations.** Res. Note NE-271. Broomall, PA: U.S. Department of Agriculture, Forest Service, Northeastern Forest Experiment Station. 3 p.
- Scott, Charles T. 1981. **Northeastern forest survey revised cubic-foot volume equations.** Res. Note NE-304. Broomall, PA: U.S. Department of Agriculture, Forest Service, Northeastern Forest Experiment Station. 3 p.
- Wiant, Harry V.; Sheetz, Carter E. Jr.; Colaninno, Andrew; DeMoss, James C.; Castaneda, Froylan. 1977. **Tables and procedures for estimating weights of some appalachian hardwoods.** Bull. 659T. Morgantown, WV: West Virginia University, Agricultural and Forestry Experiment Station, College of Agriculture and Forestry. 36 p.
- Young, H. E.; Ribe, J. H.; Wainwright, K. 1980. **Weight tables for trees and shrub species in Maine.** Misc. Report 230. Orono, ME: University of Maine, Life Sciences and Agriculture Experiment Station; 1980. 84 p.

Biomass equation coefficients

Source	Species	Green weight			Dry weight		
		b_0	b_1	b_2	b_0	b_1	b_2
Softwoods							
Young (1980)	Balsam fir	1.3196	2.4014	--	0.5958	2.4017	--
Young	Eastern white pine	1.2846	2.4577	--	0.4080	2.4490	--
Young	Red pine	1.3700	2.4741	--	0.7157	2.3865	--
Young	Spruce	1.5371	2.3296	--	0.8079	2.3316	--
Young	Hemlock	1.4094	2.3556	--	0.6803	2.3617	--
Young	Northern white-cedar	1.8148	1.9192	--	1.1182	1.9269	--
Young	Larch	1.6101	2.2197	--	0.8162	2.2453	--
Hardwoods							
Young	Red maple	1.5144	2.3619	--	0.9392	2.3804	--
Monteith (1979)	Sugar maple	7.7581	-0.5485	0.0118	5.2480	-0.3661	0.0076
Young	Yellow Birch	1.6801	2.3145	--	1.1297	2.3376	--
Wiant (1977)	Hickory	2.9616	2.6241	--	1.9338	2.6209	--
Monteith	American beech	9.9762	-0.5876	0.0125	5.3373	-0.3257	0.0072
Monteith	White ash	4.8094	-0.3503	0.0092	3.2031	-0.2337	0.0061
Wiant	Yellow-poplar	4.0961	2.3911	--	1.5779	2.5153	--
Wiant	Black cherry	4.9556	2.3756	--	2.5883	2.4253	--
Young	Aspen	1.2816	2.4738	--	0.4689	2.6087	--
Wiant	White oak	2.0453	2.7470	--	1.2892	2.7010	--
Wiant	Scarlet oak	4.6681	2.4306	--	2.6574	2.4395	--
Wiant	Chestnut oak	3.3931	2.5578	--	2.1202	2.5344	--
Wiant	Northern red oak	2.8725	2.6696	--	1.6891	2.6598	--
Wiant	Black oak	3.9106	2.4883	--	2.1457	2.5050	--

Biomass equation key

Species	Green weight		Dry weight	
	density ¹	key species ²	density ¹	key species ²
Softwoods				
balsam fir	45	balsam fir	26	balsam fir
Atlantic white-cedar	26	northern white-cedar	23	northern white-cedar
eastern redcedar	37	eastern white pine	33	red pine
larch (introduced)	47	larch	37	larch
tamarack (native)	47	larch	37	larch
Norway spruce	34	red spruce	28	red spruce
white spruce	34	red spruce	28	red spruce
black spruce	34	red spruce	28	red spruce
blue spruce	34	red spruce	28	red spruce
red spruce	34	red spruce	28	red spruce
jack pine	50	eastern hemlock	30	eastern hemlock
shortleaf pine	51	eastern hemlock	38	larch
Table Mountain pine	51	eastern hemlock	30	eastern hemlock
red pine	42	red pine	34	red pine
pitch pine	50	eastern hemlock	34	red pine
pond pine	49	eastern hemlock	38	larch
eastern white pine	36	eastern white pine	25	eastern white pine
Scotch pine	42	red pine	34	red pine
loblolly pine	54	eastern hemlock	38	larch
Virginia pine	51	eastern hemlock	33	eastern hemlock
Austrian pine	42	red pine	34	red pine
Douglas fir	37	eastern white pine	33	red pine
baldcypress	50	eastern hemlock	32	red pine
northern white-cedar	28	northern white-cedar	22	northern white cedar
eastern hemlock	50	eastern hemlock	28	eastern hemlock
Hardwoods				
maple species	51	red maple	40	red maple
boxelder	37	yellow-poplar	27	quaking aspen
black maple	54	American beech	40	red maple
striped maple	37	yellow-poplar	32	black cherry
red maple	50	red maple	38	red maple
silver maple	45	black cherry	33	black cherry
sugar maple	56	sugar maple	44	sugar maple
mountain maple	37	yellow-poplar	33	black cherry
buckeye, horsechestnut	49	white ash	25	quaking aspen
Ohio buckeye	49	white ash	28	yellow-poplar
yellow buckeye	49	white ash	25	quaking aspen
ailanthus	37	yellow-poplar	24	quaking aspen
serviceberry	61	chestnut oak	52	hickories
pawpaw	47	black cherry	25	quaking aspen

Biomass equation key (continued)

Species	Green weight		Dry weight	
	density ¹	key species ²	density ¹	key species ²
yellow birch	57	yellow birch	43	yellow birch
sweet birch	57	yellow birch	46	chestnut oak
river birch	50	red maple	40	red maple
paper birch	50	red maple	39	red maple
gray birch	46	black cherry	35	black cherry
American hornbeam	53	American beech	48	white oak
hickory	63	hickories	50	hickories
water hickory	68	black oak	43	black oak
nutmeg hickory	60	chestnut oak	42	white oak
bitternut hickory	63	hickories	46	chestnut oak
pignut hickory	64	hickories	63	hickories
pecan	61	chestnut oak	47	scarlet oak
shellbark hickory	63	hickories	50	hickories
shagbark hickory	64	hickories	51	hickories
mockernut hickory	64	hickories	51	hickories
American chestnut	55	sugar maple	30	yellow-poplar
catalpa	41	quaking aspen	29	yellow-poplar
sugarberry	48	white ash	36	red maple
hackberry	50	red maple	37	red maple
eastern redbud	47	black cherry	39	red maple
yellowwood	58	yellow birch	39	red maple
flowering dogwood	64	hickories	51	hickories
hawthorn	63	hickories	48	white oak
common persimmon	63	hickories	52	hickories
American beech	54	American beech	45	American beech
white ash	48	white ash	42	white ash
black ash	53	American beech	34	black cherry
green ash	49	white ash	40	red maple
pumpkin ash	46	black cherry	36	red maple
blue ash	46	black cherry	40	red maple
honeylocust	61	chestnut oak	44	sugar maple
Kentucky coffeetree	47	black cherry	41	white ash
American holly	57	yellow birch	40	red maple
butternut	46	black cherry	27	quaking aspen
black walnut	58	yellow birch	39	red maple
sweetgum	50	red maple	34	black cherry
yellow-poplar	38	yellow-poplar	28	yellow-poplar
Osage-orange	62	white oak	48	white oak
cucumbertree	49	white ash	34	black cherry
sweetbay	49	white ash	34	black cherry
apple sp.	55	sugar maple	47	scarlet oak
white mulberry	60	chestnut oak	37	red maple
red mulberry	60	chestnut oak	37	red maple
water tupelo	56	sugar maple	35	black cherry
blackgum	45	black cherry	35	black cherry

Biomass equation key (continued)

Species	Green weight		Dry weight	
	density ¹	key species ²	density ¹	key species ²
swamp tupelo	45	black cherry	35	black cherry
eastern hophornbeam	60	chestnut oak	50	hickories
sourwood	53	American beech	38	red maple
Paulownia	41	quaking aspen	29	yellow-poplar
sycamore	52	American beech	35	black cherry
balsam poplar	40	yellow-poplar	23	quaking aspen
eastern cottonwood	49	white ash	28	yellow-poplar
bigtooth aspen	43	quaking aspen	27	quaking aspen
swamp cottonwood	49	white ash	25	quaking aspen
quaking aspen	43	quaking aspen	27	quaking aspen
cherry, plum	40	yellow-poplar	32	black cherry
pin cherry	33	yellow-poplar	28	yellow-poplar
black cherry	46	black cherry	35	black cherry
chokecherry	60	chestnut oak	48	white oak
white oak	62	white oak	48	white oak
swamp white oak	69	black oak	50	hickories
scarlet oak	62	scarlet oak	47	scarlet oak
northern pin oak	64	black oak	44	northern red oak
southern red oak	62	scarlet oak	41	white ash
cherrybark oak	68	black oak	48	white oak
bear oak	64	black oak	44	northern red oak
shingle oak	64	black oak	47	scarlet oak
laurel oak	65	black oak	44	northern red oak
overcup oak	63	northern red oak	51	hickories
bur oak	62	white oak	45	American beech
blackjack oak	64	black oak	46	chestnut oak
swamp chestnut oak	65	black oak	47	scarlet oak
chinkapin oak	63	northern red oak	54	hickories
water oak	63	northern red oak	44	northern red oak
pin oak	63	northern red oak	44	northern red oak
willow oak	67	black oak	49	white oak
chestnut oak	61	chestnut oak	46	chestnut oak
northern red oak	63	northern red oak	44	northern red oak
shumard oak	64	black oak	44	northern red oak
post oak	63	northern red oak	47	scarlet oak
black oak	63	black oak	43	black oak
black locust	58	yellow birch	48	white ash
black willow	50	red maple	26	quaking aspen
sassafras	44	quaking aspen	32	black cherry
American mountain-ash	60	chestnut oak	34	black cherry
European mountain-ash	60	chestnut oak	34	black cherry

Biomass equation key (continued)

Species	Green weight		Dry weight	
	density ¹	key species ²	density ¹	key species ²
American basswood	41	quaking aspen	26	quaking aspen
white basswood	41	quaking aspen	26	quaking aspen
winged elm	54	American beech	47	scarlet oak
American elm	54	American beech	36	red maple
slippery elm	56	sugar maple	37	red maple
rock elm	54	American beech	44	northern red oak

¹Species density, pounds/cubic feet.

²Indicates species used to develop coefficients for equations. See coefficient and equation table.

Oaks of the Northeast

Species Group	Common Name
Select White Oaks	
<i>Q. alba</i>	white oak
<i>Q. bicolor</i>	swamp white oak
<i>Q. macrocarpa</i>	bur oak
<i>Q. michauxii</i>	swamp chestnut oak
<i>Q. muchlenbergii</i>	chinkapin oak
Select Red Oaks	
<i>Q. falcata</i> var. <i>pagodifolia</i>	cherrybark oak
<i>Q. rubra</i>	northern red oak
<i>Q. shumardii</i>	shumard oak
Other White Oaks	
<i>Q. lyrata</i>	overcup oak
<i>Q. prinus</i>	chestnut oak
<i>Q. stellata</i> var. <i>stellata</i>	post oak
Other Red Oaks	
<i>Q. coccinea</i>	scarlet oak
<i>Q. ellipsoidalis</i>	northern pin oak
<i>Q. falcata</i>	southern red oak
<i>Q. ilicifolia</i>	bear oak
<i>Q. imbricaria</i>	shingle oak
<i>Q. laurifolia</i>	laurel oak
<i>Q. marilandica</i>	blackjack oak
<i>Q. nigra</i>	water oak
<i>Q. palustris</i>	pin oak
<i>Q. phellos</i>	willow oak
<i>Q. velutina</i>	black oak

Tree Species of Maryland (as encountered on field plots)

Scientific Name ***	Common Name(s)	Occurrence **
Softwoods		
<i>Chamaecyparis thyoides</i> (L) B.S.P.	Atlantic white-cedar	vr
<i>Juniperus virginiana</i> L.	eastern redcedar	r
<i>Larix</i> spp. Mill.	larch	vr
<i>Picea abies</i> (L.)Karst	Norway spruce	r
<i>P. rubens</i> Sarg.	red spruce	r
<i>Pinus echinata</i> Mill.	shortleaf pine	vr
<i>P. nigra</i> Arnold	Austrian pine	vr
<i>P. pungens</i> Lamb	table mountain piner	vr
<i>P. resinosa</i> Ait.	red pine	c
<i>P. rigida</i> Mill.	pitch pine	r
<i>P. serotina</i> Michx.	pond pine	r
<i>P. strobus</i> L.	eastern white pine	c
<i>P. sylvestris</i> L.	Scotch pine	r
<i>P. Taeda</i> L.	loblolly pine	vc
<i>P. virginiana</i> Mill.	Virginia pine	vc
<i>Taxodium distichum</i> (L.) Rich	Cypress	vr
<i>Tsuga canadensis</i> (L.) Carr.	eastern hemlock	r
Hardwoods		
<i>Acer negundo</i> L.*	boxelder	r
<i>A. pensylvanicum</i> L.*	striped maple	vr
<i>A. rubrum</i> L.	red maple	vc
<i>A. saccharinum</i> L.	silver maple	r
<i>A. saccharum</i> Marsh	sugar maple	c
<i>Ailanthus altissima</i> (Mill.)Swingle*	ailanthus	vr
<i>Betula alleghaniensis</i> Britton	yellow birch	r
<i>B. lenta</i> L.	sweet birch (black)	c
<i>B. nigra</i> L.	river birch	r
<i>B. populifolia</i> Marsh	gray birch	vr
<i>Carpinus caroliniana</i> Walt.*	American hornbeam	r
<i>Carya</i> spp. Nutt.	hickory	c
<i>Castanea dentata</i> (Marsh)Borkh.	American chestnut	vr
<i>Catalpa</i> spp. Scop.*	catalpa	r
<i>Celtis occidentalis</i>	hackberry	r
<i>Ceris canadensis</i> L.	eastern redbud	r

Tree species of Maryland (continued)

Scientific Name ***	Common Name(s)	Occurrence **
<i>Cornus spp.</i> L.	dogwood	r
<i>Crataegus spp.</i> L.*	hawthorn	vr
<i>Diospyros virginiana</i> L.*	persimmon	r
<i>Fagus grandifolia</i> Ehrh.	American beech	c
<i>Fraxinus americana</i> L.	white ash	c
<i>F. nigra</i> Marsh.	black ash	vr
<i>F. pennsylvanica</i> Marsh	green ash	r
<i>Ilex opaca</i> Ait.	American holly	c
<i>Juglans cinerea</i> L.	butternut	r
<i>Liquidambar styraciflua</i> L.	sweetgum	vc
<i>Liriodendron tulipifera</i> L.	yellow-poplar (tulip tree)	r
<i>Magnolia spp.</i> L.	magnolia	vr
<i>M. acuminata</i> L.	cucumbertree	vr
<i>M. virginiana</i> L.	sweetbay	r
<i>Malus spp.</i> Mill.	apple	vr
<i>Nyssa sylvatica</i> Marsh.	blackgum	c
<i>Ostrya virginiana</i> (Mill.)K. Koch*	eastern hophornbeam	r
<i>Platanus occidentalis</i> L.	sycamore	r
<i>Populus deltoides</i> Bartr. ex Marsh.	eastern cottonwood	vr
<i>P. grandidentata</i> Michx.	bigtooth aspen	c
<i>P. tremuloides</i> Michx.	quaking aspen	vr
<i>Prinus pensylvanica</i> L. f.*	pin cherry	r
<i>P. serotina</i> Ehrh.	black cherry	c
<i>Quercus alba</i> L.	white oak	vc
<i>Q. bicolor</i> Willd.	swamp white oak	r
<i>Q. coccinea</i> Muenchh.	scarlet oak	c
<i>Q. falcata</i> Michx.	southern red oak	c
<i>Q. falcata var. pagodifolia</i> Ell.	cherrybark oak	r
<i>Q. imbricaria</i> Michx.	shingle oak	vr
<i>Q. michauxii</i> Nutt.	swamp chestnut oak	r
<i>Q. muehlenbergii</i> Engelm.	chinkapin oak	vr
<i>Q. nigra</i> L.	water oak	c
<i>Q. palustris</i> Muenchh.	pin oak	r
<i>Q. phellos</i> L.	willow oak	c
<i>Q. prinus</i> L.	chestnut oak	vc
<i>Q. rubra</i> L.	northern red oak	c
<i>Q. stellata</i> Wangenh.	post oak	r
<i>Q. velutina</i> Lam.	black oak	c
<i>Robinia pseudoacacia</i> L.	black locust	c

Tree species of Maryland (continued)

Scientific Name ***	Common Name(s)	Occurrence **
<i>Salix</i> spp. Marsh.*	willow	r
<i>Salix nigra</i> Marsh.	black willow	vr
<i>Sassafras albidum</i> (Nutt.) Nees*	sassafras	c
<i>Tilia americana</i> L.	American basswood	r
<i>Ulmus americana</i> L.	American elm	c
<i>U. rubra</i> Muhl.	slippery elm	r

*** Names according to: Little, Elbert L., Jr. Checklist of United States Trees (native and naturalized). Agric. Handb. 541 Washington, DC: U.S. Department of Agriculture, Forest Service. 1979. 375 p. **Occurrence is based on the proportion of the species among all live trees 5.0 inches d.b.h. or larger 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.

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 feet = 3,480 cubic meters
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 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 or
1 square foot per acre basal area = 0.229568 square 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 is 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.

List of Available Biomass Tables

The following biomass tables are on microfiche. These tables are available at the state, geographic unit, and county level for both green and dry weight. Copies of fiche or photocopies of particular tables can be obtained by calling or writing

USDA Forest Service
Forest Inventory and Analysis
100 Matsonford Road
Radnor, PA 19087
(215-975-4074)

Table description

1. Softwood aboveground biomass by diameter class and stand-size class.
2. Hardwood aboveground biomass by diameter class and stand-size class.
3. Net weight (tons) of all trees on timberland by class of materials and softwoods and hardwoods.
4. Net weight (tons) of all live trees on timberland by species and diameter group.
5. Net weight (tons) of merchantable stem of growing stock trees on timberland by species and diameter class.
6. Net weight (tons) of growing stock trees on timberland by species and diameter class.
7. Net weight (tons) of all live trees on timberland by species and diameter group.
8. Net weight (tons) of all live trees on timberland by components and age class.
9. Net weight (tons) of all live trees on timberland by forest type and stand-size class.
10. Net weight (tons) of all live trees on timberland by forest-type group and stand-size class.
11. Net weight (tons) of all live trees on timberland by timber management class and forest-type group.
12. Net weight (tons) of all live trees on timberland by timber management class and standard area class.
13. Net weight (tons) of cull and salvable dead trees on timberland by forest-type group and stand-size class.
14. Net weight (tons) of cull and salvable dead trees 5"+ on timberland by species group and diameter group.
15. Net weight (tons) of cull and salvable dead trees on timberland by component type of tree and softwoods/hardwoods.

Index to Tables

The tables are divided into three sections: (1) net volume and aboveground biomass of all trees, (2) net aboveground biomass of all live trees and (3) net aboveground biomass of cull and salvable dead trees.

All Trees

1. Net volume of growing stock, sawtimber, and aboveground tree biomass of all trees on timberland, by county and species group, Maryland, 1986.
2. Area of timberland, net aboveground tree biomass of all trees on timberland, and net aboveground tree biomass per acre of timberland, by county, Maryland, 1986.
3. Net aboveground tree biomass of all trees on timberland, by class of material and species group, Maryland, 1986.
4. Net aboveground tree biomass of all trees on timberland, by class of material and species group, Allegany County, Maryland, 1986.
5. Net aboveground tree biomass of all trees on timberland, by class of material and species group, Baltimore County, Maryland, 1986.
6. Net aboveground tree biomass of all trees on timberland, by class of material and species group, Calvert County, Maryland, 1986.
7. Net aboveground tree biomass of all trees on timberland, by class of material and species group, Carroll County, Maryland, 1986.
8. Net aboveground tree biomass of all trees on timberland, by class of material and species group, Charles County, Maryland, 1986.
9. Net aboveground tree biomass of all trees on timberland, by class of material and species group, Dorchester County, Maryland, 1986.
10. Net aboveground tree biomass of all trees on timberland, by class of material and species group, Frederick County, Maryland, 1986.
11. Net aboveground tree biomass of all trees on timberland, by class of material and species group, Garrett County, Maryland, 1986.
12. Net aboveground tree biomass of all trees on timberland, by class of material and species group, St. Marys County, Maryland, 1986.
13. Net aboveground tree biomass of all trees on timberland, by class of material and species group, Somerset County, Maryland, 1986.
14. Net aboveground tree biomass of all trees on timberland, by class of material and species group, Washington County, Maryland, 1986.
15. Net aboveground tree biomass of all trees on timberland, by class of material and species group, Wicomico County, Maryland, 1986.
16. Net aboveground tree biomass of all trees on timberland, by class of material and species group, Worcester County, Maryland, 1986.
17. Net aboveground tree biomass of all trees on timberland, by class of material and species group, Anne Arundel/Howard Counties, Maryland, 1986.
18. Net aboveground tree biomass of all trees on timberland, by class of material and species group, Caroline/Talbot Counties, Maryland, 1986.
19. Net aboveground tree biomass of all trees on timberland, by class of material and

species group, Cecil/Harford Counties, Maryland, 1986.

20. Net aboveground tree biomass of all trees on timberland, by class of material and species group, Kent/Queen Annes Counties, Maryland, 1986.

21. Net aboveground tree biomass of all trees on timberland, by class of material and species group, Montgomery/Prince Georges Counties, Maryland, 1986.

Live Trees

22. Net aboveground tree biomass of all live trees on timberland, by forest-type group and stand-size class, Maryland, 1986.

23. Net aboveground tree biomass of all live trees on timberland, by forest-type group and stand-size class, Allegany County, Maryland, 1986.

24. Net aboveground tree biomass of all live trees on timberland, by forest-type group and stand-size class, Baltimore County, Maryland, 1986.

25. Net aboveground tree biomass of all live trees on timberland, by forest-type group and stand-size class, Calvert County, Maryland, 1986.

26. Net aboveground tree biomass of all live trees on timberland, by forest-type group and stand-size class, Carroll County, Maryland, 1986.

27. Net aboveground tree biomass of all live trees on timberland, by forest-type group and stand-size class, Charles County, Maryland, 1986.

28. Net aboveground tree biomass of all live trees on timberland, by forest-type group and stand-size class, Dorchester County, Maryland, 1986.

29. Net aboveground tree biomass of all live trees on timberland, by forest-type group and stand-size class, Frederick County, Maryland, 1986.

30. Net aboveground tree biomass of all live trees on timberland, by forest-type group and stand-size class, Garrett County, Maryland, 1986.

31. Net aboveground tree biomass of all live trees on timberland, by forest-type group and stand-size class, St. Marys County, Maryland, 1986.

32. Net aboveground tree biomass of all live trees on timberland, by forest-type group and stand-size class, Somerset County, Maryland, 1986.

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35. Net aboveground tree biomass of all live trees on timberland, by forest-type group and stand-size class, Worcester County, Maryland, 1986.

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 58. Net aboveground tree biomass of all live trees on timberland, by species and diameter group, Kent/Queen Annes Counties, Maryland, 1986.
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- Cull and Salvable Dead Trees**
60. Net aboveground tree biomass of cull and salvable dead trees (5.0+ inches d.b.h.) on timberland, by forest-type group and stand-size class, Maryland, 1986.

61. Net aboveground tree biomass of cull and salvable dead trees (5.0+ inches d.b.h.) on timberland, by forest-type group and stand-size class, Allegany County, Maryland, 1986.
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76. Net aboveground tree biomass of cull and salvable dead trees (5.0+ inches d.b.h.) on timberland, by forest-type group and stand-size class, Cecil/Harford Counties, Maryland, 1986.
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78. Net aboveground tree biomass of cull and salvable dead trees (5.0+ inches d.b.h.) on timberland, by forest-type group and stand-size class, Montgomery/Prince Georges Counties, Maryland, 1986.

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96. Net aboveground tree biomass of cull and salvable dead trees on timberland, by species group and diameter group, Kent/Queen/Annes County, Maryland, 1986.
97. Net aboveground tree biomass of cull and salvable dead trees on timberland, by species group and diameter group, Montgomery/Prince Georges County, Maryland, 1986.

All Trees

Table 1.--Net volume of growing stock, sawtimber, and aboveground tree biomass of all trees on timberland, by county and species group, Maryland, 1986

County	Growing Stock			Sawtimber		
	Softwoods	Hardwoods	All groups	Softwoods	Hardwoods	All groups
	--millions of cubic feet--			--millions of board feet ^a --		
Baltimore	29.9	175.9	205.8	77.3	689.8	767.1
Carroll	10.1	151.3	161.4	43.1	511.7	554.9
Frederick	5.9	217.8	223.7	12.9	670.2	683.1
Washington	9.2	144.3	153.5	24.2	460.7	484.8
Anne Arundel/Howard	28.4	243.9	272.3	71.7	824.7	896.4
Caroline/Talbot	57.8	202.3	260.2	197.0	583.9	780.9
Cecil/Harford	19.6	275.2	294.8	55.1	900.0	955.1
Kent/Queen Anne's	32.3	182.1	214.4	112.0	617.5	729.4
Montgomery/Prince George's	53.8	272.9	326.7	98.8	945.9	1,044.7
Central Unit	247.0	1,865.9	2,112.8	692.1	6,204.4	6,896.5
Calvert	19.2	148.5	167.6	52.1	510.7	562.7
Charles	72.5	302.4	374.9	183.4	877.3	1,060.7
St. Mary's	80.9	202.0	282.9	249.0	622.0	871.0
Southern Unit	172.5	652.9	825.4	484.5	2,010.0	2,494.4
Dorchester	105.3	107.5	212.8	270.4	254.6	525.0
Somerset	68.7	83.1	151.8	191.5	210.6	402.1
Wicomico	68.2	90.2	158.4	205.8	205.5	411.3
Worcester	80.1	176.8	256.9	241.3	451.6	692.8
Lower Eastern Shore Unit	322.4	457.6	779.9	909.0	1,122.3	2,031.3
Allegany	19.2	237.3	256.6	53.9	581.8	635.7
Garrett	52.0	448.1	500.1	114.9	1,162.0	1,276.9
Western Unit	71.2	685.4	756.7	168.9	1,743.7	1,912.6
State total	813.1	3,661.8	4,474.9	2,254.3	11,080.4	13,334.8

Table 1.--Continued

County	Green Weight			Dry Weight		
	Softwoods	Hardwoods	All groups	Softwoods	Hardwoods	All groups
---thousands of tons---						
Baltimore	1,389.8	9,888.4	11,278.2	649.0	5,654.2	6,303.2
Carroll	480.1	8,753.0	9,233.1	198.4	4,882.6	5,216.9
Frederick	416.5	13,255.6	13,672.1	194.5	7,794.6	7,989.1
Washington	489.6	9,223.3	9,712.9	240.1	5,397.7	5,637.8
Anne Arundel/Howard	1,417.7	13,583.3	15,001.0	728.0	7,861.0	8,589.0
Caroline/Talbot	2,536.2	12,099.4	14,635.6	1,130.4	7,002.3	8,132.7
Cecil/Harford	1,007.5	17,824.2	18,831.7	536.2	10,305.5	10,841.7
Kent/Queen Anne's	1,335.7	10,289.0	11,624.7	583.8	5,981.1	6,564.9
Montgomery/Prince George's	2,175.5	17,131.8	19,307.3	1,134.7	9,893.8	11,028.5
Central Unit	11,248.6	112,048.0	123,296.6	5,395.1	64,908.7	70,303.8
Calvert	867.0	8,449.1	9,316.1	446.1	4,844.3	5,290.4
Charles	3,108.6	16,723.7	19,832.3	1,556.8	9,706.7	11,273.5
St. Mary's	3,268.5	12,060.9	15,329.4	1,547.7	6,918.2	8,465.9
Southern Unit	7,244.1	37,233.7	44,477.8	3,560.6	21,469.2	25,029.8
Dorchester	4,692.2	7,293.1	11,985.3	2,037.8	4,228.0	6,265.8
Somerset	3,441.6	5,095.9	8,537.5	1,494.6	2,986.2	4,480.8
Wicomico	2,914.0	5,797.8	8,711.8	1,252.2	3,420.8	4,673.0
Worcester	3,912.7	11,917.5	15,830.2	1,723.9	7,017.8	8,741.7
Lower Eastern Shore Unit	14,960.4	30,104.3	45,064.7	6,508.5	17,652.8	24,161.3
Allegany	1,116.4	17,536.7	18,653.1	572.6	10,324.4	10,897.0
Garrett	2,956.7	30,432.9	33,389.6	1,360.0	17,862.8	19,222.8
Western Unit	4,073.1	47,969.6	52,042.7	1,932.6	28,187.2	30,119.8
State total	37,526.2	227,355.6	264,881.8	17,396.8	132,217.8	149,614.6

^aInternational 1/4-inch rule.

Table 2.--Area of timberland, net aboveground tree biomass of all trees on timberland, and net aboveground tree biomass per acre of timberland, by county, Maryland, 1986

County	Timberland area	Total aboveground tree biomass	Total aboveground tree biomass per unit area
	Thousand acres	Thousand green tons	Green tons per acre
Baltimore	104.9	11,278.2	107.5
Carroll	70.7	9,233.1	130.6
Frederick	116.8	13,672.1	117.1
Washington	90.4	9,712.9	107.4
Anne Arundel/Howard	147.9	15,001.0	101.4
Caroline/Talbot	100.0	14,635.6	146.4
Cecil/Harford	163.5	18,831.7	115.2
Kent/Queen Anne's	112.3	11,624.7	103.5
Montgomery/Prince George's	153.0	19,307.3	126.2
Central Unit	1,059.6	123,296.6	116.4
Calvert	73.9	9,316.1	126.1
Charles	175.5	19,832.3	113.0
St. Mary's	128.5	15,329.4	119.3
Southern Unit	377.9	44,477.8	117.7
Dorchester	141.1	11,985.3	84.9
Somerset	87.2	8,537.5	97.9
Wicomico	104.6	8,711.8	83.3
Worcester	156.1	15,830.2	101.4
Lower Eastern Shore Unit	489.0	45,064.7	92.2
Allegany	198.3	18,653.1	94.1
Garrett	299.3	33,389.6	111.6
Western Unit	497.6	52,042.7	104.6
State total	2,424.0	264,881.8	109.3

Table 2.--Continued

County	Total aboveground tree biomass	Total aboveground tree biomass per unit area
	Thousand dry tons	Dry tons per acre
Baltimore	6,303.2	60.1
Carroll	5,216.9	73.8
Frederick	7,989.1	68.4
Washington	5,637.8	62.4
Anne Arundel/Howard	8,589.0	58.1
Caroline/Talbot	8,132.7	81.3
Cecil/Harford	10,841.7	66.3
Kent/Queen Anne's	6,564.9	58.5
Montgomery/Prince George's	11,028.5	72.1
Central Unit	70,303.8	66.3
Calvert	5,290.4	71.6
Charles	11,273.5	64.2
St. Mary's	8,465.9	65.9
Southern Unit	25,029.8	66.2
Dorchester	6,265.8	44.4
Somerset	4,480.8	51.4
Wicomico	4,673.0	44.7
Worcester	8,741.7	56.0
Lower Eastern Shore Unit	24,161.3	49.4
Allegany	10,897.0	55.0
Garrett	19,222.8	64.2
Western Unit	30,119.8	60.5
State total	149,614.6	61.7

Table 3.--Net aboveground tree biomass of all trees on timberland, by class of material and species group, Maryland, 1986

(In thousands of tons)

Class of material	Green Weight ^a		All groups	Sampling error (percent)
	Softwoods	Hardwoods		
Sawtimber trees:				
Sawlog portion	15,659.2	83,281.2	98,940.4	3.5
Upper stem	2,148.2	18,111.7	20,260.0	3.4
Total	17,807.4	101,392.9	119,200.3	3.5
Poletimber trees	7,024.7	40,915.9	47,940.6	3.2
All growing stock	24,832.1	142,308.8	167,140.9	2.8
Rough cull trees ^b	222.2	9,669.8	9,892.0	6.8
Rotten cull trees ^b	14.1	1,347.0	1,361.1	14.3
Salvable dead trees ^c	549.0	4,227.0	4,776.0	10.6
Saplings ^d	2,617.4	17,121.6	19,739.0	5.7
Tops - growing stock	9,203.7	48,820.5	58,024.1	2.7
Tops - rough and rotten	87.8	3,860.9	3,948.7	6.1
All nongrowing stock	12,694.1	85,046.8	97,740.9	2.7
Total, all classes	37,526.2	227,355.6	264,881.8	2.7
Sampling error (percent)	7.1	3.1	2.7	

Table 3.--Continued

(In thousands of tons)

Class of material	Dry Weight ^a		All groups	Sampling error (percent)
	Softwoods	Hardwoods		
Sawtimber trees:				
Sawlog portion	7,133.0	48,433.3	55,566.3	3.6
Upper stem	987.4	10,550.8	11,538.3	3.4
Total	8,120.5	58,984.1	67,104.6	3.6
Poletimber trees	3,325.5	23,993.8	27,319.3	3.2
All growing stock	11,445.9	82,977.9	94,423.8	2.9
Rough cull trees ^b	109.8	5,631.4	5,741.2	6.8
Rotten cull trees ^b	6.3	808.7	815.0	14.4
Salvable dead trees ^c	263.4	2,448.2	2,711.6	10.7
Saplings ^d	1,268.7	9,617.8	10,886.4	5.6
Tops - growing stock	4,259.7	28,487.0	32,746.7	2.7
Tops - rough and rotten	43.0	2,246.8	2,289.8	6.0
All nongrowing stock	5,950.9	49,239.9	55,190.8	2.8
Total, all classes	17,396.8	132,217.8	149,614.6	2.7
Sampling error (percent)	7.0	3.1	2.7	

^aIncludes bark and sound cull; excludes rotten cull.^bBole portion of trees 5.0 inches d.b.h. and larger.^cVolume of bole portion of trees 5.0 inches d.b.h. and larger, and weight of entire tree aboveground.^dIncludes entire tree aboveground.

Table 4.--Net aboveground tree biomass of all trees on timberland, by class of material and species group, Allegany County, Maryland, 1986

(In thousands of tons)

Class of material	Green Weight ^a		All groups	Sampling error (percent)
	Softwoods	Hardwoods		
Sawtimber trees:				
Sawlog portion	462.3	5,256.3	5,718.5	9.4
Upper stem	68.2	1,161.0	1,229.2	9.0
Total	530.5	6,417.3	6,947.7	9.3
Poletimber trees				
All growing stock	710.0	10,079.1	10,789.0	6.7
Rough cull trees ^b	21.5	1,627.8	1,649.3	11.7
Rotten cull trees ^b	.0	59.3	59.3	53.0
Salvable dead trees ^c	3.8	548.0	551.9	34.6
Saplings ^d	110.0	1,087.7	1,197.8	16.4
Tops - growing stock	262.8	3,553.1	3,815.9	6.4
Tops - rough and rotten	8.3	581.7	589.9	11.2
All nongrowing stock	406.4	7,457.6	7,864.1	5.8
Total, all classes	1,116.4	17,536.7	18,653.1	5.7
Sampling error (percent)				
	25.2	6.0	5.7	

Table 4.--Continued

(In thousands of tons)

Class of material	Dry Weight ^a		All groups	Sampling error (percent)
	Softwoods	Hardwoods		
Sawtimber trees:				
Sawlog portion	238.7	3,089.8	3,328.5	9.5
Upper stem	35.4	683.4	718.8	9.0
Total	274.1	3,773.2	4,047.3	9.4
Poletimber trees	92.1	2,166.7	2,258.8	9.0
All growing stock	366.2	5,939.9	6,306.1	6.8
Rough cull trees ^b	11.4	969.6	981.0	11.8
Rotten cull trees ^b	.0	37.2	37.2	52.1
Salvable dead trees ^c	2.0	324.0	326.0	34.0
Saplings ^d	53.1	611.8	664.9	15.6
Tops - growing stock	135.5	2,094.9	2,230.4	6.4
Tops - rough and rotten	4.4	347.0	351.4	11.5
All nongrowing stock	206.4	4,384.5	4,590.9	5.8
Total, all classes	572.6	10,324.4	10,897.0	5.7
Sampling error (percent)	25.5	6.1	5.7	

^aIncludes bark and sound cull; excludes rotten cull.^bBole portion of trees 5.0 inches d.b.h. and larger.^cVolume of bole portion of trees 5.0 inches d.b.h. and larger, and weight of entire tree aboveground.^dIncludes entire tree aboveground.

Table 5.--Net aboveground tree biomass of all trees on timberland, by class of material and species group, Baltimore County, Maryland, 1986

(In thousands of tons)

Class of material	Green Weight ^a		All groups	Sampling error (percent)
	Softwoods	Hardwoods		
Sawtimber trees:				
Sawlog portion	567.6	4,784.2	5,351.8	26.6
Upper stem	82.5	946.2	1,028.6	25.8
Total	650.1	5,730.4	6,308.5	26.4
Poletimber trees	302.9	1,183.6	1,486.5	21.0
All growing stock	953.0	6,914.0	7,866.9	22.9
Rough cull trees ^b	9.2	314.6	323.8	33.1
Rotten cull trees ^b	.0	2.8	2.8	100.0
Salvable dead trees ^c	44.9	79.5	124.4	44.2
Saplings ^d	18.0	241.6	259.6	37.9
Tops - growing stock	361.4	2,223.4	2,584.8	21.0
Tops - rough and rotten	3.3	112.4	115.8	33.2
All nongrowing stock	436.8	2,974.4	3,411.2	19.6
Total, all classes	1,389.8	9,888.4	11,278.2	21.7
Sampling error (percent)	49.1	25.8	21.7	

Table 5.--Continued

(In thousands of tons)

Class of material	Dry Weight ^a		All groups	Sampling error (percent)
	Softwoods	Hardwoods		
Sawtimber trees:				
Sawlog portion	267.8	2,725.7	2,993.5	27.0
Upper stem	38.9	539.3	578.2	26.1
Total	306.7	3,265.0	3,571.7	26.8
Poletimber trees	136.9	679.0	815.9	20.8
All growing stock	443.6	3,944.0	4,387.9	23.1
Rough cull trees ^b	3.7	181.9	185.7	33.6
Rotten cull trees ^b	.0	1.7	1.7	100.0
Salvable dead trees ^c	23.4	46.1	69.6	45.6
Saplings ^d	9.3	146.8	156.1	38.3
Tops - growing stock	167.6	1,269.2	1,436.7	21.1
Tops - rough and rotten	1.4	64.4	65.9	33.9
All nongrowing stock	205.4	1,710.2	1,915.6	19.9
Total, all classes	649.0	5,654.2	6,303.2	21.9
Sampling error (percent)	46.6	25.4	21.9	

^aIncludes bark and sound cull; excludes rotten cull.

^bBole portion of trees 5.0 inches d.b.h. and larger.

^cVolume of bole portion of trees 5.0 inches d.b.h. and larger, and weight of entire tree aboveground.

^dIncludes entire tree aboveground.

Table 6.--Net aboveground tree biomass of all trees on timberland, by class of material and species group, Calvert County, Maryland, 1986

(In thousands of tons)

Class of material	Green Weight ^a		All groups	Sampling error (percent)
	Softwoods	Hardwoods		
Sawtimber trees:				
Sawlog portion	381.7	3,457.6	3,839.3	11.5
Upper stem	52.2	728.0	780.2	11.1
Total	433.9	4,185.6	4,619.5	11.4
Poletimber trees	144.9	1,122.4	1,267.3	11.5
All growing stock	578.8	5,308.0	5,886.8	10.4
Rough cull trees ^b	18.1	167.9	186.1	31.4
Rotten cull trees ^b	.0	37.6	37.6	44.3
Salvable dead trees ^c	10.8	295.9	306.6	54.3
Saplings ^d	47.2	796.0	843.2	24.2
Tops - growing stock	207.6	1,770.3	1,977.9	10.0
Tops - rough and rotten	4.4	73.4	77.8	26.9
All nongrowing stock	288.2	3,141.1	3,429.3	12.1
Total, all classes	867.0	8,449.1	9,316.1	10.5
Sampling error (percent)	21.4	11.3	10.5	

Table 6.--Continued

(In thousands of tons)

Class of material	Dry Weight ^a		All groups	Sampling error (percent)
	Softwoods	Hardwoods		
Sawtimber trees:				
Sawlog portion	195.7	1,994.3	2,190.0	11.4
Upper stem	26.9	420.4	447.3	11.1
Total	222.6	2,414.7	2,637.2	11.4
Poletimber trees	75.0	651.7	726.7	11.4
All growing stock	297.6	3,066.4	3,364.0	10.3
Rough cull trees ^b	10.0	92.7	102.6	32.0
Rotten cull trees ^b	.0	21.4	21.4	42.1
Salvable dead trees ^c	5.8	162.7	168.5	54.2
Saplings ^d	23.4	437.6	461.0	24.8
Tops - growing stock	106.9	1,023.4	1,130.3	10.0
Tops - rough and rotten	2.4	40.2	42.6	26.8
All nongrowing stock	148.5	1,777.9	1,926.4	12.3
Total, all classes	446.1	4,844.3	5,290.4	10.5
Sampling error (percent)	21.6	11.3	10.5	

^aIncludes bark and sound cull; excludes rotten cull.

^bBole portion of trees 5.0 inches d.b.h. and larger.

^cVolume of bole portion of trees 5.0 inches d.b.h. and larger, and weight of entire tree aboveground.

^dIncludes entire tree aboveground.

Table 7.--Net aboveground tree biomass of all trees on timberland, by class of material and species group, Carroll County, Maryland, 1986

(In thousands of tons)

Class of material	Green Weight ^a		All groups	Sampling error (percent)
	Softwoods	Hardwoods		
Sawtimber trees:				
Sawlog portion	321.9	3,923.9	4,245.7	15.8
Upper stem	39.7	810.7	850.5	14.8
Total	361.6	4,734.6	5,096.2	15.6
Poletimber trees	.0	1,418.3	1,418.3	27.2
All growing stock	361.6	6,153.0	6,514.5	14.1
Rough cull trees ^b	.0	69.8	69.8	72.0
Rotten cull trees ^b	.0	3.1	3.1	100.0
Salvable dead trees ^c	.0	232.4	232.4	35.2
Saplings ^d	.0	195.2	195.2	46.0
Tops - growing stock	118.6	2,066.6	2,185.1	14.3
Tops - rough and rotten	.0	32.9	32.9	73.5
All nongrowing stock	118.6	2,600.0	2,718.6	12.3
Total, all classes	480.1	8,753.0	9,233.1	13.5
Sampling error (percent)	99.5	13.6	13.5	

Table 7.--Continued

(In thousands of tons)

Class of material	Dry Weight ^a		All groups	Sampling error (percent)
	Softwoods	Hardwoods		
Sawtimber trees:				
Sawlog portion	132.9	2,254.7	2,387.6	15.3
Upper stem	16.5	465.5	481.9	14.7
Total	149.4	2,720.2	2,869.6	15.2
Poletimber trees	.0	806.9	806.9	27.1
All growing stock	149.4	3,527.1	3,676.5	13.7
Rough cull trees ^b	.0	41.2	41.2	72.2
Rotten cull trees ^b	.0	1.8	1.8	100.0
Salvable dead trees ^c	.0	135.8	135.8	34.9
Saplings ^d	.0	110.6	110.6	46.1
Tops - growing stock	49.0	1,182.5	1,231.4	14.0
Tops - rough and rotten	.0	19.4	19.4	73.6
All nongrowing stock	49.0	1,491.4	1,540.4	11.8
Total, all classes	198.4	5,018.5	5,216.9	13.1
Sampling error (percent)	99.3	13.4	13.1	

^aIncludes bark and sound cull; excludes rotten cull.

^bBole portion of trees 5.0 inches d.b.h. and larger.

^cVolume of bole portion of trees 5.0 inches d.b.h. and larger, and weight of entire tree aboveground.

^dIncludes entire tree aboveground.

Table 8.--Net aboveground tree biomass of all trees on timberland, by class of material and species group, Charles County, Maryland, 1986

(In thousands of tons)

Class of material	Green Weight ^a		All groups	Sampling error (percent)
	Softwoods	Hardwoods		
Sawtimber trees:				
Sawlog portion	1,274.1	6,108.6	7,382.8	8.8
Upper stem	193.2	1,343.8	1,537.0	8.0
Total	1,467.4	7,452.4	8,919.8	8.6
Poletimber trees	616.3	3,291.1	3,907.4	9.5
All growing stock	2,083.7	10,743.5	12,827.2	6.5
Rough cull trees ^b	58.1	526.7	584.8	22.7
Rotten cull trees ^b	.0	79.8	79.8	48.2
Salvable dead trees ^c	43.5	79.3	122.8	35.5
Saplings ^d	117.2	1,374.9	1,492.1	19.1
Tops - growing stock	786.2	3,706.1	4,492.2	6.1
Tops - rough and rotten	19.9	213.5	233.3	22.1
All nongrowing stock	1,024.9	5,980.2	7,005.1	7.9
Total, all classes	3,108.6	16,723.7	19,832.3	6.5
Sampling error (percent)	23.7	8.6	6.5	

Table 8.--Continued

(In thousands of tons)

Class of material	Dry Weight ^a		All groups	Sampling error (percent)
	Softwoods	Hardwoods		
Sawtimber trees:				
Sawlog portion	636.9	3,551.1	4,188.0	8.9
Upper stem	97.2	784.0	881.2	8.3
Total	734.1	4,335.2	5,069.3	8.8
Poletimber trees	314.9	1,934.2	2,249.1	9.6
All growing stock	1,049.0	6,269.4	7,318.4	6.7
Rough cull trees ^b	29.2	290.0	319.2	22.8
Rotten cull trees ^b	.0	46.5	46.5	48.7
Salvable dead trees ^c	21.3	47.6	68.9	36.5
Saplings ^d	60.6	772.0	832.6	19.1
Tops - growing stock	396.7	2,164.1	2,560.7	6.3
Tops - rough and rotten	10.0	117.1	127.1	21.6
All nongrowing stock	517.8	3,437.3	3,955.1	7.9
Total, all classes	1,566.8	9,706.7	11,273.5	6.7
Sampling error (percent)				
	22.9	8.6	6.7	

^aIncludes bark and sound cull; excludes rotten cull.

^bBole portion of trees 5.0 inches d.b.h. and larger.

^cVolume of bole portion of trees 5.0 inches d.b.h. and larger, and weight of entire tree aboveground.

^dIncludes entire tree aboveground.

Table 9.--Net aboveground tree biomass of all trees on timberland, by class of material and species group, Dorchester County, Maryland, 1986

(In thousands of tons)

Class of material	Green Weight ^a		All groups	Sampling error (percent)
	Softwoods	Hardwoods		
Sawtimber trees:				
Sawlog portion	1,796.4	2,204.0	4,000.5	12.5
Upper stem	262.9	501.6	764.5	12.9
Total	2,059.3	2,705.6	4,765.0	12.5
Poletimber trees				
All growing stock	3,081.0	4,420.6	7,501.6	9.2
Rough cull trees ^b	11.3	156.5	167.8	23.6
Rotten cull trees ^b	.0	65.5	65.5	25.8
Salvable dead trees ^c	109.4	196.1	305.5	19.7
Saplings ^d	315.4	783.1	1,098.6	21.5
Tops - growing stock	1,170.4	1,589.5	2,769.9	8.7
Tops - rough and rotten	4.6	81.7	86.3	19.0
All nongrowing stock	1,611.2	2,872.5	4,483.7	8.4
Total, all classes	4,692.2	7,293.1	11,985.3	8.5
Sampling error (percent)				
	16.3	14.3	8.5	

Table 9.--Continued

(In thousands of tons)

Class of material	Dry Weight ^a		All groups	Sampling error (percent)
	Softwoods	Hardwoods		
Sawtimber trees:				
Sawlog portion	756.1	1,273.1	2,029.2	13.4
Upper stem	111.3	291.0	402.3	13.9
Total	867.4	1,564.1	2,431.5	13.4
Poletimber trees	455.6	1,018.2	1,473.8	10.5
All growing stock	1,323.0	2,582.3	3,905.3	9.5
Rough cull trees ^b	4.9	94.0	99.0	23.9
Rotten cull trees ^b	.0	38.2	38.2	25.1
Salvable dead trees ^c	48.7	105.5	154.2	20.6
Saplings ^d	153.5	428.5	582.0	21.6
Tops - growing stock	505.6	931.1	1,436.7	8.8
Tops - rough and rotten	2.0	48.4	50.4	19.0
All nongrowing stock	714.8	1,645.7	2,360.5	8.5
Total, all classes	2,037.8	4,228.0	6,265.8	8.7
Sampling error (percent)	16.4	14.0	8.7	

^aIncludes bark and sound cull; excludes rotten cull.^bBole portion of trees 5.0 inches d.b.h. and larger.^cVolume of bole portion of trees 5.0 inches d.b.h. and larger, and weight of entire tree aboveground.^dIncludes entire tree aboveground.

Table 10.--Net aboveground tree biomass of all trees on timberland, by class of material and species group, Frederick County, Maryland, 1986

(In thousands of tons)

Class of material	Green Weight ^a		All groups	Sampling error (percent)
	Softwoods	Hardwoods		
Sawtimber trees:				
Sawlog portion	95.7	5,031.4	5,127.0	12.8
Upper stem	15.4	1,105.3	1,120.7	11.4
Total	111.0	6,136.6	6,247.7	12.6
Poletimber trees	90.6	2,487.8	2,578.5	16.3
All growing stock	201.7	8,624.5	8,826.2	9.3
Rough cull trees ^b	.0	632.7	632.7	24.1
Rotten cull trees ^b	.0	10.3	10.3	70.8
Salvable dead trees ^c	.0	175.9	175.9	39.3
Saplings ^d	133.5	642.2	775.7	29.9
Tops - growing stock	81.4	2,944.7	3,026.1	8.8
Tops - rough and rotten	.0	225.2	225.2	22.3
All nongrowing stock	214.8	4,631.1	4,845.9	10.4
Total, all classes	416.5	13,255.6	13,672.1	9.2
Sampling error (percent)	44.4	9.7	9.2	

Table 10.--Continued

(In thousands of tons)

Class of material	Dry Weight ^a		All groups	Sampling error (percent)
	Softwoods	Hardwoods		
Sawtimber trees:				
Sawlog portion	48.3	2,955.9	3,004.2	13.1
Upper stem	7.8	651.3	659.0	11.7
Total	56.0	3,607.2	3,663.2	12.8
Poletimber trees	38.1	1,461.8	1,500.0	16.8
All growing stock	94.2	5,069.0	5,163.2	9.5
Rough cull trees ^b	.0	360.5	360.5	24.5
Rotten cull trees ^b	.0	6.6	6.6	70.8
Salvable dead trees ^c	.0	101.6	101.6	39.4
Saplings ^d	62.9	398.3	461.3	29.7
Tops - growing stock	37.4	1,730.7	1,768.1	9.1
Tops - rough and rotten	.0	127.8	127.8	22.2
All nongrowing stock	100.3	2,725.6	2,825.9	10.5
Total, all classes	194.5	7,794.6	7,989.1	9.4
Sampling error (percent)	44.2	9.8	9.4	

^aIncludes bark and sound cull; excludes rotten cull.^bBole portion of trees 5.0 inches d.b.h. and larger.^cVolume of bole portion of trees 5.0 inches d.b.h. and larger, and weight of entire tree aboveground.^dIncludes entire tree aboveground.

Table 11.--Net aboveground tree biomass of all trees on timberland, by class of material and species group, Garrett County, Maryland, 1986

(In thousands of tons)

Class of material	Green Weight ^a		All groups	Sampling error (percent)
	Softwoods	Hardwoods		
Sawtimber trees:				
Sawlog portion	907.9	10,065.7	10,973.6	7.4
Upper stem	112.2	2,288.9	2,401.1	6.7
Total	1,020.1	12,354.6	13,374.7	7.2
Poletimber trees	891.6	6,235.5	7,127.1	8.9
All growing stock	1,911.7	18,590.1	20,501.8	5.6
Rough cull trees ^b	29.1	1,743.4	1,772.5	12.0
Rotten cull trees ^b	.8	288.0	288.8	28.1
Salvable dead trees ^c	22.0	663.4	685.5	21.2
Saplings ^c	230.8	1,939.0	2,169.7	16.9
Tops - growing stock	751.0	6,471.8	7,222.8	5.7
Tops - rough and rotten	11.4	737.2	748.6	10.7
All nongrowing stock	1,045.0	11,842.8	12,887.8	4.9
Total, all classes	2,956.7	30,432.9	33,389.6	4.8
Sampling error (percent)	34.0	5.2	4.8	

Table 11.--Continued

(In thousands of tons)

Class of material	Dry Weight ^a		All groups	Sampling error (percent)
	Softwoods	Hardwoods		
Sawtimber trees:				
Sawlog portion	427.0	5,918.3	6,345.3	7.4
Upper stem	52.1	1,347.5	1,399.6	6.8
Total	479.1	7,265.8	7,744.9	7.2
Poletimber trees	401.7	3,679.9	4,081.6	8.1
All growing stock	880.8	10,945.7	11,826.5	5.5
Rough cull trees ^b	12.5	1,022.4	1,035.0	12.0
Rotten cull trees ^b	.4	173.2	173.6	27.7
Salvable dead trees ^c	10.8	401.6	412.4	21.5
Saplings ^d	106.6	1,075.1	1,181.7	16.5
Tops - growing stock	344.0	3,811.9	4,155.9	5.4
Tops - rough and rotten	4.9	432.9	437.8	10.6
All nongrowing stock	479.2	6,917.1	7,396.3	4.7
Total, all classes	1,360.0	17,862.8	19,222.8	4.7
Sampling error (percent)	33.2	5.2	4.7	

^aIncludes bark and sound cull; excludes rotten cull.

^bBole portion of trees 5.0 inches d.b.h. and larger.

^cVolume of bole portion of trees 5.0 inches d.b.h. and larger, and weight of entire tree aboveground.

^dIncludes entire tree aboveground.

Table 12.--Net aboveground tree biomass of all trees on timberland, by class of material and species group, St. Mary's County, Maryland, 1986

(In thousands of tons)

Class of material	Green Weight ^a		All groups	Sampling error (percent)
	Softwoods	Hardwoods		
Sawtimber trees:				
Sawlog portion	1,630.8	4,360.7	5,991.5	8.3
Upper stem	222.1	957.4	1,179.5	8.0
Total	1,852.8	5,318.1	7,171.0	8.2
Poletimber trees	461.2	2,054.3	2,515.5	8.2
All growing stock	2,314.1	7,372.4	9,686.5	6.8
Rough cull trees ^b	.3	359.1	359.4	27.8
Rotten cull trees ^b	2.0	91.5	93.5	69.0
Salvable dead trees ^c	46.6	233.7	280.3	39.2
Saplings ^d	80.4	1,315.0	1,395.4	15.7
Tops - growing stock	824.3	2,524.5	3,348.8	6.6
Tops - rough and rotten	.8	164.6	165.5	27.1
All nongrowing stock	954.4	4,688.5	5,642.9	8.4
Total, all classes	3,268.5	12,060.9	15,329.4	7.0
Sampling error (percent)	16.7	8.4	7.0	

Table 12.--Continued

(In thousands of tons)

Class of material	Dry Weight ^a		All groups	Sampling error (percent)
	Softwoods	Hardwoods		
Sawtimber trees:				
Sawlog portion	759.5	2,490.1	3,249.6	8.4
Upper stem	104.8	549.1	654.0	8.2
Total	864.3	3,039.2	3,903.5	8.3
Poletimber trees	226.6	1,196.7	1,423.3	8.2
All growing stock	1,090.9	4,236.0	5,326.9	6.9
Rough cull trees ^b	.1	202.5	202.7	27.8
Rotten cull trees ^b	1.1	53.4	54.5	68.5
Salvable dead trees ^c	22.8	138.0	160.8	39.5
Saplings ^d	41.4	740.9	782.2	16.3
Tops - growing stock	391.0	1,454.3	1,845.3	6.6
Tops - rough and rotten	.4	93.1	93.5	27.0
All nongrowing stock	456.8	2,682.2	3,139.0	8.6
Total, all classes	1,547.7	6,918.2	8,465.9	7.1
Sampling error				
(percent)	16.5	8.4	7.1	

^aIncludes bark and sound cull; excludes rotten cull.^bBole portion of trees 5.0 inches d.b.h. and larger.^cVolume of bole portion of trees 5.0 inches d.b.h. and larger, and weight of entire tree aboveground.^dIncludes entire tree aboveground.

Table 13.--Net aboveground tree biomass of all trees on timberland, by class of material and species group, Somerset County, Maryland, 1986

(In thousands of tons)

Class of material	Green Weight ^a		All groups	Sampling error (percent)
	Softwoods	Hardwoods		
Sawtimber trees:				
Sawlog portion	1,302.3	1,681.5	2,983.8	17.4
Upper stem	173.1	393.7	566.8	19.1
Total	1,475.4	2,075.1	3,550.5	17.5
Poletimber trees	608.0	1,152.8	1,761.6	17.7
All growing stock	2,084.2	3,227.9	5,312.1	15.2
Rough cull trees ^b	3.8	202.0	205.8	44.9
Rotten cull trees ^b	.0	7.4	7.4	100.0
Salvable dead trees ^c	34.2	40.5	74.7	29.9
Saplings ^d	539.7	394.6	934.3	42.0
Tops - growing stock	778.1	1,151.3	1,929.4	14.7
Tops - rough and rotten	1.6	72.2	73.8	45.2
All nongrowing stock	1,357.4	1,868.0	3,225.4	16.5
Total, all classes	3,441.6	5,095.9	8,537.5	14.2
Sampling error (percent)	27.5	24.8	14.2	

Table 13.--Continued

(In thousands of tons)

Class of material	Dry Weight ^a		All groups	Sampling error (percent)
	Softwoods	Hardwoods		
Sawtimber trees:				
Sawlog portion	541.6	982.8	1,524.4	18.8
Upper stem	72.4	230.2	302.5	21.0
Total	613.9	1,213.0	1,826.9	19.0
Poletimber trees				
All growing stock	885.1	1,889.3	2,774.4	16.5
Rough cull trees ^b	1.7	119.9	121.6	42.9
Rotten cull trees ^b	.0	4.4	4.4	100.0
Salvable dead trees ^c	15.4	23.5	38.9	28.8
Saplings ^d	259.2	232.7	491.9	39.6
Tops - growing stock	332.5	674.0	1,006.5	15.7
Tops - rough and rotten	.7	42.3	43.1	43.3
All nongrowing stock	609.5	1,096.9	1,706.4	16.1
Total, all classes	1,494.6	2,986.2	4,480.8	15.0
Sampling error (percent)				
	27.8	24.8	15.0	

^aIncludes bark and sound cull; excludes rotten cull.

^bBole portion of trees 5.0 inches d.b.h. and larger.

^cVolume of bole portion of trees 5.0 inches d.b.h. and larger, and weight of entire tree aboveground.

^dIncludes entire tree aboveground.

Table 14.--Net aboveground tree biomass of all trees on timberland, by class of material and species group, Washington County, Maryland, 1986

(In thousands of tons)

Class of material	Green Weight ^a		All groups	Sampling error (percent)
	Softwoods	Hardwoods		
Sawtimber trees:				
Sawlog portion	187.2	3,609.9	3,797.1	18.5
Upper stem	27.8	804.1	831.9	17.5
Total	215.0	4,414.0	4,629.0	18.3
Poletimber trees	83.8	1,370.5	1,454.3	14.5
All growing stock	298.8	5,784.5	6,083.3	15.2
Rough cull trees ^b	25.5	433.2	458.8	26.0
Rotten cull trees ^b	.0	15.8	15.8	100.0
Salvable dead trees ^c	35.2	428.3	463.5	24.9
Saplings ^d	6.1	418.9	425.1	41.2
Tops - growing stock	111.6	1,978.1	2,089.7	14.1
Tops - rough and rotten	12.4	164.5	176.9	27.5
All nongrowing stock	190.8	3,438.8	3,629.6	12.8
Total, all classes	489.6	9,223.3	9,712.9	14.0
Sampling error (percent)	46.1	15.8	14.0	

Table 14.--Continued

(In thousands of tons)

Class of material	Dry Weight ^a		All groups	Sampling error (percent)
	Softwoods	Hardwoods		
Sawtimber trees:				
Sawlog portion	88.7	2,111.5	2,200.2	19.2
Upper stem	13.5	469.9	483.4	18.1
Total	102.2	2,581.4	2,683.6	19.0
Poletimber trees	42.3	811.7	854.0	14.2
All growing stock	144.5	3,393.1	3,537.5	15.7
Rough cull trees ^b	13.0	257.1	270.1	26.4
Rotten cull trees ^b	.0	10.8	10.8	100.0
Salvable dead trees ^c	18.6	247.6	266.3	24.8
Saplings ^d	3.4	231.2	234.6	41.3
Tops - growing stock	54.3	1,161.0	1,215.2	14.6
Tops - rough and rotten	6.3	97.0	103.3	27.7
All nongrowing stock	95.6	2,004.6	2,100.3	12.6
Total, all classes	240.1	5,397.7	5,637.8	14.3
Sampling error (percent)	46.9	15.9	14.3	

^aIncludes bark and sound cull; excludes rotten cull.

^bBole portion of trees 5.0 inches d.b.h. and larger.

^cVolume of bole portion of trees 5.0 inches d.b.h. and larger, and weight of entire tree aboveground.

^dIncludes entire tree aboveground.

Table 15.--Net aboveground tree biomass of all trees on timberland, by class of material and species group, Wicomico County, Maryland, 1986

(In thousands of tons)

Class of material	Green Weight ^a		All groups	Sampling error (percent)
	Softwoods	Hardwoods		
Sawtimber trees:				
Sawlog portion	1,358.1	1,597.1	2,955.2	11.1
Upper stem	186.7	388.7	575.5	11.5
Total	1,544.8	1,985.9	3,530.7	11.1
Poletimber trees	472.1	1,465.4	1,937.4	10.7
All growing stock	2,016.9	3,451.2	5,468.1	9.5
Rough cull trees ^b	1.2	98.4	99.6	35.0
Rotten cull trees ^b	1.7	48.0	49.7	45.5
Salvable dead trees ^c	.0	117.3	117.3	45.1
Saplings ^d	161.3	755.2	916.6	25.0
Tops - growing stock	731.9	1,277.1	2,009.0	9.4
Tops - rough and rotten	1.0	50.6	51.5	34.5
All nongrowing stock	897.1	2,346.6	3,243.7	11.5
Total, all classes	2,914.0	5,797.8	8,711.8	9.7
Sampling error (percent)	20.6	11.8	9.7	

Table 15.--Continued

(In thousands of tons)

Class of material	Dry Weight ^a		All groups	Sampling error (percent)
	Softwoods	Hardwoods		
Sawtimber trees:				
Sawlog portion	569.7	947.5	1,517.2	11.6
Upper stem	78.9	231.0	309.9	12.7
Total	648.6	1,178.5	1,827.1	11.7
Poletimber trees	211.1	863.7	1,074.8	10.3
All growing stock	859.7	2,042.2	2,901.9	9.8
Rough cull trees ^b	.6	58.9	59.5	35.2
Rotten cull trees ^b	.9	28.3	29.2	45.7
Salvable dead trees ^c	.0	70.0	70.0	47.4
Saplings ^d	76.7	436.3	513.0	24.8
Tops - growing stock	313.8	755.1	1,068.9	9.5
Tops - rough and rotten	.5	30.1	30.6	34.6
All nongrowing stock	392.5	1,378.6	1,771.1	11.3
Total, all classes	1,252.2	3,420.8	4,673.0	9.7
Sampling error (percent)	20.5	11.9	9.7	

^aIncludes bark and sound cull; excludes rotten cull.

^bBole portion of trees 5.0 inches d.b.h. and larger.

^cVolume of bole portion of trees 5.0 inches d.b.h. and larger, and weight of entire tree aboveground.

^dIncludes entire tree aboveground.

Table 16.--Net aboveground tree biomass of all trees on timberland, by class of material and species group, Worcester County, Maryland, 1986

(In thousands of tons)

Class of material	Green Weight ^a		All groups	Sampling error (percent)
	Softwoods	Hardwoods		
Sawtimber trees:				
Sawlog portion	1,581.6	3,553.7	5,135.3	13.1
Upper stem	197.6	817.8	1,015.4	12.6
Total	1,777.2	4,371.5	6,150.7	13.0
Poletimber trees	660.3	2,497.9	3,158.2	12.0
All growing stock	2,439.5	6,869.4	9,308.9	11.2
Rough cull trees ^b	10.2	712.8	723.0	34.2
Rotten cull trees ^b	.0	170.5	170.5	51.6
Salvable dead trees ^c	26.5	51.8	78.3	39.7
Saplings ^d	542.6	1,388.9	1,931.5	17.9
Tops - growing stock	890.0	2,422.6	3,312.6	10.9
Tops - rough and rotten	3.9	301.4	305.4	30.6
All nongrowing stock	1,473.2	5,048.1	6,521.3	12.9
Total, all classes	3,912.7	11,917.5	15,830.2	11.3
Sampling error (percent)	19.0	13.3	11.3	

Table 16.--Continued

(In thousands of tons)

Class of material	Dry Weight ^a		All groups	Sampling error (percent)
	Softwoods	Hardwoods		
Sawtimber trees:				
Sawlog portion	678.8	2,120.4	2,799.2	13.5
Upper stem	85.0	487.6	572.5	13.2
Total	763.8	2,608.0	3,371.8	13.4
Poletimber trees	297.1	1,481.1	1,778.2	11.8
All growing stock	1,060.9	4,089.1	5,150.0	11.5
Rough cull trees ^b	4.5	407.5	411.9	32.8
Rotten cull trees ^b	.0	102.5	102.5	51.3
Salvable dead trees ^c	10.7	30.8	41.4	39.2
Saplings ^d	257.3	774.9	1,032.3	17.5
Tops - growing stock	388.8	1,440.3	1,829.1	11.1
Tops - rough and rotten	1.7	172.7	174.4	29.2
All nongrowing stock	663.0	2,928.7	3,591.7	12.9
Total, all classes	1,723.9	7,017.8	8,741.7	11.6
Sampling error (percent)	18.9	13.3	11.6	

^aIncludes bark and sound cull; excludes rotten cull.^bBole portion of trees 5.0 inches d.b.h. and larger.^cVolume of bole portion of trees 5.0 inches d.b.h. and larger, and weight of entire tree aboveground.^dIncludes entire tree aboveground.

Table 17.--Net aboveground tree biomass of all trees on timberland, by class of material and species group, Anne Arundel/Howard Counties, 1986

(In thousands of tons)

Class of material	Green Weight ^a		All groups	Sampling error (percent)
	Softwoods	Hardwoods		
Sawtimber trees:				
Sawlog portion	537.1	5,469.9	6,007.0	14.6
Upper stem	83.7	1,157.0	1,240.7	14.0
Total	620.8	6,626.9	7,247.7	14.5
Poletimber trees	244.6	2,234.4	2,479.0	15.4
All growing stock	865.4	8,861.3	9,726.7	11.7
Rough cull trees ^b	15.8	402.8	418.6	30.6
Rotten cull trees ^b	.0	29.5	29.5	100.0
Salvable dead trees ^c	52.2	227.2	279.5	38.9
Saplings ^d	152.9	887.5	1,040.4	24.3
Tops - growing stock	326.0	3,006.7	3,332.7	11.1
Tops - rough and rotten	5.4	168.3	173.6	29.4
All nongrowing stock	552.3	4,722.0	5,274.3	12.0
Total, all classes	1,417.7	13,583.3	15,001.0	11.4
Sampling error (percent)	53.7	13.2	11.4	

Table 17.--Continued

(In thousands of tons)

Class of material	Dry Weight ^a		All groups	Sampling error (percent)
	Softwoods	Hardwoods		
Sawtimber trees:				
Sawlog portion	274.5	3,154.5	3,429.0	14.6
Upper stem	43.1	668.2	711.4	14.0
Total	317.6	3,822.8	4,140.4	14.5
Poletimber trees	127.7	1,285.2	1,412.9	15.4
All growing stock	445.3	5,108.0	5,553.3	11.8
Rough cull trees ^b	8.5	243.6	252.2	30.6
Rotten cull trees ^b	.0	17.7	17.7	100.0
Salvable dead trees ^c	26.0	125.7	151.7	38.8
Saplings ^d	77.2	530.5	607.7	24.8
Tops - growing stock	168.1	1,733.7	1,901.8	11.2
Tops - rough and rotten	2.9	101.9	104.8	29.5
All nongrowing stock	282.7	2,753.0	3,035.7	12.2
Total, all classes	728.0	7,861.0	8,589.0	11.4
Sampling error (percent)	54.5	13.1	11.4	

^aIncludes bark and sound cull; excludes rotten cull.

^bBole portion of trees 5.0 inches d.b.h. and larger.

^cVolume of bole portion of trees 5.0 inches d.b.h. and larger, and weight of entire tree aboveground.

^dIncludes entire tree aboveground.

Table 18.--Net aboveground tree biomass of all trees on timberland, by class of material and species group, Caroline/Talbot Counties, 1986

(In thousands of tons)

Class of material	Green Weight ^a		All groups	Sampling error (percent)
	Softwoods	Hardwoods		
Sawtimber trees:				
Sawlog portion	1,337.0	4,391.8	5,728.8	22.2
Upper stem	161.6	1,011.6	1,173.2	22.6
Total	1,498.6	5,403.4	6,902.0	22.2
Poletimber trees	248.2	2,369.1	2,617.3	15.4
All growing stock	1,746.8	7,772.5	9,519.3	19.0
Rough cull trees ^b	.0	226.1	226.1	30.1
Rotten cull trees ^b	2.5	25.8	28.3	64.2
Salvable dead trees ^c	39.7	126.5	166.2	52.1
Saplings ^d	144.4	1,140.1	1,284.5	21.4
Tops - growing stock	601.8	2,714.7	3,316.5	18.3
Tops - rough and rotten	.9	93.7	94.5	27.3
All nongrowing stock	789.4	4,326.9	5,116.3	14.1
Total, all classes	2,536.2	12,099.4	14,635.6	16.9
Sampling error (percent)	24.5	18.1	16.9	

Table 18.--Continued

(In thousands of tons)

Class of material	Dry Weight ^a		All groups	Sampling error (percent)
	Softwoods	Hardwoods		
Sawtimber trees:				
Sawlog portion	582.1	2,532.7	3,114.8	22.9
Upper stem	71.5	584.9	656.4	23.1
Total	653.6	3,117.6	3,771.2	22.9
Poletimber trees	116.6	1,388.0	1,504.6	15.4
All growing stock	770.2	4,505.6	5,275.8	19.4
Rough cull trees ^b	.0	130.5	130.5	30.6
Rotten cull trees ^b	1.1	15.2	16.3	66.3
Salvable dead trees ^c	17.2	73.6	90.7	53.9
Saplings ^d	74.6	647.2	721.8	21.0
Tops - growing stock	267.0	1,576.6	1,843.6	18.7
Tops - rough and rotten	.4	53.6	54.0	27.7
All nongrowing stock	360.2	2,496.7	2,856.9	14.4
Total, all classes	1,130.4	7,002.3	8,132.7	17.3
Sampling error (percent)	24.9	18.2	17.3	

^aIncludes bark and sound cull; excludes rotten cull.^bBole portion of trees 5.0 inches d.b.h. and larger.^cVolume of bole portion of trees 5.0 inches d.b.h. and larger, and weight of entire tree aboveground.^dIncludes entire tree aboveground.

Table 19.--Net aboveground tree biomass of all trees on timberland, by class of material and species group, Cecil/Harford Counties, 1986

(In thousands of tons)

Class of material	Green Weight ^a		All groups	Sampling error (percent)
	Softwoods	Hardwoods		
Sawtimber trees:				
Sawlog portion	451.6	6,621.2	7,072.9	13.5
Upper stem	63.3	1,396.3	1,459.6	12.9
Total	514.9	8,017.6	8,532.4	13.4
Poletimber trees	150.8	2,473.1	2,623.9	17.7
All growing stock	665.7	10,490.7	11,156.4	11.1
Rough cull trees ^b	18.0	886.8	904.8	23.1
Rotten cull trees ^b	.0	263.2	263.2	29.0
Salvable dead trees ^c	54.5	462.4	516.9	58.6
Saplings ^d	17.7	1,818.3	1,836.1	22.6
Tops - growing stock	243.8	3,527.1	3,770.9	10.8
Tops - rough and rotten	7.8	375.7	383.4	21.2
All nongrowing stock	341.8	7,333.5	7,675.3	9.5
Total, all classes	1,007.5	17,824.2	18,831.7	9.6
Sampling error (percent)	45.5	10.1	9.6	

Table 19.--Continued

(In thousands of tons)

Class of material	Dry Weight ^a		All groups	Sampling error (percent)
	Softwoods	Hardwoods		
Sawtimber trees:				
Sawlog portion	240.4	3,831.8	4,072.2	13.3
Upper stem	33.8	808.1	841.9	12.8
Total	274.2	4,639.9	4,914.1	13.2
Poletimber trees	80.2	1,460.7	1,540.9	18.1
All growing stock	354.4	6,100.6	6,455.0	11.0
Rough cull trees ^b	9.6	520.0	529.7	23.6
Rotten cull trees ^b	.0	158.2	158.2	30.1
Salvable dead trees ^c	29.0	265.6	294.5	59.5
Saplings ^d	9.4	986.4	995.8	21.5
Tops - growing stock	129.7	2,053.6	2,183.3	10.8
Tops - rough and rotten	4.1	221.1	225.2	21.5
All nongrowing stock	181.9	4,204.9	4,386.7	9.3
Total, all classes	536.2	10,305.5	10,841.7	9.6
Sampling error (percent)	45.9	10.1	9.6	

^aIncludes bark and sound cull; excludes rotten cull.^bBole portion of trees 5.0 inches d.b.h. and larger.^cVolume of bole portion of trees 5.0 inches d.b.h. and larger, and weight of entire tree aboveground.^dIncludes entire tree aboveground.

Table 20.--Net aboveground tree biomass of all trees on timberland, by class of material and species group, Kent/Queen Anne's Counties, 1986

(In thousands of tons)

Class of material	Green Weight ^a		All groups	Sampling error (percent)
	Softwoods	Hardwoods		
Sawtimber trees:				
Sawlog portion	754.4	4,311.1	5,065.5	9.7
Upper stem	98.4	912.6	1,011.0	10.3
Total	852.8	5,223.7	6,076.5	9.7
Poletimber trees	116.1	1,648.7	1,764.8	14.8
All growing stock	968.9	6,872.4	7,841.3	8.8
Rough cull trees ^b	.0	335.7	335.7	25.9
Rotten cull trees ^b	7.0	41.5	48.5	33.0
Salvable dead trees ^c	25.6	128.1	153.7	47.7
Saplings ^d	.0	476.2	476.2	27.2
Tops - growing stock	331.9	2,304.9	2,636.9	8.6
Tops - rough and rotten	2.2	130.1	132.3	22.9
All nongrowing stock	366.8	3,416.6	3,783.4	8.4
Total, all classes	1,335.7	10,289.0	11,624.7	8.3
Sampling error (percent)	43.3	10.8	8.3	

Table 20.--Continued

(In thousands of tons)

Class of material	Dry Weight ^a		All groups	Sampling error (percent)
	Softwoods	Hardwoods		
Sawtimber trees:				
Sawlog portion	326.4	2,504.9	2,831.3	10.7
Upper stem	42.9	529.9	572.8	11.1
Total	369.3	3,034.8	3,404.1	10.7
Poletimber trees	53.5	961.0	1,014.5	14.8
All growing stock	422.8	3,995.8	4,418.6	9.3
Rough cull trees ^b	.0	200.8	200.8	26.1
Rotten cull trees ^b	2.9	24.4	27.2	32.7
Salvable dead trees ^c	11.8	68.9	80.7	48.9
Saplings ^d	.0	272.5	272.5	28.2
Tops - growing stock	145.5	1,341.1	1,486.5	8.9
Tops - rough and rotten	.9	77.6	78.5	23.4
All nongrowing stock	161.0	1,985.3	2,146.3	8.7
Total, all classes	583.8	5,981.1	6,564.9	8.7
Sampling error (percent)	42.2	10.9	8.7	

^aIncludes bark and sound cull; excludes rotten cull.^bBole portion of trees 5.0 inches d.b.h. and larger.^cVolume of bole portion of trees 5.0 inches d.b.h. and larger, and weight of entire tree aboveground.^dIncludes entire tree aboveground.

Table 21.--Net aboveground tree biomass of all trees on timberland, by class of material and species group, Montgomery/Prince George's Counties, 1986

(In thousands of tons)

Class of material	Green Weight ^a		All groups	Sampling error (percent)
	Softwoods	Hardwoods		
Sawtimber trees:				
Sawlog portion	711.6	6,852.5	7,564.0	20.4
Upper stem	107.6	1,387.0	1,494.6	19.0
Total	819.2	8,239.5	9,058.7	20.1
Poletimber trees				
All growing stock	1,550.5	10,773.8	12,324.3	16.9
Rough cull trees ^b	.0	773.3	773.3	48.8
Rotten cull trees ^b	.0	107.3	107.3	85.5
Salvable dead trees ^c	.0	140.4	140.4	52.7
Saplings ^d	.0	1,467.1	1,467.1	22.1
Tops - growing stock	625.0	3,587.9	4,212.9	15.8
Tops - rough and rotten	.0	281.9	281.9	41.8
All nongrowing stock	625.0	6,358.0	6,983.0	18.1
Total, all classes	2,175.5	17,131.8	19,307.3	17.2
Sampling error (percent)				
	28.9	19.3	17.2	

Table 21.--Continued

(In thousands of tons)

Class of material	Dry Weight ^a		All groups	Sampling error (percent)
	Softwoods	Hardwoods		
Sawtimber trees:				
Sawlog portion	367.8	3,994.1	4,361.9	20.5
Upper stem	55.6	809.4	865.0	19.1
Total	423.5	4,803.5	5,227.0	20.3
Poletimber trees	384.9	1,471.0	1,855.9	14.9
All growing stock	808.3	6,274.6	7,082.9	17.0
Rough cull trees ^b	.0	438.1	438.1	49.3
Rotten cull trees ^b	.0	67.2	67.2	83.5
Salvable dead trees ^c	.0	79.5	79.5	53.6
Saplings ^d	.0	784.5	784.5	21.6
Tops - growing stock	326.4	2,089.8	2,416.2	16.0
Tops - rough and rotten	.0	160.1	160.1	42.1
All nongrowing stock	326.4	3,619.2	3,945.6	18.3
Total, all classes	1,134.7	9,893.8	11,028.5	17.3
Sampling error (percent)	29.4	19.3	17.3	

^aIncludes bark and sound cull; excludes rotten cull.^bBole portion of trees 5.0 inches d.b.h. and larger.^cVolume of bole portion of trees 5.0 inches d.b.h. and larger, and weight of entire tree aboveground.^dIncludes entire tree aboveground.

All Live Trees

Table 22.--Net aboveground tree biomass of all live trees on timberland, by forest-type group and stand-size class, Maryland, 1986

Forest-type group	Stand-size class				All classes	Sampling error (percent)
	Sawtimber	Poletimber	Sapling and seedling	Nonstocked		
<u>Thousand acres</u>						
White/red pine	16.4	22.3	14.4	.0	53.1	29.4
Loblolly/shortleaf	193.6	63.9	39.4	.0	296.9	10.4
Oak/pine	215.6	29.9	36.4	.0	281.9	11.9
Oak/hickory	1,087.3	282.8	84.4	.0	1,454.4	3.4
Oak/gum/cypress	80.3	27.4	12.5	.0	120.2	17.1
Elm/ash/red maple	69.6	6.2	7.9	.0	83.7	22.6
Northern hardwoods	61.0	36.5	36.3	.0	133.8	15.3
Total, all groups	1,723.8	468.9	231.3	.0	2,424.0	1.1
Sampling error (percent)	2.7	8.2	11.9	.0	1.1	
<u>Green tons per acre^a</u>						
White/red pine	114.2	72.1	18.9	.0	70.7	
Loblolly/shortleaf	104.7	77.6	22.6	.0	88.0	
Oak/pine	110.8	87.3	25.3	.0	97.3	
Oak/hickory	132.4	83.8	30.8	.0	117.1	
Oak/gum/cypress	132.4	74.9	38.0	.0	109.5	
Elm/ash/red maple	123.1	72.5	6.5	.0	103.4	
Northern hardwoods	108.2	78.5	23.9	.0	77.2	
All groups	125.2	81.6	26.3	.0	107.3	
<u>Dry tons per acre^a</u>						
White/red pine	54.5	32.1	9.8	.0	33.0	
Loblolly/shortleaf	51.7	38.2	11.6	.0	43.5	
Oak/pine	59.7	47.1	13.9	.0	52.4	
Oak/hickory	76.5	48.5	17.1	.0	67.6	
Oak/gum/cypress	77.4	43.7	22.3	.0	64.0	
Elm/ash/red maple	71.6	40.1	3.6	.0	62.8	
Northern hardwoods	65.6	45.9	13.8	.0	46.2	
All groups	70.8	45.7	14.5	.0	60.6	

^aPer acre estimates are based on the timberland area in each forest-type group and stand-size class.

Table 23.--Net aboveground tree biomass of all live trees on timberland, by forest-type group and stand-size class, Allegany County, Maryland, 1986

Forest-type group	Stand-size class				All classes	Sampling error (percent)
	Sawtimber	Poletimber	Sapling and seedling	Nonstocked		
	<u>Thousand acres</u>					
Loblolly/shortleaf	8.9	7.1	.0	.0	15.9	52.8
Oak/pine	3.7	2.3	9.9	.0	15.9	53.9
Oak/hickory	75.5	47.1	11.1	.0	133.8	8.8
Elm/ash/red maple	3.7	.0	.0	.0	3.7	100.0
Northern hardwoods	15.3	10.3	3.4	.0	29.0	32.7
Total, all groups	107.2	66.7	24.4	.0	198.3	1.3
Sampling error (percent)	11.3	17.3	39.4	.0	1.3	
	<u>Green tons per acre^a</u>					
Loblolly/shortleaf	62.9	29.3	.0	.0	48.3	
Oak/pine	57.1	89.1	38.5	.0	50.2	
Oak/hickory	132.4	73.3	32.1	.0	103.2	
Elm/ash/red maple	90.2	.0	.0	.0	90.2	
Northern hardwoods	98.5	77.6	27.1	.0	82.7	
All groups	102.2	69.9	34.0	.0	91.3	
	<u>Dry tons per acre^a</u>					
Loblolly/shortleaf	35.2	16.4	.0	.0	27.0	
Oak/pine	32.4	50.0	20.8	.0	27.7	
Oak/hickory	77.2	42.7	18.3	.0	60.1	
Elm/ash/red maple	53.0	.0	.0	.0	53.0	
Northern hardwoods	60.0	47.5	16.1	.0	50.4	
All groups	69.0	41.0	19.0	.0	53.3	

^aPer acre estimates are based on the timberland area in each forest-type group and stand-size class.

Table 24.--Net aboveground tree biomass of all live trees on timberland, by forest-type group and stand-size class, Baltimore County, Maryland, 1986

Forest-type group	Stand-size class				All classes	Sampling error (percent)
	Sawtimber	Poletimber	Sapling and seedling	Nonstocked		
	<u>Thousand acres</u>					
White/red pine	6.4	4.0	.0	.0	10.4	72.4
Loblolly/shortleaf	4.0	.0	.0	.0	4.0	100.5
Oak/pine	11.5	.0	.0	.0	11.5	94.5
Oak/hickory	57.1	18.8	.0	.0	76.0	18.4
Northern hardwoods	3.1	.0	.0	.0	3.1	101.7
Total, all groups	82.1	22.8	.0	.0	104.9	5.5
Sampling error (percent)	14.7	49.3	.0	.0	5.5	
	<u>Green tons per acre^a</u>					
White/red pine	97.7	66.4	.0	.0	85.6	
Loblolly/shortleaf	85.8	.0	.0	.0	85.8	
Oak/pine	52.4	.0	.0	.0	52.4	
Oak/hickory	140.8	61.2	.0	.0	120.9	
Northern hardwoods	40.6	.0	.0	.0	40.6	
All groups	118.6	62.1	.0	.0	106.3	
	<u>Dry tons per acre^a</u>					
White/red pine	41.4	29.2	.0	.0	36.7	
Loblolly/shortleaf	46.6	.0	.0	.0	46.6	
Oak/pine	30.8	.0	.0	.0	30.8	
Oak/hickory	80.0	35.6	.0	.0	68.9	
Northern hardwoods	24.0	.0	.0	.0	24.0	
All groups	66.3	34.5	.0	.0	59.4	

^aPer acre estimates are based on the timberland area in each forest-type group and stand-size class.

Table 25.--Net aboveground tree biomass of all live trees on timberland, by forest-type group and stand-size class, Calvert County, Maryland, 1986

Forest-type group	Stand-size class				All classes	Sampling error (percent)
	Sawtimber	Poletimber	Sapling and seedling	Nonstocked		
	<u>Thousand acres</u>					
Loblolly/shortleaf	.8	.8	.0	.0	1.6	61.9
Oak/pine	11.5	.0	.0	.0	11.5	42.1
Oak/hickory	43.0	2.9	1.7	.0	47.6	14.8
Oak/gum/cypress	10.3	.0	.0	.0	10.3	49.0
Elm/ash/red maple	2.8	.0	.0	.0	2.8	100.9
Total, all groups	68.4	3.7	1.7	.0	73.9	4.1
Sampling error (percent)	6.5	81.6	96.9	.0	4.1	
	<u>Green tons per acre^a</u>					
Loblolly/shortleaf	111.0	141.0	.0	.0	126.0	
Oak/pine	104.4	.0	.0	.0	104.4	
Oak/hickory	129.2	92.0	90.6	.0	125.5	
Oak/gum/cypress	125.7	.0	.0	.0	125.7	
Elm/ash/red maple	120.0	.0	.0	.0	120.0	
All groups	123.9	102.6	90.6	.0	121.9	
	<u>Dry tons per acre^a</u>					
Loblolly/shortleaf	59.6	68.8	.0	.0	64.2	
Oak/pine	57.3	.0	.0	.0	57.3	
Oak/hickory	74.0	51.1	51.6	.0	71.8	
Oak/gum/cypress	72.8	.0	.0	.0	72.8	
Elm/ash/red maple	69.4	.0	.0	.0	69.4	
All groups	70.6	54.9	51.6	.0	69.3	

^aPer acre estimates are based on the timberland area in each forest-type group and stand-size class.

Table 26.--Net aboveground tree biomass of all live trees on timberland, by forest-type group and stand-size class, Carroll County, Maryland, 1986

Forest-type group	Stand-size class				All classes	Sampling error (percent)
	Sawtimber	Poletimber	Sapling and seedling	Nonstocked		
<u>Thousand acres</u>						
Loblolly/shortleaf	7.5	.0	.0	.0	7.5	83.4
Oak/hickory	54.9	3.7	.0	.0	58.6	15.2
Elm/ash/red maple	4.6	.0	.0	.0	4.6	101.1
Total, all groups	66.9	3.7	.0	.0	70.7	7.5
Sampling error (percent)	9.3	99.4	.0	.0	7.5	
<u>Green tons per acre^a</u>						
Loblolly/shortleaf	64.7	.0	.0	.0	64.7	
Oak/hickory	137.6	72.1	.0	.0	133.5	
Elm/ash/red maple	150.8	.0	.0	.0	150.8	
All groups	130.6	72.1	.0	.0	127.3	
<u>Dry tons per acre^a</u>						
Loblolly/shortleaf	26.9	.0	.0	.0	26.9	
Oak/hickory	79.6	41.6	.0	.0	77.2	
Elm/ash/red maple	77.9	.0	.0	.0	77.9	
All groups	73.6	41.6	.0	.0	71.9	

^aPer acre estimates are based on the timberland area in each forest-type group and stand-size class.

Table 27.--Net aboveground tree biomass of all live trees on timberland, by forest-type group and stand-size class, Charles County, Maryland, 1986

Forest-type group	Stand-size class				All classes	Sampling error (percent)
	Sawtimber	Poletimber	Sapling and seedling	Nonstocked		
<u>Thousand acres</u>						
Loblolly/shortleaf	25.4	.0	9.1	.0	34.5	27.7
Oak/pine	13.9	7.6	.0	.0	21.5	39.4
Oak/hickory	84.6	12.4	11.3	.0	108.3	11.7
Oak/gum/cypress	.0	7.5	.0	.0	7.5	68.2
Elm/ash/red maple	3.7	.0	.0	.0	3.7	100.2
Total, all groups	127.5	27.5	20.4	.0	175.5	2.8
Sampling error (percent)	9.7	35.1	39.7	.0	2.8	
<u>Green tons per acre^a</u>						
Loblolly/shortleaf	109.4	.0	29.0	.0	88.2	
Oak/pine	98.0	85.1	.0	.0	93.4	
Oak/hickory	135.7	95.5	42.3	.0	121.3	
Oak/gum/cypress	.0	111.0	.0	.0	111.0	
Elm/ash/red maple	186.1	.0	.0	.0	186.1	
All groups	127.9	96.8	36.3	.0	112.3	
<u>Dry tons per acre^a</u>						
Loblolly/shortleaf	56.8	.0	16.5	.0	46.2	
Oak/pine	54.5	46.8	.0	.0	51.8	
Oak/hickory	78.5	54.5	24.2	.0	70.1	
Oak/gum/cypress	.0	65.9	.0	.0	65.9	
Elm/ash/red maple	112.2	.0	.0	.0	112.2	
All groups	72.6	55.5	20.8	.0	63.8	

^aPer acre estimates are based on the timberland area in each forest-type group and stand-size class.

Table 28.--Net aboveground tree biomass of all live trees on timberland, by forest-type group and stand-size class, Dorchester County, Maryland, 1986

Forest-type group	Stand-size class				All classes	Sampling error (percent)
	Sawtimber	Poletimber	Sapling and seedling	Nonstocked		
<u>Thousand acres</u>						
Loblolly/shortleaf	32.9	7.6	3.6	.0	44.1	23.9
Oak/pine	23.7	8.4	6.9	.0	39.0	32.2
Oak/hickory	3.3	6.8	2.2	.0	12.4	49.4
Oak/gum/cypress	17.6	12.0	6.9	.0	36.6	33.4
Elm/ash/red maple	6.9	.0	2.2	.0	9.1	58.3
Total, all groups	84.5	34.9	21.8	.0	141.1	2.8
Sampling error (percent)	11.1	21.2	34.6	.0	2.8	
<u>Green tons per acre^a</u>						
Loblolly/shortleaf	96.1	50.8	47.7	.0	84.4	
Oak/pine	122.2	84.5	22.0	.0	96.4	
Oak/hickory	92.3	72.9	34.5	.0	70.7	
Oak/gum/cypress	113.5	63.8	29.7	.0	81.1	
Elm/ash/red maple	45.9	.0	19.1	.0	39.4	
All groups	102.7	67.5	29.6	.0	82.8	
<u>Dry tons per acre^a</u>						
Loblolly/shortleaf	44.3	23.0	23.6	.0	38.9	
Oak/pine	64.4	44.2	12.8	.0	50.9	
Oak/hickory	53.3	42.4	21.4	.0	41.3	
Oak/gum/cypress	64.4	36.4	17.2	.0	46.1	
Elm/ash/red maple	27.3	.0	10.7	.0	23.3	
All groups	53.0	36.4	16.6	.0	43.3	

^aPer acre estimates are based on the timberland area in each forest-type group and stand-size class.

Table 29.--Net aboveground tree biomass of all live trees on timberland, by forest-type group and stand-size class, Frederick County, Maryland, 1986

Forest-type group	Stand-size class				All classes	Sampling error (percent)
	Sawtimber	Poletimber	Sapling and seedling	Nonstocked		
<u>Thousand acres</u>						
White/red pine	.0	4.5	10.5	.0	15.0	64.4
Oak/pine	.0	2.4	.0	.0	2.4	102.0
Oak/hickory	61.0	17.6	3.7	.0	82.2	15.0
Elm/ash/red maple	4.5	.0	.0	.0	4.5	100.6
Northern hardwoods	.0	3.7	9.0	.0	12.6	52.6
Total, all groups	65.5	28.2	23.2	.0	116.8	5.2
Sampling error (percent)	17.9	35.5	44.4	.0	5.2	
<u>Green tons per acre^a</u>						
White/red pine	.0	21.7	11.4	.0	14.5	
Oak/pine	.0	95.3	.0	.0	95.3	
Oak/hickory	142.7	153.8	36.8	.0	140.4	
Elm/ash/red maple	184.4	.0	.0	.0	184.4	
Northern hardwoods	.0	108.9	30.4	.0	53.7	
All groups	145.5	121.8	22.8	.0	115.5	
<u>Dry tons per acre^a</u>						
White/red pine	.0	9.2	5.3	.0	6.5	
Oak/pine	.0	54.6	.0	.0	54.6	
Oak/hickory	83.2	89.6	23.9	.0	82.0	
Elm/ash/red maple	114.1	.0	.0	.0	114.1	
Northern hardwoods	.0	63.3	19.3	.0	32.4	
All groups	85.3	70.4	13.7	.0	67.5	

^aPer acre estimates are based on the timberland area in each forest-type group and stand-size class.

Table 30.--Net aboveground tree biomass of all live trees on timberland, by forest-type group and stand-size class, Garrett County, Maryland, 1986

Forest-type group	Stand-size class				All classes	Sampling error (percent)
	Sawtimber	Poletimber	Sapling and seedling	Nonstocked		
<u>Thousand acres</u>						
White/red pine	10.0	13.8	3.9	.0	27.7	34.8
Oak/pine	3.6	.0	.0	.0	3.6	99.6
Oak/hickory	130.7	53.3	10.4	.0	194.4	7.6
Northern hardwoods	41.2	17.3	15.1	.0	73.6	19.6
Total, all groups	185.5	84.4	29.4	.0	299.3	1.9
Sampling error (percent)	8.6	17.5	34.4	.0	1.9	
<u>Green tons per acre^a</u>						
White/red pine	124.7	90.2	39.1	.0	95.4	
Oak/pine	117.5	.0	.0	.0	117.5	
Oak/hickory	134.3	97.2	10.7	.0	117.5	
Northern hardwoods	117.1	91.6	25.8	.0	92.4	
All groups	129.6	94.9	22.2	.0	109.3	
<u>Dry tons per acre^a</u>						
White/red pine	63.0	40.4	21.9	.0	46.0	
Oak/pine	56.5	.0	.0	.0	56.5	
Oak/hickory	78.4	55.8	5.8	.0	68.3	
Northern hardwoods	71.0	52.5	14.2	.0	55.0	
All groups	75.5	52.6	12.3	.0	62.8	

^aPer acre estimates are based on the timberland area in each forest-type group and stand-size class.

Table 31.--Net aboveground tree biomass of all live trees on timberland, by forest-type group and stand-size class, St. Mary's County, Maryland, 1986

Forest-type group	Stand-size class				All classes	Sampling error (percent)
	Sawtimber	Poletimber	Sapling and seedling	Nonstocked		
<u>Thousand acres</u>						
Loblolly/shortleaf	26.9	3.7	.0	.0	30.6	28.2
Oak/pine	16.5	.0	1.4	.0	17.9	39.4
Oak/hickory	63.9	3.1	1.2	.0	68.2	14.2
Oak/gum/cypress	8.9	.0	.0	.0	8.9	56.0
Elm/ash/red maple	2.9	.0	.0	.0	2.9	100.3
Total, all groups	119.1	6.8	2.5	.0	128.5	3.5
Sampling error (percent)	5.4	66.5	70.8	.0	3.5	
<u>Green tons per acre^a</u>						
Loblolly/shortleaf	120.4	45.5	.0	.0	111.3	
Oak/pine	120.2	.0	78.9	.0	117.0	
Oak/hickory	123.3	97.6	33.4	.0	120.6	
Oak/gum/cypress	95.4	.0	.0	.0	95.4	
Elm/ash/red maple	163.9	.0	.0	.0	163.9	
All groups	121.1	69.3	60.2	.0	117.1	
<u>Dry tons per acre^a</u>						
Loblolly/shortleaf	61.8	24.7	.0	.0	57.3	
Oak/pine	65.8	.0	42.8	.0	63.9	
Oak/hickory	69.5	60.9	19.8	.0	68.2	
Oak/gum/cypress	54.9	.0	.0	.0	54.9	
Elm/ash/red maple	89.8	.0	.0	.0	89.8	
All groups	66.7	41.2	33.5	.0	64.6	

^aPer acre estimates are based on the timberland area in each forest-type group and stand-size class.

Table 32.--Net aboveground tree biomass of all live trees on timberland, by forest-type group and stand-size class, Somerset County, Maryland, 1986

Forest-type group	Stand-size class				All classes	Sampling error (percent)
	Sawtimber	Poletimber	Sapling and seedling	Nonstocked		
	<u>Thousand acres</u>					
Loblolly/shortleaf	13.5	8.7	7.6	.0	29.9	31.7
Oak/pine	14.4	.0	10.3	.0	24.7	33.7
Oak/hickory	19.2	4.6	1.6	.0	25.5	30.9
Oak/gum/cypress	3.4	.0	.0	.0	3.4	100.2
Elm/ash/red maple	3.7	.0	.0	.0	3.7	100.1
Total, all groups	54.2	13.4	19.5	.0	87.2	4.2
Sampling error (percent)	18.1	57.9	38.1	.0	4.2	
	<u>Green tons per acre^a</u>					
Loblolly/shortleaf	121.2	137.7	16.6	.0	99.0	
Oak/pine	122.8	.0	16.7	.0	78.6	
Oak/hickory	101.6	49.1	6.4	.0	85.8	
Oak/gum/cypress	166.9	.0	.0	.0	166.9	
Elm/ash/red maple	218.1	.0	.0	.0	218.1	
All groups	124.2	106.3	15.8	.0	97.1	
	<u>Dry tons per acre^a</u>					
Loblolly/shortleaf	55.8	63.6	7.7	.0	45.6	
Oak/pine	62.8	.0	8.8	.0	40.3	
Oak/hickory	58.5	29.6	3.7	.0	49.6	
Oak/gum/cypress	100.4	.0	.0	.0	100.4	
Elm/ash/red maple	128.1	.0	.0	.0	128.1	
All groups	66.4	51.5	7.9	.0	50.9	

^aPer acre estimates are based on the timberland area in each forest-type group and stand-size class.

Table 33.--Net aboveground tree biomass of all live trees on timberland, by forest-type group and stand-size class, Washington County, Maryland, 1986

Forest-type group	Stand-size class				All classes	Sampling error (percent)
	Sawtimber	Poletimber	Sapling and seedling	Nonstocked		
<u>Thousand acres</u>						
Oak/pine	11.3	.0	.0	.0	11.3	71.5
Oak/hickory	54.2	13.8	.0	.0	68.0	15.9
Elm/ash/red maple	6.1	.0	.0	.0	6.1	89.7
Northern hardwoods	.0	5.1	.0	.0	5.1	95.0
Total, all groups	71.5	18.9	.0	.0	90.4	6.4
Sampling error (percent)	14.0	47.3	.0	.0	6.4	
<u>Green tons per acre^a</u>						
Oak/pine	74.2	.0	.0	.0	74.2	
Oak/hickory	130.1	67.3	.0	.0	117.4	
Elm/ash/red maple	57.6	.0	.0	.0	57.6	
Northern hardwoods	.0	15.2	.0	.0	15.2	
All groups	115.3	53.3	.0	.0	102.3	
<u>Dry tons per acre^a</u>						
Oak/pine	40.9	.0	.0	.0	40.9	
Oak/hickory	76.3	37.9	.0	.0	68.5	
Elm/ash/red maple	33.8	.0	.0	.0	33.8	
Northern hardwoods	.0	8.5	.0	.0	8.5	
All groups	67.2	29.9	.0	.0	59.4	

^aPer acre estimates are based on the timberland area in each forest-type group and stand-size class.

Table 34.--Net aboveground tree biomass of all live trees on timberland, by forest-type group and stand-size class, Wicomico County, Maryland, 1986

Forest-type group	Stand-size class				All classes	Sampling error (percent)
	Sawtimber	Poletimber	Sapling and seedling	Nonstocked		
	<u>Thousand acres</u>					
Loblolly/shortleaf	24.2	6.7	1.8	.0	32.7	29.6
Oak/pine	20.0	1.8	.0	.0	21.8	39.8
Oak/hickory	22.8	4.7	2.9	.0	30.4	29.8
Oak/gum/cypress	9.2	7.9	2.5	.0	19.6	31.0
Total, all groups	76.2	21.1	7.3	.0	104.6	2.7
Sampling error (percent)	9.6	31.6	58.5	.0	2.7	
	<u>Green tons per acre^a</u>					
Loblolly/shortleaf	95.2	73.8	16.0	.0	86.5	
Oak/pine	90.7	85.6	.0	.0	90.3	
Oak/hickory	84.7	73.0	.0	.0	74.8	
Oak/gum/cypress	105.4	57.7	40.1	.0	77.8	
All groups	92.1	68.6	17.7	.0	82.2	
	<u>Dry tons per acre^a</u>					
Loblolly/shortleaf	45.7	34.0	8.8	.0	41.3	
Oak/pine	48.5	43.3	.0	.0	48.1	
Oak/hickory	48.7	42.3	.0	.0	43.1	
Oak/gum/cypress	61.5	33.8	23.7	.0	45.6	
All groups	49.3	36.6	10.3	.0	44.0	

^aPer acre estimates are based on the timberland area in each forest-type group and stand-size class.

Table 35.--Net aboveground tree biomass of all live trees on timberland, by forest-type group and stand-size class, Worcester County, Maryland, 1986

Forest-type group	Stand-size class				All classes	Sampling error (percent)
	Sawtimber	Poletimber	Sapling and seedling	Nonstocked		
<u>Thousand acres</u>						
Loblolly/shortleaf	11.7	17.5	6.2	.0	35.4	27.4
Oak/pine	23.5	4.1	6.2	.0	33.7	29.3
Oak/hickory	45.7	17.6	4.2	.0	67.5	17.5
Oak/gum/cypress	9.9	.0	3.1	.0	13.0	47.3
Elm/ash/red maple	2.8	.0	3.8	.0	6.5	70.4
Total, all groups	93.6	39.2	23.4	.0	156.1	2.5
Sampling error (percent)	12.2	26.0	37.7	.0	2.5	
<u>Green tons per acre^a</u>						
Loblolly/shortleaf	136.4	75.8	35.7	.0	88.8	
Oak/pine	132.8	51.0	14.5	.0	101.5	
Oak/hickory	112.6	61.8	20.7	.0	93.6	
Oak/gum/cypress	219.6	.0	55.1	.0	180.4	
Elm/ash/red maple	184.6	.0	2.0	.0	80.7	
All groups	134.1	66.9	24.6	.0	100.9	
<u>Dry tons per acre^a</u>						
Loblolly/shortleaf	66.2	36.9	17.0	.0	43.1	
Oak/pine	71.1	26.7	8.7	.0	54.5	
Oak/hickory	65.3	36.2	12.1	.0	54.3	
Oak/gum/cypress	126.3	.0	32.5	.0	104.0	
Elm/ash/red maple	111.4	.0	1.2	.0	48.7	
All groups	74.7	35.5	13.5	.0	55.7	

^aPer acre estimates are based on the timberland area in each forest-type group and stand-size class.

Table 36.--Net aboveground tree biomass of all live trees on timberland, by forest-type group and stand-size class, Anne Arundel/Howard Counties, Maryland, 1986

Forest-type group	Stand-size class				All classes	Sampling error (percent)
	Sawtimber	Poletimber	Sapling and seedling	Nonstocked		
	<u>Thousand acres</u>					
Loblolly/shortleaf	14.3	.0	3.1	.0	17.5	56.9
Oak/pine	9.8	.0	1.8	.0	11.7	59.7
Oak/hickory	79.0	21.3	2.8	.0	103.1	14.5
Elm/ash/red maple	15.7	.0	.0	.0	15.7	64.7
Total, all groups	118.9	21.3	7.8	.0	147.9	5.9
Sampling error (percent)	10.9	51.6	57.1	.0	5.9	
	<u>Green tons per acre^a</u>					
Loblolly/shortleaf	67.1	.0	23.0	.0	58.9	
Oak/pine	111.9	.0	7.9	.0	94.9	
Oak/hickory	118.9	72.3	4.4	.0	106.1	
Elm/ash/red maple	104.3	.0	.0	.0	104.3	
All groups	110.0	72.3	12.5	.0	99.5	
	<u>Dry tons per acre^a</u>					
Loblolly/shortleaf	35.7	.0	12.3	.0	31.4	
Oak/pine	63.4	.0	4.5	.0	53.9	
Oak/hickory	68.8	41.6	2.6	.0	61.4	
Elm/ash/red maple	59.3	.0	.0	.0	59.3	
All groups	63.1	41.6	6.9	.0	57.0	

^aPer acre estimates are based on the timberland area in each forest-type group and stand-size class.

Table 37.--Net aboveground tree biomass of all live trees on timberland, by forest-type group and stand-size class, Caroline/Talbot Counties, Maryland, 1986

Forest-type group	Stand-size class				All classes	Sampling error (percent)
	Sawtimber	Poletimber	Sapling and seedling	Nonstocked		
<u>Thousand acres</u>						
Loblolly/shortleaf	7.4	.0	.0	.0	7.4	53.9
Oak/pine	12.5	3.2	.0	.0	15.7	52.1
Oak/hickory	53.7	18.4	4.9	.0	77.0	12.2
Total, all groups	73.5	21.6	4.9	.0	100.0	4.3
Sampling error (percent)	12.3	37.3	75.2	.0	4.3	
<u>Green tons per acre^a</u>						
Loblolly/shortleaf	160.8	.0	.0	.0	160.8	
Oak/pine	151.8	143.3	.0	.0	150.1	
Oak/hickory	165.4	94.0	64.0	.0	141.9	
All groups	162.8	101.3	64.0	.0	144.7	
<u>Dry tons per acre^a</u>						
Loblolly/shortleaf	74.9	.0	.0	.0	74.9	
Oak/pine	77.9	77.9	.0	.0	77.9	
Oak/hickory	95.0	53.2	37.9	.0	81.4	
All groups	90.2	56.8	37.9	.0	80.4	

^aPer acre estimates are based on the timberland area in each forest-type group and stand-size class.

Table 38.--Net aboveground tree biomass of all live trees on timberland, by forest-type group and stand-size class, Cecil/Harford Counties, Maryland, 1986

Forest-type group	Stand-size class				All classes	Sampling error (percent)
	Sawtimber	Poletimber	Sapling and seedling	Nonstocked		
<u>Thousand acres</u>						
Loblolly/shortleaf	.0	.0	7.9	.0	7.9	91.4
Oak/pine	9.1	.0	.0	.0	9.1	72.5
Oak/hickory	96.2	23.9	14.1	.0	134.3	10.3
Oak/gum/cypress	.8	.0	.0	.0	.8	51.4
Elm/ash/red maple	5.3	.0	.0	.0	5.3	101.6
Northern hardwoods	1.4	.0	4.8	.0	6.2	79.1
Total, all groups	112.8	23.9	26.8	.0	163.5	5.9
Sampling error (percent)	12.9	42.0	36.3	.0	5.9	
<u>Green tons per acre^a</u>						
Loblolly/shortleaf	.0	.0	.8	.0	.8	
Oak/pine	133.2	.0	.0	.0	133.2	
Oak/hickory	142.0	82.1	46.4	.0	125.9	
Oak/gum/cypress	65.4	.0	.0	.0	65.4	
Elm/ash/red maple	110.2	.0	.0	.0	110.2	
Northern hardwoods	102.4	.0	9.0	.0	30.1	
All groups	106.5	46.7	19.6	.0	112.0	
<u>Dry tons per acre^a</u>						
Loblolly/shortleaf	.0	.0	.5	.0	.5	
Oak/pine	73.8	.0	.0	.0	73.8	
Oak/hickory	82.0	48.3	23.7	.0	69.8	
Oak/gum/cypress	37.9	.0	.0	.0	37.9	
Elm/ash/red maple	66.4	.0	.0	.0	66.4	
Northern hardwoods	60.8	.0	5.4	.0	17.9	
All groups	80.1	48.3	13.6	.0	64.5	

^aPer acre estimates are based on the timberland area in each forest-type group and stand-size class.

Table 39.--Net aboveground tree biomass of all live trees on timberland, by forest-type group and stand-size class, Kent/Queen Anne's Counties, Maryland, 1986

Forest-type group	Stand-size class				All classes	Sampling error (percent)
	Sawtimber	Poletimber	Sapling and seedling	Nonstocked		
	<u>Thousand acres</u>					
Loblolly/shortleaf	9.3	.0	.0	.0	9.3	65.3
Oak/pine	14.5	.0	.0	.0	14.5	62.2
Oak/hickory	65.4	.0	.0	.0	65.4	21.9
Oak/gum/cypress	12.1	.0	.0	.0	12.1	73.0
Elm/ash/red maple	7.0	2.1	1.9	.0	11.0	49.9
Total, all groups	108.2	2.1	1.9	.0	112.3	11.4
Sampling error (percent)	11.6	98.6	98.8	.0	11.4	
	<u>Green tons per acre^a</u>					
Loblolly/shortleaf	112.1	.0	.0	.0	112.1	
Oak/pine	92.7	.0	.0	.0	92.7	
Oak/hickory	101.9	.0	.0	.0	101.9	
Oak/gum/cypress	107.8	.0	.0	.0	107.8	
Elm/ash/red maple	143.0	55.0	.8	.0	101.6	
All groups	104.9	55.0	.8	.0	102.1	
	<u>Dry tons per acre^a</u>					
Loblolly/shortleaf	53.8	.0	.0	.0	53.8	
Oak/pine	50.8	.0	.0	.0	50.8	
Oak/hickory	58.4	.0	.0	.0	58.4	
Oak/gum/cypress	65.2	.0	.0	.0	65.2	
Elm/ash/red maple	83.0	26.4	.4	.0	58.0	
All groups	59.4	26.4	.4	.0	57.7	

^aPer acre estimates are based on the timberland area in each forest-type group and stand-size class.

Table 40.--Net aboveground tree biomass of all live trees on timberland, by forest-type group and stand-size class, Montgomery/Prince George's Counties, Maryland, 1986

Forest-type group	Stand-size class				All classes	Sampling error (percent)
	Sawtimber	Poletimber	Sapling and seedling	Nonstocked		
<u>Thousand acres</u>						
Loblolly/shortleaf	6.9	11.8	.0	.0	18.7	46.6
Oak/pine	16.2	.0	.0	.0	16.2	51.2
Oak/hickory	77.1	12.6	12.2	.0	102.0	13.9
Oak/gum/cypress	8.0	.0	.0	.0	8.0	71.3
Elm/ash/red maple	.0	4.1	.0	.0	4.1	100.8
Northern hardwoods	.0	.0	4.1	.0	4.1	100.8
Total, all groups	108.2	28.5	16.3	.0	153.0	6.8
Sampling error (percent)	11.6	37.7	42.6	.0	6.8	
<u>Green tons per acre^a</u>						
Loblolly/shortleaf	129.0	90.4	.0	.0	104.6	
Oak/pine	130.9	.0	.0	.0	130.9	
Oak/hickory	158.5	69.4	14.1	.0	130.1	
Oak/gum/cypress	177.7	.0	.0	.0	177.7	
Elm/ash/red maple	.0	81.4	.0	.0	81.4	
Northern hardwoods	.0	.0	16.7	.0	16.7	
All groups	153.9	79.8	14.7	.0	125.3	
<u>Dry tons per acre^a</u>						
Loblolly/shortleaf	71.3	49.2	.0	.0	57.4	
Oak/pine	70.7	.0	.0	.0	70.7	
Oak/hickory	91.4	41.5	6.1	.0	74.9	
Oak/gum/cypress	107.6	.0	.0	.0	107.6	
Elm/ash/red maple	.0	47.2	.0	.0	47.2	
Northern hardwoods	.0	.0	8.6	.0	8.6	
All groups	88.2	45.5	6.7	.0	71.6	

^aPer acre estimates are based on the timberland area in each forest-type group and stand-size class.

Table 41.--Net aboveground tree biomass of all live trees on timberland, by species and diameter group, Maryland, 1986

Species	Diameter group (inches at breast height)				All classes
	1.0-4.9	5.0-10.9	11.0-20.9	21+	
In thousands of green tons					
White/red pine	136.0	1,769.5	950.5	.0	2,856.0
Loblolly pine	1,563.3	8,369.6	10,457.8	378.0	20,768.7
Virginia pine	528.3	5,682.1	4,234.9	15.1	10,460.4
Other yellow pines	211.4	382.7	214.3	.0	808.4
Other softwoods	178.3	706.9	990.7	207.8	2,083.7
Total softwoods	2,617.4	16,910.7	16,848.1	601.0	36,977.2
Red maple	3,554.0	10,072.4	11,488.2	3,843.4	28,958.0
Sugar maple	369.6	1,545.3	1,539.7	457.0	3,911.6
Hickory	619.0	2,817.9	4,131.2	526.8	8,095.0
Beech	563.1	2,344.1	4,639.3	1,724.8	9,271.4
Sweetgum	2,027.7	6,067.8	7,301.9	971.6	16,368.9
Yellow-poplar	406.2	2,973.0	11,483.1	7,617.5	22,479.8
Blackgum	1,746.0	3,503.9	4,126.9	725.3	10,102.2
Ash-walnut-cherry	1,183.8	4,381.7	4,379.6	460.2	10,405.3
Select white oaks	412.8	7,236.7	12,503.9	5,964.0	26,117.5
Select red oaks	142.9	3,190.4	10,883.3	5,835.4	20,052.0
Other white oaks	176.9	4,782.0	9,025.6	2,601.2	16,585.7
Other red oaks	772.2	5,816.0	15,663.6	6,589.2	28,841.1
Black locust	772.5	1,883.7	1,554.9	49.0	4,260.0
Other commercial hardwoods	4,375.0	6,748.8	5,440.8	1,115.9	17,680.4
Total hardwoods	17,121.6	63,363.7	104,162.0	38,481.3	223,128.6
Total, all species	19,739.0	80,274.4	121,010.1	39,082.2	260,105.8
In thousands of dry tons					
White/red pine	60.9	761.7	388.5	.0	1,211.1
Loblolly pine	747.1	3,673.9	4,316.1	147.7	8,884.8
Virginia pine	274.2	3,031.3	2,290.9	8.3	5,604.7
Other yellow pines	97.8	194.6	112.2	.0	404.6
Other softwoods	88.7	343.8	490.1	105.7	1,028.3
Total softwoods	1,268.7	8,005.3	7,597.7	261.7	17,133.4
Red maple	2,041.9	5,885.5	6,795.7	2,305.0	17,028.1
Sugar maple	229.8	985.5	986.7	293.5	2,495.6
Hickory	402.6	1,827.4	2,668.2	327.7	5,225.9
Beech	331.4	1,363.6	2,685.1	996.2	5,376.3
Sweetgum	1,239.3	3,937.7	4,924.5	679.0	10,780.5
Yellow-poplar	181.4	1,491.8	6,238.2	4,408.3	12,319.7
Blackgum	957.0	1,994.9	2,437.3	447.5	5,836.7
Ash-walnut-cherry	693.5	2,624.7	2,692.3	295.3	6,305.7
Select white oaks	246.8	4,163.3	7,048.9	3,285.4	14,744.5
Select red oaks	80.8	1,830.3	6,232.8	3,321.8	11,465.6
Other white oaks	107.6	2,840.0	5,282.2	1,507.4	9,737.2
Other red oaks	443.5	3,383.8	8,761.8	3,537.1	16,126.2
Black locust	301.5	1,021.9	1,055.5	39.2	2,418.2
Other commercial hardwoods	2,360.8	3,705.4	3,122.4	720.8	9,909.4
Total hardwoods	9,617.8	37,055.8	60,931.8	22,164.2	129,769.6
Total, all species	10,886.4	45,061.1	68,529.5	22,425.9	146,903.0

Table 42.--Net aboveground tree biomass of all live trees on timberland, by species and diameter group, Allegany County, Maryland, 1986

Species	Diameter group (inches at breast height)				All classes
	1.0-4.9	5.0-10.9	11.0-20.9	21+	
In thousands of green tons					
White/red pine	14.7	32.8	42.6	.0	90.1
Virginia pine	20.4	379.4	251.2	.0	651.0
Other yellow pines	.0	25.5	135.0	.0	160.5
Other softwoods	74.9	83.5	52.5	.0	211.0
Total softwoods	110.0	521.3	481.3	.0	1,112.6
Red maple	99.1	248.6	213.0	24.1	584.8
Sugar maple	102.8	641.1	647.3	231.2	1,622.4
Hickory	112.1	367.8	399.3	.0	879.3
Beech	.0	.0	27.4	.0	27.4
Yellow-poplar	.0	29.2	46.7	.0	75.9
Blackgum	12.7	104.7	93.3	.0	210.7
Ash-walnut-cherry	83.9	594.4	285.7	.0	964.0
Select white oaks	81.8	1,223.4	1,114.6	361.8	2,781.6
Select red oaks	73.2	698.3	1,462.4	1,262.0	3,495.8
Other white oaks	39.0	847.9	1,079.3	227.4	2,193.6
Other red oaks	30.8	378.0	940.0	453.0	1,801.8
Black locust	165.7	321.6	232.6	14.9	734.9
Other commercial hardwoods	286.6	561.1	515.2	253.6	1,616.5
Total hardwoods	1,087.7	6,016.0	7,056.9	2,828.0	16,988.6
Total, all species	1,197.8	6,537.3	7,538.2	2,828.0	18,101.3
In thousands of dry tons					
White/red pine	6.1	13.4	17.3	.0	36.8
Virginia pine	10.6	202.5	135.8	.0	348.8
Other yellow pines	.0	12.8	69.2	.0	82.0
Other softwoods	36.4	40.8	25.8	.0	102.9
Total softwoods	53.1	269.4	248.0	.0	570.5
Red maple	56.8	145.2	126.0	14.4	342.3
Sugar maple	63.4	408.8	414.9	148.6	1,035.7
Hickory	72.9	238.6	258.5	.0	570.0
Beech	.0	.0	15.9	.0	15.9
Yellow-poplar	.0	14.7	25.4	.0	40.1
Blackgum	6.8	60.7	56.0	.0	123.5
Ash-walnut-cherry	54.3	374.6	177.0	.0	606.0
Select white oaks	48.5	699.9	618.7	194.8	1,562.0
Select red oaks	42.5	402.1	837.3	718.0	1,999.9
Other white oaks	23.9	504.0	633.3	131.8	1,293.0
Other red oaks	17.2	215.5	539.0	261.9	1,033.6
Black locust	70.5	172.7	158.7	12.4	414.4
Other commercial hardwoods	154.9	323.7	314.3	171.3	964.1
Total hardwoods	611.8	3,560.5	4,174.9	1,653.2	10,000.4
Total, all species	664.9	3,829.9	4,422.9	1,653.2	10,570.9

Table 43.--Net aboveground tree biomass of all live trees on timberland, by species and diameter group, Baltimore County, Maryland, 1986

Species	Diameter group (inches at breast height)				All classes
	1.0-4.9	5.0-10.9	11.0-20.9	21+	
In thousands of green tons					
White/red pine	.0	437.7	377.1	.0	814.9
Virginia pine	18.0	202.7	277.4	.0	498.1
Other yellow pines	.0	20.0	11.9	.0	31.9
Total softwoods	18.0	660.4	666.5	.0	1,344.9
Red maple	19.5	382.7	318.6	.0	720.9
Hickory	29.8	156.0	51.9	.0	237.7
Beech	63.1	102.9	142.7	29.3	337.9
Sweetgum	.0	40.3	40.0	.0	80.3
Yellow-poplar	3.3	317.6	1,166.0	1,592.0	3,078.9
Blackgum	45.2	94.0	78.7	.0	217.9
Ash-walnut-cherry	.0	89.0	144.8	.0	233.8
Select white oaks	.0	125.1	293.6	693.0	1,111.7
Select red oaks	.0	20.4	414.7	351.4	786.5
Other white oaks	1.6	128.0	630.8	222.0	982.3
Other red oaks	.0	233.0	925.4	561.0	1,719.4
Other commercial hardwoods	79.1	132.4	58.4	31.6	301.6
Total hardwoods	241.6	1,821.5	4,265.7	3,480.1	9,808.8
Total, all species	259.6	2,481.9	4,932.1	3,480.1	11,153.7
In thousands of dry tons					
White/red pine	.0	187.2	153.5	.0	340.7
Virginia pine	9.3	108.3	150.2	.0	267.8
Other yellow pines	.0	10.8	6.4	.0	17.2
Total softwoods	9.3	306.2	310.1	.0	625.6
Red maple	11.1	224.2	188.5	.0	423.8
Hickory	19.4	101.2	33.6	.0	154.2
Beech	37.0	59.9	82.6	16.9	196.4
Sweetgum	.0	26.5	26.8	.0	53.3
Yellow-poplar	1.3	160.9	636.2	922.9	1,721.3
Blackgum	24.6	53.6	46.5	.0	124.7
Ash-walnut-cherry	.0	51.7	85.8	.0	137.5
Select white oaks	.0	71.5	163.5	372.8	607.9
Select red oaks	.0	11.7	237.5	199.9	449.1
Other white oaks	1.0	76.0	365.9	128.5	571.4
Other red oaks	.0	134.0	533.1	324.3	991.4
Other commercial hardwoods	52.4	73.4	32.6	18.5	176.9
Total hardwoods	146.8	1,044.6	2,432.6	1,984.0	5,608.0
Total, all species	156.1	1,350.9	2,742.7	1,984.0	6,233.6

Table 44.--Net aboveground tree biomass of all live trees on timberland, by species and diameter group, Calvert County, Maryland, 1986

Species	Diameter group (inches at breast height)				All classes
	1.0-4.9	5.0-10.9	11.0-20.9	21+	
In thousands of green tons					
Loblolly pine	24.7	75.0	60.1	20.0	179.8
Virginia pine	22.6	360.6	232.6	15.1	630.8
Other softwoods	.0	.0	4.7	40.8	45.5
Total softwoods	47.2	435.6	297.4	75.9	856.2
Red maple	253.3	356.0	266.2	151.2	1,026.9
Hickory	1.2	58.1	249.8	.0	309.2
Beech	89.4	197.4	543.4	224.6	1,054.8
Sweetgum	16.9	313.8	456.6	114.9	902.2
Yellow-poplar	29.9	148.5	855.5	422.5	1,456.4
Blackgum	9.6	60.4	66.1	45.3	181.4
Ash-walnut-cherry	.0	40.1	164.0	.0	204.2
Select white oaks	3.6	54.0	187.3	201.7	446.5
Select red oaks	23.3	20.9	200.6	183.0	427.8
Other white oaks	70.3	53.1	189.1	75.7	388.2
Other red oaks	28.4	122.0	487.0	190.6	828.1
Other commercial hardwoods	270.1	267.5	267.7	122.2	927.5
Total hardwoods	796.0	1,692.1	3,933.3	1,731.8	8,153.2
Total, all species	843.2	2,127.6	4,230.7	1,807.7	9,009.3
In thousands of dry tons					
Loblolly pine	11.7	32.7	24.7	7.8	76.9
Virginia pine	11.7	192.4	126.2	8.3	338.6
Other softwoods	.0	.0	2.2	22.7	24.9
Total softwoods	23.4	225.1	153.0	38.7	440.3
Red maple	146.2	208.0	157.4	90.4	602.0
Hickory	.8	37.7	158.6	.0	197.1
Beech	52.8	114.7	314.5	129.8	611.7
Sweetgum	10.2	203.2	308.8	79.9	602.2
Yellow-poplar	13.4	74.5	464.2	245.1	797.3
Blackgum	5.2	34.7	39.6	27.7	107.1
Ash-walnut-cherry	.0	23.2	101.6	.0	124.7
Select white oaks	2.2	31.0	104.8	109.3	247.3
Select red oaks	13.5	12.1	114.7	104.2	244.5
Other white oaks	42.4	31.6	110.7	44.0	228.8
Other red oaks	15.9	73.0	263.8	87.3	439.9
Other commercial hardwoods	135.0	131.5	139.4	72.8	478.8
Total hardwoods	437.6	975.2	2,278.1	990.6	4,681.5
Total, all species	461.0	1,200.4	2,431.2	1,029.4	5,121.9

Table 45.--Net aboveground tree biomass of all live trees on timberland, by species and diameter group, Carroll County, Maryland, 1986

Species	Diameter group (inches at breast height)				All classes
	1.0-4.9	5.0-10.9	11.0-20.9	21+	
In thousands of green tons					
White/red pine	.0	.0	158.7	.0	158.7
Loblolly pine	.0	11.5	307.6	.0	319.1
Virginia pine	.0	.0	2.4	.0	2.4
Total softwoods	.0	11.5	468.7	.0	480.1
Red maple	23.5	397.1	264.3	89.4	774.4
Hickory	50.3	150.9	198.8	4.5	404.6
Beech	2.8	25.6	27.2	.0	55.7
Yellow-poplar	.0	.2	402.9	280.8	683.9
Blackgum	19.9	40.5	23.8	.0	84.2
Ash-walnut-cherry	85.7	322.5	140.2	3.3	551.7
Select white oaks	.0	144.2	136.9	196.3	477.3
Select red oaks	.0	150.1	555.1	197.3	902.5
Other white oaks	.0	319.5	559.5	283.8	1,162.8
Other red oaks	.0	347.1	1,536.6	815.6	2,699.4
Black locust	.0	36.8	.0	.0	36.8
Other commercial hardwoods	13.0	183.4	383.3	107.7	687.3
Total hardwoods	195.2	2,118.1	4,228.6	1,978.7	8,520.6
Total, all species	195.2	2,129.5	4,697.3	1,978.7	9,000.7
In thousands of dry tons					
White/red pine	.0	.0	64.5	.0	64.5
Loblolly pine	.0	4.9	127.7	.0	132.6
Virginia pine	.0	.0	1.3	.0	1.3
Total softwoods	.0	4.9	193.5	.0	198.4
Red maple	13.4	232.2	156.2	53.5	455.2
Hickory	32.8	97.9	128.7	2.9	262.3
Beech	1.6	14.9	15.8	.0	32.3
Yellow-poplar	.0	.1	219.6	161.5	381.2
Blackgum	10.8	23.4	14.2	.0	48.4
Ash-walnut-cherry	47.2	185.1	85.3	2.2	319.8
Select white oaks	.0	84.6	75.9	106.7	267.1
Select red oaks	.0	86.3	317.7	112.5	516.5
Other white oaks	.0	189.6	328.1	164.8	682.5
Other red oaks	.0	196.7	880.8	471.0	1,548.5
Black locust	.0	18.0	.0	.0	18.0
Other commercial hardwoods	4.8	76.8	205.1	64.1	350.8
Total hardwoods	110.6	1,205.7	2,427.3	1,139.1	4,882.6
Total, all species	110.6	1,210.6	2,620.7	1,139.1	5,081.0

Table 46.--Net aboveground tree biomass of all live trees on timberland, by species and diameter group, Charles County, Maryland, 1986

Species	Diameter group (inches at breast height)				All classes
	1.0-4.9	5.0-10.9	11.0-20.9	21+	
In thousands of green tons					
Loblolly pine	.0	404.7	405.9	.0	810.6
Virginia pine	117.2	1,165.2	813.9	.0	2,096.3
Other yellow pines	.0	49.2	.0	.0	49.2
Other softwoods	.0	89.7	19.3	.0	108.9
Total softwoods	117.2	1,708.7	1,239.1	.0	3,065.0
Red maple	376.6	527.8	788.8	190.0	1,883.3
Hickory	53.6	186.8	349.3	102.0	691.7
Beech	46.3	388.9	833.1	193.7	1,462.0
Sweetgum	291.1	1,132.3	1,162.9	154.4	2,740.6
Yellow-poplar	1.6	430.6	913.0	718.2	2,063.4
Blackgum	63.4	286.4	271.3	62.3	683.4
Ash-walnut-cherry	38.9	220.4	153.7	22.9	436.0
Select white oaks	17.4	546.4	1,117.5	489.3	2,170.5
Select red oaks	1.8	52.4	113.0	70.8	238.0
Other white oaks	.0	67.4	10.0	.0	77.3
Other red oaks	93.8	622.8	1,715.1	393.3	2,825.0
Black locust	.0	54.1	51.1	.0	105.2
Other commercial hardwoods	390.4	530.7	296.5	50.4	1,268.0
Total hardwoods	1,374.9	5,047.0	7,775.3	2,447.2	16,644.4
Total, all species	1,492.1	6,755.7	9,014.4	2,447.2	19,709.5
In thousands of dry tons					
Loblolly pine	.0	177.2	167.4	.0	344.6
Virginia pine	60.6	621.9	439.8	.0	1,122.4
Other yellow pines	.0	25.5	.0	.0	25.5
Other softwoods	.0	43.6	9.2	.0	52.8
Total softwoods	60.6	868.4	616.4	.0	1,545.5
Red maple	217.1	308.7	466.3	113.4	1,105.5
Hickory	34.9	121.1	223.2	62.7	441.9
Beech	27.3	226.2	482.3	111.9	847.7
Sweetgum	177.8	736.7	784.5	107.5	1,806.5
Yellow-poplar	.6	215.2	494.0	416.7	1,126.5
Blackgum	33.1	156.0	154.2	39.6	382.9
Ash-walnut-cherry	21.7	118.5	94.3	15.9	250.4
Select white oaks	10.4	316.8	660.2	278.7	1,266.2
Select red oaks	1.0	30.2	64.7	40.3	136.2
Other white oaks	.0	38.5	5.0	.0	43.5
Other red oaks	48.7	354.4	921.6	178.0	1,502.7
Black locust	.0	29.8	34.1	.0	63.9
Other commercial hardwoods	199.3	288.6	166.0	31.5	685.3
Total hardwoods	772.0	2,940.7	4,550.4	1,396.1	9,659.1
Total, all species	832.6	3,809.1	5,166.8	1,396.1	11,204.6

Table 47.--Net aboveground tree biomass of all live trees on timberland, by species and diameter group, Dorchester County, Maryland, 1986

Species	Diameter group (inches at breast height)				All Classes
	1.0-4.9	5.0-10.9	11.0-20.9	21+	
In thousands of green tons					
Loblolly pine	274.5	2,428.0	1,699.1	68.4	4,470.0
Virginia pine	40.9	39.3	32.5	.0	112.7
Total softwoods	315.4	2,467.3	1,731.6	68.4	4,582.7
Red maple	160.5	461.1	370.8	99.9	1,092.3
Hickory	.0	174.2	15.1	.0	189.3
Beech	2.4	.0	21.0	.0	23.4
Sweetgum	121.4	390.6	395.0	32.5	939.6
Yellow-poplar	.0	54.5	17.8	38.3	110.6
Blackgum	234.3	375.4	171.1	1.9	782.7
Ash-walnut-cherry	9.8	54.5	38.6	.0	102.9
Select white oaks	11.1	516.0	1,026.3	204.3	1,757.8
Select red oaks	.0	8.7	51.2	.0	59.9
Other white oaks	.0	12.3	.0	.0	12.3
Other red oaks	1.3	381.8	945.4	330.3	1,658.8
Other commercial hardwoods	242.3	123.9	1.2	.0	367.4
Total hardwoods	783.1	2,553.1	3,053.5	707.3	7,097.0
Total, all species	1,098.6	5,020.3	4,785.1	775.7	11,679.7
In thousands of dry tons					
Loblolly pine	132.2	1,065.1	705.3	26.7	1,929.3
Virginia pine	21.4	20.9	17.6	.0	59.8
Total softwoods	153.5	1,086.0	722.9	26.7	1,989.1
Red maple	92.2	269.2	219.5	59.6	640.5
Hickory	.0	113.0	9.8	.0	122.8
Beech	1.4	.0	12.2	.0	13.6
Sweetgum	73.6	253.8	266.0	22.9	616.2
Yellow-poplar	.0	27.2	9.5	22.0	58.8
Blackgum	131.0	216.7	101.5	1.2	450.4
Ash-walnut-cherry	5.3	31.3	23.1	.0	59.7
Select white oaks	6.5	300.5	597.2	122.3	1,026.4
Select red oaks	.0	4.6	30.4	.0	35.0
Other white oaks	.0	6.7	.0	.0	6.7
Other red oaks	.8	220.4	512.7	169.5	903.4
Other commercial hardwoods	117.7	70.8	.7	.0	189.1
Total hardwoods	428.5	1,514.3	1,782.3	397.5	4,122.5
Total, all species	582.0	2,600.3	2,505.2	424.2	6,111.6

Table 48.--Net aboveground tree biomass of all live trees on timberland, by species and diameter group, Frederick County, Maryland, 1986

Species	Diameter group (inches at breast height)				All Classes
	1.0-4.9	5.0-10.9	11.0-20.9	21+	
In thousands of green tons					
White/red pine	.0	96.5	28.8	.0	125.3
Virginia pine	.0	41.2	69.7	.0	110.9
Other yellow pines	119.3	46.8	.0	.0	166.1
Other softwoods	14.2	.0	.0	.0	14.2
Total softwoods	133.5	184.5	98.5	.0	416.5
Red maple	53.1	223.2	538.4	456.1	1,270.8
Hickory	73.3	371.0	138.5	36.4	619.2
Beech	37.5	27.5	81.0	72.7	218.7
Yellow-poplar	.0	117.8	568.6	335.9	1,022.4
Blackgum	38.7	114.8	134.7	.0	288.2
Ash-walnut-cherry	246.2	494.7	607.3	48.3	1,396.4
Select white oaks	.0	183.6	292.6	181.6	657.8
Select red oaks	.0	376.4	1,114.2	443.1	1,933.6
Other white oaks	11.4	1,198.7	1,918.6	348.4	3,477.1
Other red oaks	50.7	1.9	352.9	105.9	511.3
Black locust	.0	283.6	157.0	4.1	444.6
Other commercial hardwoods	131.3	417.6	561.4	129.1	1,239.4
Total hardwoods	642.2	3,810.7	6,465.2	2,161.6	13,079.7
Total, all species	775.7	3,995.3	6,563.7	2,161.6	13,496.2
In thousands of dry tons					
White/red pine	.0	39.5	11.7	.0	51.2
Virginia pine	.0	22.1	37.6	.0	59.7
Other yellow pines	55.4	20.7	.0	.0	76.1
Other softwoods	7.5	.0	.0	.0	7.5
Total softwoods	62.9	82.3	49.3	.0	194.5
Red maple	30.5	130.3	320.7	280.1	761.6
Hickory	47.6	240.3	89.7	23.6	401.2
Beech	22.2	16.0	46.9	42.0	127.1
Yellow-poplar	.0	59.3	311.2	192.6	563.1
Blackgum	21.1	65.6	80.6	.0	167.2
Ash-walnut-cherry	161.2	301.7	382.3	28.3	873.6
Select white oaks	.0	105.0	162.3	97.4	364.7
Select red oaks	.0	216.4	637.9	252.4	1,106.7
Other white oaks	7.0	712.1	1,125.6	202.2	2,046.8
Other red oaks	28.4	1.1	204.3	60.8	294.6
Black locust	.0	161.0	101.6	3.2	265.9
Other commercial hardwoods	80.3	221.2	333.3	85.7	720.4
Total hardwoods	398.3	2,229.9	3,796.3	1,268.4	7,693.0
Total, all species	461.3	2,312.2	3,845.6	1,268.4	7,887.5

Table 49.--Net aboveground tree biomass of all live trees on timberland, by species and diameter group, Garrett County, Maryland, 1986

Species	Diameter group (inches at breast height)				All Classes
	1.0-4.9	5.0-10.9	11.0-20.9	21+	
In thousands of green tons					
White/red pine	109.5	1,187.9	217.5	.0	1,514.9
Other yellow pines	76.6	89.8	23.5	.0	189.8
Other softwoods	44.7	398.9	639.8	146.6	1,230.0
Total softwoods	230.8	1,676.5	880.7	146.6	2,934.7
Red maple	555.0	2,206.8	1,512.2	160.4	4,434.4
Sugar maple	266.8	754.6	827.4	169.2	2,017.9
Hickory	31.8	422.3	623.1	35.6	1,112.7
Beech	27.5	275.1	245.0	30.4	578.0
Yellow-poplar	.0	31.8	192.8	.0	224.6
Blackgum	31.8	46.5	64.0	.0	142.3
Ash-walnut-cherry	326.9	939.2	1,165.6	113.3	2,544.9
Select white oaks	33.0	1,282.7	1,517.8	1,172.5	4,006.0
Select red oaks	19.4	1,047.0	3,762.8	1,498.9	6,328.2
Other white oaks	23.7	1,151.5	1,511.0	709.8	3,396.0
Other red oaks	.0	610.5	965.3	335.0	1,910.7
Black locust	180.9	336.3	375.2	29.9	922.4
Other commercial hardwoods	442.2	1,000.7	584.4	124.1	2,151.4
Total hardwoods	1,939.0	10,104.9	13,346.5	4,379.1	29,769.5
Total, all species	2,169.7	11,781.4	14,227.2	4,525.7	32,704.1
In thousands of dry tons					
White/red pine	50.0	515.7	90.3	.0	656.0
Other yellow pines	35.0	44.3	12.7	.0	92.0
Other softwoods	21.6	193.9	313.6	72.1	601.2
Total softwoods	106.6	753.9	416.6	72.1	1,349.2
Red maple	318.7	1,289.6	893.5	95.8	2,597.6
Sugar maple	166.3	481.3	530.2	108.7	1,286.5
Hickory	20.7	273.8	403.4	23.0	720.9
Beech	16.3	160.1	141.8	17.5	335.7
Yellow-poplar	.0	15.5	103.0	.0	118.6
Blackgum	17.4	26.5	38.4	.0	82.3
Ash-walnut-cherry	186.2	553.0	717.2	75.1	1,531.5
Select white oaks	19.9	732.9	844.8	636.1	2,233.7
Select red oaks	11.3	602.8	2,155.0	853.7	3,622.7
Other white oaks	14.6	684.2	886.6	411.4	1,996.8
Other red oaks	.0	351.7	556.4	193.8	1,101.8
Black locust	75.8	179.9	262.1	23.5	541.3
Other commercial hardwoods	228.0	598.6	381.1	84.1	1,291.8
Total hardwoods	1,075.1	5,949.9	7,913.5	2,522.7	17,461.2
Total, all species	1,181.7	6,703.8	8,330.2	2,594.8	18,810.4

Table 50.--Net aboveground tree biomass of all live trees on timberland, by species and diameter group, St. Mary's County, Maryland, 1986

Species	Diameter group (inches at breast height)				All Classes
	1.0-4.9	5.0-10.9	11.0-20.9	21+	
In thousands of green tons					
Loblolly pine	19.4	554.0	1,088.4	83.3	1,745.1
Virginia pine	61.0	702.5	691.5	.0	1,455.0
Other yellow pines	.0	2.3	.0	.0	2.3
Other softwoods	.0	.0	19.5	.0	19.5
Total softwoods	80.4	1,258.8	1,799.3	83.3	3,221.9
Red maple	119.1	282.4	486.6	95.6	983.8
Hickory	8.6	132.1	252.6	75.0	468.2
Beech	96.2	143.6	504.4	177.1	921.2
Sweetgum	257.2	564.1	663.7	83.3	1,568.2
Yellow-poplar	2.1	252.5	819.8	344.2	1,418.6
Blackgum	233.8	152.5	304.0	25.9	716.1
Ash-walnut-cherry	1.4	43.8	117.8	20.5	183.5
Select white oaks	3.0	317.1	909.7	291.9	1,521.7
Select red oaks	13.5	73.9	148.1	.0	235.6
Other white oaks	.0	105.1	218.1	45.6	368.7
Other red oaks	121.7	540.8	1,118.5	371.7	2,152.7
Black locust	.0	21.2	38.8	.0	60.0
Other commercial hardwoods	458.4	523.9	209.9	36.5	1,228.8
Total hardwoods	1,315.0	3,153.1	5,791.8	1,567.2	11,827.2
Total, all species	1,395.4	4,412.0	7,591.1	1,650.6	15,049.1
In thousands of dry tons					
Loblolly pine	9.7	243.0	449.5	32.5	734.7
Virginia pine	31.7	375.2	374.1	.0	780.9
Other yellow pines	.0	1.2	.0	.0	1.2
Other softwoods	.0	.0	8.1	.0	8.1
Total softwoods	41.4	619.4	831.6	32.5	1,524.9
Red maple	68.0	164.8	287.5	57.2	577.4
Hickory	5.6	85.6	163.5	48.4	303.1
Beech	56.6	83.6	291.9	102.2	534.4
Sweetgum	158.2	366.2	446.3	57.7	1,028.4
Yellow-poplar	.8	126.6	446.1	198.9	772.4
Blackgum	129.6	88.2	181.6	15.8	415.1
Ash-walnut-cherry	.8	26.3	73.2	12.5	112.8
Select white oaks	1.9	181.3	508.3	160.3	851.8
Select red oaks	5.5	41.4	84.4	.0	131.3
Other white oaks	.0	62.6	121.0	26.1	209.8
Other red oaks	70.9	314.4	609.8	161.0	1,156.1
Black locust	.0	11.5	24.9	.0	36.4
Other commercial hardwoods	243.0	277.1	109.5	21.7	651.3
Total hardwoods	740.9	1,829.6	3,348.0	861.7	6,780.2
Total, all species	782.2	2,449.0	4,179.6	894.2	8,305.1

Table 51.--Net aboveground tree biomass of all live trees on timberland, by species and diameter group, Somerset County, Maryland, 1986

Species	Diameter group (inches at breast height)				All Classes
	1.0-4.9	5.0-10.9	11.0-20.9	21+	
In thousands of green tons					
Loblolly pine	539.7	1,290.5	1,570.6	.0	3,400.8
Virginia pine	.0	6.6	.0	.0	6.6
Total softwoods	539.7	1,297.1	1,570.6	.0	3,407.4
Red maple	233.8	422.8	548.0	215.8	1,420.4
Beech	25.6	68.9	73.2	14.6	182.3
Sweetgum	72.6	224.3	278.8	.0	575.7
Blackgum	7.3	312.1	381.6	99.5	800.6
Ash-walnut-cherry	.0	102.9	73.6	.0	176.5
Select white oaks	22.7	261.3	555.1	115.9	955.0
Select red oaks	.0	19.8	.0	.0	19.8
Other red oaks	10.9	205.8	595.2	.0	811.9
Other commercial hardwoods	21.7	91.4	.0	.0	113.1
Total hardwoods	394.6	1,709.4	2,505.6	445.8	5,055.4
Total, all species	934.3	3,006.5	4,076.2	445.8	8,462.8
In thousands of dry tons					
Loblolly pine	259.2	567.8	648.7	.0	1,475.7
Virginia pine	.0	3.5	.0	.0	3.5
Total softwoods	259.2	571.3	648.7	.0	1,479.2
Red maple	134.4	246.8	324.1	129.1	834.5
Beech	15.1	40.1	42.4	8.4	105.9
Sweetgum	44.3	145.4	187.6	.0	377.4
Blackgum	3.9	180.2	226.0	61.0	471.2
Ash-walnut-cherry	.0	54.3	46.2	.0	100.4
Select white oaks	14.5	151.0	314.4	72.4	552.3
Select red oaks	.0	11.4	.0	.0	11.4
Other red oaks	6.4	121.8	318.2	.0	446.4
Other commercial hardwoods	14.2	49.2	.0	.0	63.4
Total hardwoods	232.7	1,000.2	1,458.8	271.0	2,962.7
Total, all species	491.9	1,571.5	2,107.5	271.0	4,441.9

Table 52.--Net aboveground tree biomass of all live trees on timberland, by species and diameter group, Washington County, Maryland, 1986

Species	Diameter group (inches at breast height)				All Classes
	1.0-4.9	5.0-10.9	11.0-20.9	21+	
In thousands of green tons					
White/red pine	.0	14.5	90.2	.0	104.7
Virginia pine	.0	47.0	.0	.0	47.0
Other yellow pines	.0	123.9	19.6	.0	143.5
Other softwoods	6.1	120.1	33.0	.0	159.2
Total softwoods	6.1	305.5	142.8	.0	454.4
Red maple	26.7	185.4	228.4	50.0	490.4
Sugar maple	.0	149.7	65.0	56.6	271.2
Hickory	1.5	71.7	199.3	.0	272.4
Beech	.0	39.5	88.0	40.6	168.0
Yellow-poplar	.0	17.3	419.9	71.8	509.0
Blackgum	79.5	77.7	7.7	84.3	249.1
Ash-walnut-cherry	13.6	216.7	158.1	.0	388.4
Select white oaks	.0	142.6	373.1	.0	515.6
Select red oaks	.0	243.8	1,208.6	254.4	1,706.8
Other white oaks	.0	590.5	1,747.5	88.6	2,426.6
Other red oaks	42.6	77.8	520.3	99.3	740.0
Black locust	51.9	104.1	150.6	.0	306.6
Other commercial hardwoods	203.3	294.0	203.7	49.9	750.9
Total hardwoods	418.9	2,210.5	5,370.1	795.5	8,795.0
Total, all species	425.1	2,516.0	5,512.9	795.5	9,249.4
In thousands of dry tons					
White/red pine	.0	5.9	36.6	.0	42.6
Virginia pine	.0	25.0	.0	.0	25.0
Other yellow pines	.0	65.9	10.6	.0	76.5
Other softwoods	3.4	58.0	15.9	.0	77.4
Total softwoods	3.4	154.9	63.2	.0	221.5
Red maple	15.2	107.7	136.0	30.6	289.5
Sugar maple	.0	95.4	41.6	36.3	173.4
Hickory	1.0	46.5	129.0	.0	176.4
Beech	.0	22.9	50.9	23.5	97.3
Yellow-poplar	.0	8.7	229.1	40.4	278.2
Blackgum	44.6	45.0	4.5	52.2	146.3
Ash-walnut-cherry	7.3	132.7	96.3	.0	236.4
Select white oaks	.0	81.2	201.4	.0	282.6
Select red oaks	.0	140.3	691.6	145.1	977.1
Other white oaks	.0	351.3	1,025.1	51.5	1,427.9
Other red oaks	23.8	44.2	298.3	57.1	423.3
Black locust	20.9	55.5	98.5	.0	174.9
Other commercial hardwoods	118.5	168.4	141.2	38.9	467.0
Total hardwoods	231.2	1,299.8	3,143.5	475.5	5,150.1
Total, all species	234.6	1,454.7	3,206.7	475.5	5,371.6

Table 53.--Net aboveground tree biomass of all live trees on timberland, by species and diameter group, Wicomico County, Maryland, 1986

Species	Diameter group (inches at breast height)				All Classes
	1.0-4.9	5.0-10.9	11.0-20.9	21+	
In thousands of green tons					
Loblolly pine	161.3	1,214.9	1,418.3	47.4	2,842.0
Virginia pine	.0	48.3	21.4	.0	69.7
Other softwoods	.0	.0	2.3	.0	2.3
Total softwoods	161.3	1,263.2	1,442.0	47.4	2,913.9
Red maple	280.5	569.5	835.5	157.5	1,843.0
Hickory	.0	.0	3.4	.0	3.4
Beech	.0	65.5	78.8	.0	144.4
Sweetgum	144.2	390.9	430.3	21.7	987.1
Yellow-poplar	.0	.0	92.1	25.8	117.9
Blackgum	69.9	250.8	265.3	.0	586.0
Ash-walnut-cherry	.0	7.9	6.7	.0	14.7
Select white oaks	18.4	98.5	313.6	45.5	476.1
Select red oaks	.0	6.4	51.0	.0	57.4
Other red oaks	163.2	460.4	396.8	.0	1,020.4
Other commercial hardwoods	79.0	293.1	58.2	.0	430.2
Total hardwoods	755.2	2,143.0	2,531.9	250.4	5,680.5
Total, all species	916.6	3,406.2	3,973.9	297.9	8,594.5
In thousands of dry tons					
Loblolly pine	76.7	532.1	586.2	18.7	1,213.7
Virginia pine	.0	25.8	11.6	.0	37.4
Other softwoods	.0	.0	1.2	.0	1.2
Total softwoods	76.7	557.9	598.9	18.7	1,252.2
Red maple	161.0	332.8	493.9	94.1	1,081.8
Hickory	.0	.0	2.2	.0	2.2
Beech	.0	38.0	45.7	.0	83.7
Sweetgum	87.5	253.3	289.3	15.0	645.1
Yellow-poplar	.0	.0	49.9	14.7	64.6
Blackgum	38.4	145.1	158.1	.0	341.6
Ash-walnut-cherry	.0	4.6	4.0	.0	8.7
Select white oaks	11.0	56.3	175.7	24.8	267.8
Select red oaks	.0	3.7	29.2	.0	32.9
Other red oaks	98.7	268.7	221.1	.0	588.6
Other commercial hardwoods	39.7	160.3	33.9	.0	233.9
Total hardwoods	436.3	1,262.9	1,503.1	148.6	3,350.8
Total, all species	513.0	1,820.8	2,102.0	167.3	4,603.1

Table 54.--Net aboveground tree biomass of all live trees on timberland, by species and diameter group, Worcester County, Maryland, 1986

Species	Diameter group (inches at breast height)				All Classes
	1.0-4.9	5.0-10.9	11.0-20.9	21+	
In thousands of green tons					
Loblolly pine	522.0	1,398.7	1,572.7	85.4	3,578.8
Virginia pine	.0	23.5	115.8	.0	139.3
Other softwoods	20.6	8.9	121.3	17.3	168.1
Total softwoods	542.6	1,431.2	1,809.8	102.8	3,886.3
Red maple	483.5	1,417.7	1,729.1	708.5	4,338.7
Hickory	1.9	8.4	.0	.0	10.3
Beech	3.0	116.7	188.9	.0	308.7
Sweetgum	242.1	652.7	889.9	70.3	1,854.9
Yellow-poplar	23.8	37.5	75.7	150.9	287.9
Blackgum	96.7	366.1	667.4	122.9	1,253.2
Ash-walnut-cherry	5.2	128.4	108.0	.0	241.6
Select white oaks	18.4	351.6	787.0	112.4	1,269.4
Select red oaks	4.0	.0	15.8	34.9	54.7
Other red oaks	105.2	308.2	675.7	15.1	1,104.2
Other commercial hardwoods	405.1	462.9	220.3	53.7	1,142.0
Total hardwoods	1,388.9	3,850.2	5,357.9	1,268.7	11,865.6
Total, all species	1,931.5	5,281.3	7,167.7	1,371.5	15,751.9
In thousands of dry tons					
Loblolly pine	247.0	619.5	647.5	33.4	1,547.4
Virginia pine	.0	12.6	62.8	.0	75.4
Other softwoods	10.3	4.6	65.9	9.5	90.4
Total softwoods	257.3	636.7	776.2	42.9	1,713.1
Red maple	277.4	828.5	1,022.3	423.7	2,551.9
Hickory	1.3	5.5	.0	.0	6.7
Beech	1.6	67.7	109.4	.0	178.8
Sweetgum	148.1	424.6	600.7	48.8	1,222.2
Yellow-poplar	10.3	18.4	41.2	86.4	156.3
Blackgum	46.6	196.2	384.5	75.8	703.1
Ash-walnut-cherry	3.2	76.2	71.6	.0	151.0
Select white oaks	11.1	205.4	441.8	60.6	718.9
Select red oaks	2.3	.0	9.1	19.9	31.3
Other red oaks	60.9	184.6	377.8	6.9	630.3
Other commercial hardwoods	212.2	256.5	125.3	42.5	636.5
Total hardwoods	774.9	2,263.6	3,183.8	764.7	6,986.9
Total, all species	1,032.3	2,900.3	3,960.0	807.6	8,700.1

Table 55.--Net aboveground tree biomass of all live trees on timberland, by species and diameter group, Anne Arundel/Howard Counties, 1986

Species	Diameter group (inches at breast height)				All Classes
	1.0-4.9	5.0-10.9	11.0-20.9	21+	
In thousands of green tons					
White/red pine	11.8	.0	.0	.0	11.8
Loblolly pine	.0	40.1	176.5	.0	216.6
Virginia pine	125.5	622.3	371.5	.0	1,119.3
Other yellow pines	15.6	2.2	.0	.0	17.8
Total softwoods	152.9	664.7	548.0	.0	1,365.5
Red maple	62.7	475.3	729.4	211.5	1,478.9
Hickory	78.2	122.7	108.3	141.1	450.2
Beech	.0	193.2	428.9	82.3	704.4
Sweetgum	247.6	308.7	553.7	129.4	1,239.4
Yellow-poplar	.0	324.7	1,354.3	606.5	2,285.5
Blackgum	35.9	156.5	220.6	44.8	457.8
Ash-walnut-cherry	113.3	287.0	345.9	36.9	783.0
Select white oaks	21.9	257.7	483.2	85.8	848.6
Select red oaks	.0	161.9	169.0	93.3	424.2
Other white oaks	.0	165.5	183.2	274.2	623.0
Other red oaks	3.1	434.5	987.2	595.8	2,020.6
Black locust	.0	.0	87.5	.0	87.5
Other commercial hardwoods	324.7	664.7	925.7	37.8	1,952.9
Total hardwoods	887.5	3,552.3	6,576.8	2,339.5	13,356.1
Total, all species	1,040.4	4,217.0	7,124.8	2,339.5	14,721.6
In thousands of dry tons					
White/red pine	4.9	.0	.0	.0	4.9
Loblolly pine	.0	17.5	73.6	.0	91.0
Virginia pine	64.9	332.0	200.7	.0	597.6
Other yellow pines	7.4	1.2	.0	.0	8.6
Total softwoods	77.2	350.7	274.2	.0	702.1
Red maple	36.0	277.6	431.5	126.5	871.6
Hickory	50.9	79.6	70.1	81.7	282.2
Beech	.0	112.3	248.2	47.5	408.0
Sweetgum	152.0	199.7	373.1	90.7	815.5
Yellow-poplar	.0	161.3	734.9	347.6	1,243.8
Blackgum	19.5	91.1	131.9	27.4	269.9
Ash-walnut-cherry	60.0	172.6	203.0	21.5	457.1
Select white oaks	13.1	148.4	277.3	46.5	485.4
Select red oaks	.0	88.6	97.5	53.1	239.3
Other white oaks	.0	98.7	107.3	158.5	364.5
Other red oaks	1.8	260.4	562.2	313.1	1,137.5
Black locust	.0	.0	60.2	.0	60.2
Other commercial hardwoods	197.1	368.1	512.5	22.6	1,100.3
Total hardwoods	530.5	2,058.3	3,809.8	1,336.8	7,735.3
Total, all species	607.7	2,409.0	4,084.0	1,336.8	8,437.4

Table 56.--Net aboveground tree biomass of all live trees on timberland, by species and diameter group, Caroline/Talbot Counties, 1986

Species	Diameter group (inches at breast height)				All Classes
	1.0-4.9	5.0-10.9	11.0-20.9	21+	
In thousands of green tons					
Loblolly pine	21.7	462.3	1,333.8	47.0	1,864.7
Virginia pine	122.8	243.8	262.1	.0	628.6
Other softwoods	.0	.0	.0	3.1	3.1
Total softwoods	144.4	706.1	1,595.9	50.1	2,496.4
Red maple	259.9	360.0	759.5	202.8	1,582.1
Hickory	48.7	51.4	305.1	.0	405.2
Beech	28.6	346.3	345.8	138.1	858.8
Sweetgum	211.9	582.0	823.3	176.6	1,793.8
Yellow-poplar	84.6	186.8	682.1	2.8	956.3
Blackgum	135.0	335.3	480.9	.0	951.1
Ash-walnut-cherry	91.1	24.7	17.8	.0	133.6
Select white oaks	53.2	612.8	1,013.4	92.5	1,772.0
Select red oaks	7.8	155.6	348.9	9.3	521.6
Other red oaks	32.0	450.4	1,061.6	724.3	2,268.3
Black locust	.0	.0	12.1	.0	12.1
Other commercial hardwoods	187.5	430.0	90.4	10.1	718.0
Total hardwoods	1,140.1	3,535.4	5,940.8	1,356.6	11,972.9
Total, all species	1,284.5	4,241.5	7,536.7	1,406.6	14,469.3
In thousands of dry tons					
Loblolly pine	10.6	201.4	545.3	18.4	775.6
Virginia pine	64.0	130.2	142.0	.0	336.3
Other softwoods	.0	.0	.0	1.4	1.4
Total softwoods	74.6	331.6	687.3	19.8	1,113.3
Red maple	149.3	210.5	449.4	121.4	930.6
Hickory	31.6	33.3	197.5	.0	262.5
Beech	16.9	201.8	200.2	79.8	498.7
Sweetgum	130.2	378.0	555.1	124.6	1,187.9
Yellow-poplar	38.9	94.2	365.9	1.6	500.7
Blackgum	74.5	194.7	287.1	.0	556.3
Ash-walnut-cherry	50.8	14.1	10.5	.0	75.4
Select white oaks	31.4	353.4	571.9	50.0	1,006.7
Select red oaks	4.6	89.7	200.0	5.3	299.5
Other red oaks	21.9	268.3	580.3	357.8	1,228.3
Black locust	.0	.0	7.5	.0	7.5
Other commercial hardwoods	97.2	228.3	42.8	6.6	374.9
Total hardwoods	647.2	2,066.4	3,468.2	747.1	6,928.8
Total, all species	721.8	2,397.9	4,155.5	766.8	8,042.1

Table 57.--Net aboveground tree biomass of all live trees on timberland, by species and diameter group, Cecil/Harford Counties, 1986

Species	Diameter group (inches at breast height)				All classes
	1.0-4.9	5.0-10.9	11.0-20.9	21+	
In thousands of green tons					
Virginia pine	.0	350.0	440.3	.0	790.3
Other yellow pines	.0	16.6	24.3	.0	40.9
Other softwoods	17.7	5.8	98.3	.0	121.8
Total softwoods	17.7	372.4	562.9	.0	953.0
Red maple	188.6	608.4	527.1	350.3	1,674.4
Hickory	94.5	120.4	487.0	16.9	718.9
Beech	122.9	85.0	527.2	157.5	892.7
Sweetgum	74.9	568.7	575.0	.0	1,218.6
Yellow-poplar	77.5	252.7	2,042.7	993.5	3,366.4
Blackgum	432.0	168.2	86.2	.0	686.4
Ash-walnut-cherry	158.0	485.5	418.1	60.9	1,122.6
Select white oaks	66.4	310.1	685.3	504.2	1,566.0
Select red oaks	.0	30.8	743.4	680.5	1,454.7
Other white oaks	30.8	102.5	944.1	83.9	1,161.4
Other red oaks	.0	204.0	932.6	282.8	1,419.5
Black locust	294.0	629.8	313.9	.0	1,237.7
Other commercial hardwoods	278.8	205.4	310.7	47.7	842.6
Total hardwoods	1,818.3	3,771.7	8,593.4	3,178.4	17,361.8
Total, all species	1,836.1	4,144.1	9,156.3	3,178.4	18,314.8
In thousands of dry tons					
Virginia pine	.0	186.7	237.9	.0	424.6
Other yellow pines	.0	8.9	13.2	.0	22.1
Other softwoods	9.4	2.8	48.2	.0	60.4
Total softwoods	9.4	198.4	299.4	.0	507.2
Red maple	108.4	355.3	311.6	209.1	984.4
Hickory	61.5	78.1	315.2	10.9	465.7
Beech	72.1	49.6	305.0	91.0	517.7
Sweetgum	44.8	369.2	387.9	.0	801.9
Yellow-poplar	34.5	127.9	1,106.8	574.8	1,843.9
Blackgum	239.7	92.9	50.4	.0	382.9
Ash-walnut-cherry	90.4	306.9	256.1	40.4	693.7
Select white oaks	39.5	179.5	381.0	282.9	882.8
Select red oaks	.0	17.7	425.4	387.7	830.8
Other white oaks	18.7	60.8	553.4	48.8	681.7
Other red oaks	.0	117.2	533.0	151.0	801.2
Black locust	107.1	346.5	214.2	.0	667.8
Other commercial hardwoods	169.7	116.1	174.0	25.4	485.2
Total hardwoods	986.4	2,217.6	5,014.0	1,821.8	10,039.8
Total, all species	995.8	2,416.0	5,313.4	1,821.8	10,547.0

Table 58.--Net aboveground tree biomass of all live trees on timberland, by species and diameter group, Kent/Queen Anne's Counties, 1986

Species	Diameter group (inches at breast height)				All classes
	1.0-4.9	5.0-10.9	11.0-20.9	21+	
In thousands of green tons					
White/red pine	.0	.0	35.7	.0	35.7
Loblolly pine	.0	343.2	705.3	26.4	1,074.9
Virginia pine	.0	74.4	125.1	.0	199.5
Total softwoods	.0	417.6	866.1	26.4	1,310.1
Red maple	78.8	528.9	788.6	496.4	1,892.7
Hickory	33.4	94.2	190.9	.0	318.5
Beech	5.4	130.4	197.2	418.8	751.7
Sweetgum	130.0	251.0	528.9	.0	909.9
Yellow-poplar	.0	216.7	719.0	485.2	1,421.0
Blackgum	20.3	368.1	461.9	57.7	908.1
Ash-walnut-cherry	2.4	100.0	103.8	54.2	260.4
Select white oaks	25.9	365.5	997.5	360.2	1,749.0
Select red oaks	.0	65.5	312.9	135.3	513.7
Other red oaks	8.3	176.9	419.3	110.9	715.4
Black locust	.0	46.3	100.2	.0	146.5
Other commercial hardwoods	171.8	146.2	230.8	25.3	574.0
Total hardwoods	476.2	2,489.6	5,051.0	2,144.0	10,160.8
Total, all species	476.2	2,907.2	5,917.1	2,170.4	11,470.9
In thousands of dry tons					
White/red pine	.0	.0	14.5	.0	14.5
Loblolly pine	.0	148.9	290.7	10.4	450.0
Virginia pine	.0	39.8	67.8	.0	107.6
Total softwoods	.0	188.7	373.0	10.4	572.1
Red maple	45.3	309.7	466.3	296.5	1,117.8
Hickory	21.7	61.1	123.6	.0	206.4
Beech	3.2	75.7	114.1	241.8	434.9
Sweetgum	78.9	161.6	358.6	.0	599.1
Yellow-poplar	.0	109.5	393.7	277.2	780.3
Blackgum	10.9	212.7	275.7	35.1	534.4
Ash-walnut-cherry	1.2	61.8	64.6	33.3	160.9
Select white oaks	15.6	208.8	557.0	196.5	977.9
Select red oaks	.0	37.7	179.2	77.0	294.0
Other red oaks	3.2	105.4	235.8	65.4	409.8
Black locust	.0	23.4	69.4	.0	92.8
Other commercial hardwoods	92.5	85.4	112.5	13.5	304.0
Total hardwoods	272.5	1,452.8	2,950.6	1,236.3	5,912.2
Total, all species	272.5	1,641.5	3,323.6	1,246.7	6,484.2

Table 59.--Net aboveground tree biomass of all live trees on timberland, by species and diameter group, Montgomery/Prince George's Counties, 1986

Species	Diameter group (inches at breast height)				All Classes
	1.0-4.9	5.0-10.9	11.0-20.9	21+	
In thousands of green tons					
Loblolly pine	.0	146.7	119.6	.0	266.3
Virginia pine	.0	1,375.3	527.6	.0	1,902.8
Other yellow pines	.0	6.3	.0	.0	6.3
Total softwoods	.0	1,528.3	647.2	.0	2,175.5
Red maple	279.8	418.7	583.5	183.8	1,465.8
Hickory	.0	330.1	558.6	115.4	1,004.1
Beech	12.5	137.5	286.0	145.2	581.3
Sweetgum	217.9	648.3	503.8	188.5	1,558.4
Yellow-poplar	183.4	554.4	1,114.2	1,549.1	3,401.2
Blackgum	180.2	193.8	348.4	180.7	903.0
Ash-walnut-cherry	7.4	230.0	329.8	99.9	667.1
Select white oaks	36.1	444.0	699.4	855.3	2,034.7
Select red oaks	.0	58.4	211.5	621.2	891.1
Other white oaks	.0	40.1	34.5	241.7	316.4
Other red oaks	80.2	260.2	1,088.6	1,204.5	2,633.6
Black locust	80.0	49.8	35.8	.0	165.7
Other commercial hardwoods	389.7	420.0	523.1	36.2	1,369.0
Total hardwoods	1,467.1	3,785.3	6,317.5	5,421.5	16,991.3
Total, all species	1,467.1	5,313.6	6,964.6	5,421.5	19,166.8
In thousands of dry tons					
Loblolly pine	.0	63.7	49.7	.0	113.3
Virginia pine	.0	732.4	285.6	.0	1,018.0
Other yellow pines	.0	3.4	.0	.0	3.4
Total softwoods	.0	799.4	335.3	.0	1,134.7
Red maple	160.9	244.5	345.1	109.6	860.1
Hickory	.0	214.0	361.6	74.6	650.2
Beech	7.3	80.0	165.6	83.8	336.7
Sweetgum	133.6	419.5	339.8	132.0	1,025.0
Yellow-poplar	81.6	277.8	607.4	906.0	1,872.8
Blackgum	99.4	111.7	206.7	111.7	529.5
Ash-walnut-cherry	3.9	135.9	200.4	66.2	406.4
Select white oaks	21.4	255.9	392.6	473.2	1,143.1
Select red oaks	.0	33.5	121.3	352.6	507.4
Other white oaks	.0	23.9	20.1	139.8	183.8
Other red oaks	45.0	152.0	613.5	678.2	1,488.7
Black locust	27.1	23.6	24.3	.0	75.0
Other commercial hardwoods	204.3	211.5	298.3	21.5	735.6
Total hardwoods	784.5	2,183.9	3,696.6	3,149.2	9,814.2
Total, all species	784.5	2,983.4	4,031.9	3,149.2	10,949.0

Cull and Salvable Dead Trees

Table 60.--Net aboveground tree biomass of cull and salvable dead trees (5.0+ inches d.b.h.) on timberland, by forest-type group and stand-size class, Maryland, 1986

Forest-type group	Stand-size class				All classes	Sampling error (percent)
	Sawtimber	Poletimber	Sapling and seedling	Nonstocked		
	<u>Thousand acres</u>					
White/red pine	16.4	22.3	14.4	.0	53.1	29.4
Loblolly/shortleaf	193.6	63.9	39.4	.0	296.9	10.4
Oak/pine	215.6	29.9	36.4	.0	281.9	11.9
Oak/hickory	1,087.3	282.8	84.4	.0	1,454.4	3.4
Oak/gum/cypress	80.3	27.4	12.5	.0	120.2	17.1
Elm/ash/red maple	69.6	6.2	7.9	.0	83.7	22.6
Northern hardwoods	61.0	36.5	36.3	.0	133.8	15.3
Total, all groups	1,723.8	468.9	231.3	.0	2,424.0	1.1
Sampling error (percent)	2.7	8.2	11.9	.0	1.1	
	<u>Green tons per acre^a</u>					
White/red pine	7.8	2.2	1.4	.0	3.7	
Loblolly/shortleaf	3.6	3.8	.1	.0	3.1	
Oak/pine	6.3	4.0	2.2	.0	5.5	
Oak/hickory	9.7	9.7	1.5	.0	9.2	
Oak/gum/cypress	11.6	3.0	4.1	.0	8.9	
Elm/ash/red maple	15.3	4.1	2.6	.0	13.3	
Northern hardwoods	15.5	14.0	6.0	.0	12.5	
All groups	9.1	8.0	2.2	.0	8.2	
	<u>Dry tons per acre^a</u>					
White/red pine	4.6	1.2	.8	.0	2.1	
Loblolly/shortleaf	1.9	2.0	.0	.0	1.7	
Oak/pine	3.5	2.3	1.2	.0	3.1	
Oak/hickory	5.6	5.6	.8	.0	5.4	
Oak/gum/cypress	6.5	1.7	2.1	.0	5.0	
Elm/ash/red maple	8.9	2.5	1.6	.0	7.7	
Northern hardwoods	9.3	8.4	3.6	.0	7.5	
All groups	5.3	4.7	1.3	.0	4.8	

^aPer acre estimates are based on the timberland area in each forest-type group and stand-size class.

Table 61.--Net aboveground tree biomass of cull and salvable dead trees (5.0+ inches d.b.h.) on timberland, by forest-type group and stand-size class, Allegany County, Maryland, 1986

Forest-type group	Stand-size class				All classes	Sampling error (percent)
	Sawtimber	Poletimber	Sapling and seedling	Nonstocked		
	<u>Thousand acres</u>					
Loblolly/shortleaf	8.9	7.1	.0	.0	15.9	52.8
Oak/pine	3.7	2.3	9.9	.0	15.9	53.9
Oak/hickory	75.5	47.1	11.1	.0	133.8	8.8
Elm/ash/red maple	3.7	.0	.0	.0	3.7	100.0
Northern hardwoods	15.3	10.3	3.4	.0	29.0	32.7
Total, all groups	107.2	66.7	24.4	.0	198.3	1.3
Sampling error (percent)	11.3	17.3	39.4	.0	1.3	
	<u>Green tons per acre^a</u>					
Loblolly/shortleaf	2.4	3.4	.0	.0	2.8	
Oak/pine	13.8	24.4	.6	.0	7.1	
Oak/hickory	17.7	12.9	2.0	.0	14.6	
Elm/ash/red maple	44.4	.0	.0	.0	44.4	
Northern hardwoods	25.7	15.0	6.8	.0	19.7	
All groups	18.3	12.6	2.1	.0	14.4	
	<u>Dry tons per acre^a</u>					
Loblolly/shortleaf	1.4	2.0	.0	.0	1.7	
Oak/pine	7.8	14.2	.4	.0	4.1	
Oak/hickory	10.5	7.7	1.1	.0	8.7	
Elm/ash/red maple	24.2	.0	.0	.0	24.2	
Northern hardwoods	15.5	9.4	.6	.0	12.0	
All groups	10.8	7.6	1.2	.0	8.6	

^aPer acre estimates are based on the timberland area in each forest-type group and stand-size class.

Table 62.--Net aboveground tree biomass of cull and salvable dead trees (5.0- inches d.b.h.) on timberland, by forest-type group and stand-size class, Baltimore County, Maryland, 1986

Forest-type group	Stand-size class				All classes	Sampling error (percent)
	Sawtimber	Poletimber	Sapling and seedling	Nonstocked		
<u>Thousand acres</u>						
White/red pine	6.4	4.0	.0	.0	10.4	72.4
Loblolly/shortleaf	4.0	.0	.0	.0	4.0	100.5
Oak/pine	11.5	.0	.0	.0	11.5	94.5
Oak/hickory	57.1	18.8	.0	.0	76.0	18.4
Northern hardwoods	3.1	.0	.0	.0	3.1	101.7
Total, all groups	82.1	22.8	.0	.0	104.9	5.5
Sampling error (percent)	14.7	49.3	.0	.0	5.5	
<u>Green tons per acre^a</u>						
White/red pine	2.0	1.5	.0	.0	1.8	
Loblolly/shortleaf	5.2	.0	.0	.0	5.2	
Oak/pine	.3	.0	.0	.0	.3	
Oak/hickory	6.4	8.5	.0	.0	6.9	
All groups	4.9	7.3	.0	.0	5.4	
<u>Dry tons per acre^a</u>						
White/red pine	.8	.7	.0	.0	.8	
Loblolly/shortleaf	2.8	.0	.0	.0	2.8	
Oak/pine	.2	.0	.0	.0	.2	
Oak/hickory	3.5	5.3	.0	.0	4.0	
All groups	2.7	4.5	.0	.0	3.1	

^aPer acre estimates are based on the timberland area in each forest-type group and stand-size class.

Table 63.--Net aboveground tree biomass of cull and salvable dead trees (5.0+ inches d.b.h.) on timberland, by forest-type group and stand-size class, Calvert County, Maryland, 1986

Forest-type group	Stand-size class				All classes	Sampling error (percent)
	Sawtimber	Poletimber	Sapling and seedling	Nonstocked		
<u>Thousand acres</u>						
Loblolly/shortleaf	.8	.8	.0	.0	1.6	61.9
Oak/pine	11.5	.0	.0	.0	11.5	42.1
Oak/hickory	43.0	2.9	1.7	.0	47.6	14.8
Oak/gum/cypress	10.3	.0	.0	.0	10.3	49.0
Elm/ash/red maple	2.8	.0	.0	.0	2.8	100.9
Total, all groups	68.4	3.7	1.7	.0	73.9	4.1
Sampling error (percent)	6.5	81.6	96.9	.0	4.1	
<u>Green tons per acre^a</u>						
Oak/pine	6.2	.0	.0	.0	6.2	
Oak/hickory	8.0	4.9	5.1	.0	7.7	
Oak/gum/cypress	16.4	.0	.0	.0	16.4	
All groups	8.6	3.8	5.1	.0	8.2	
<u>Dry tons per acre^a</u>						
Oak/pine	3.4	.0	.0	.0	3.4	
Oak/hickory	4.3	2.8	2.8	.0	4.2	
Oak/gum/cypress	9.5	.0	.0	.0	9.5	
All groups	4.7	2.2	2.8	.0	4.5	

^aPer acre estimates are based on the timberland area in each forest-type group and stand-size class.

Table 64.--Net aboveground tree biomass of cull and salvable dead trees (5.0+ inches d.b.h.) on timberland, by forest-type group and stand-size class, Carroll County, Maryland, 1986

Forest-type group	Stand-size class				All classes	Sampling error (percent)
	Sawtimber	Poletimber	Sapling and seedling	Nonstocked		
	<u>Thousand acres</u>					
Loblolly/shortleaf	7.5	.0	.0	.0	7.5	83.4
Oak/hickory	54.9	3.7	.0	.0	58.6	15.2
Elm/ash/red maple	4.6	.0	.0	.0	4.6	101.1
Total, all groups	66.9	3.7	.0	.0	70.7	7.5
Sampling error (percent)	9.3	99.4	.0	.0	7.5	
	<u>Green tons per acre^a</u>					
Loblolly/shortleaf	1.0	.0	.0	.0	1.0	
Oak/hickory	5.9	1.9	.0	.0	5.6	
All groups	5.0	1.9	.0	.0	4.8	
	<u>Dry tons per acre^a</u>					
Loblolly/shortleaf	.6	.0	.0	.0	.6	
Oak/hickory	3.5	1.1	.0	.0	3.3	
All groups	2.9	1.1	.0	.0	2.8	

^aPer acre estimates are based on the timberland area in each forest-type group and stand-size class.

Table 65.--Net aboveground tree biomass of cull and salvable dead trees (5.0+ inches d.b.h.) on timberland, by forest-type group and stand-size class, Charles County, Maryland, 1986

Forest-type group	Stand-size class				All classes	Sampling error (percent)
	Sawtimber	Poletimber	Sapling and seedling	Nonstocked		
<u>Thousand acres</u>						
Loblolly/shortleaf	25.4	.0	9.1	.0	34.5	27.7
Oak/pine	13.9	7.6	.0	.0	21.5	39.4
Oak/hickory	84.6	12.4	11.3	.0	108.3	11.7
Oak/gum/cypress	.0	7.5	.0	.0	7.5	68.2
Elm/ash/red maple	3.7	.0	.0	.0	3.7	100.2
Total, all groups	127.5	27.5	20.4	.0	175.5	2.8
Sampling error (percent)	9.7	35.1	39.7	.0	2.8	
<u>Green tons per acre^a</u>						
Loblolly/shortleaf	4.0	.0	.0	.0	3.0	
Oak/pine	4.0	4.8	.0	.0	4.3	
Oak/hickory	8.4	3.8	.0	.0	7.0	
Oak/gum/cypress	.0	.3	.0	.0	.3	
Elm/ash/red maple	17.8	.0	.0	.0	17.8	
All groups	7.3	3.1	.0	.0	5.8	
<u>Dry tons per acre^a</u>						
Loblolly/shortleaf	2.0	.0	.0	.0	1.5	
Oak/pine	2.1	2.7	.0	.0	2.3	
Oak/hickory	4.6	2.1	.0	.0	3.8	
Oak/gum/cypress	.0	.1	.0	.0	.1	
Elm/ash/red maple	11.6	.0	.0	.0	11.6	
All groups	4.0	1.7	.0	.0	3.2	

^aPer acre estimates are based on the timberland area in each forest-type group and stand-size class.

Table 66.--Net aboveground tree biomass of cull and salvable dead trees (5.0+ inches d.b.h.) on timberland, by forest-type group and stand-size class, Dorchester County, Maryland, 1986

Forest-type group	Stand-size class				All classes	Sampling error (percent)
	Sawtimber	Poletimber	Sapling and seedling	Nonstocked		
<u>Thousand acres</u>						
Loblolly/shortleaf	32.9	7.6	3.6	.0	44.1	23.9
Oak/pine	23.7	8.4	6.9	.0	39.0	32.2
Oak/hickory	3.3	6.8	2.2	.0	12.4	49.4
Oak/gum/cypress	17.6	12.0	6.9	.0	36.6	33.4
Elm/ash/red maple	6.9	.0	2.2	.0	9.1	58.3
Total, all groups	84.5	34.9	21.8	.0	141.1	2.8
Sampling error (percent)	11.1	21.2	34.6	.0	2.8	
<u>Green tons per acre^a</u>						
Loblolly/shortleaf	3.7	.2	.0	.0	2.8	
Oak/pine	7.4	2.7	6.2	.0	6.1	
Oak/hickory	16.8	3.2	.0	.0	6.2	
Oak/gum/cypress	4.2	3.5	3.4	.0	3.8	
Elm/ash/red maple	4.9	.0	6.0	.0	5.1	
All groups	5.4	2.5	3.6	.0	4.4	
<u>Dry tons per acre^a</u>						
Loblolly/shortleaf	1.8	.1	.0	.0	1.4	
Oak/pine	4.0	1.6	3.5	.0	3.4	
Oak/hickory	10.0	1.7	.0	.0	3.6	
Oak/gum/cypress	2.4	2.1	1.4	.0	2.1	
Elm/ash/red maple	2.9	.0	3.5	.0	3.0	
All groups	2.9	1.5	1.9	.0	2.4	

^aPer acre estimates are based on the timberland area in each forest-type group and stand-size class.

Table 67---Net aboveground tree biomass of cull and salvable dead trees (5.0+ inches d.b.h.) on timberland, by forest-type group and stand-size class, Frederick County, Maryland, 1986

Forest-type group	Stand-size class				All classes	Sampling error (percent)
	Sawtimber	Poletimber	Sapling and seedling	Nonstocked		
	<u>Thousand acres</u>					
White/red pine	.0	4.5	10.5	.0	15.0	64.4
Oak/pine	.0	2.4	.0	.0	2.4	102.0
Oak/hickory	61.0	17.6	3.7	.0	82.2	15.0
Elm/ash/red maple	4.5	.0	.0	.0	4.5	100.6
Northern hardwoods	.0	3.7	9.0	.0	12.6	52.6
Total, all groups	65.5	28.2	23.2	.0	116.8	5.2
Sampling error (percent)	17.9	35.5	44.4	.0	5.2	
	<u>Green tons per acre^a</u>					
Oak/pine	.0	1.6	.0	.0	1.6	
Oak/hickory	9.6	11.8	.0	.0	9.7	
Elm/ash/red maple	31.9	.0	.0	.0	31.9	
Northern hardwoods	.0	12.0	6.3	.0	8.0	
All groups	11.2	9.1	2.4	.0	8.9	
	<u>Dry tons per acre^a</u>					
Oak/pine	.0	1.1	.0	.0	1.1	
Oak/hickory	5.4	6.6	.0	.0	5.4	
Elm/ash/red maple	19.5	.0	.0	.0	19.5	
Northern hardwoods	.0	7.5	3.8	.0	5.0	
All groups	6.3	5.2	1.5	.0	5.1	

^aPer acre estimates are based on the timberland area in each forest-type group and stand-size class.

Table 68.--Net aboveground tree biomass of cull and salvable dead trees (5.0+ inches d.b.h.) on timberland, by forest-type group and stand-size class, Garrett County, Maryland, 1986

Forest-type group	Stand-size class				All classes	Sampling error (percent)
	Sawtimber	Poletimber	Sapling and seedling	Nonstocked		
<u>Thousand acres</u>						
White/red pine	10.0	13.8	3.9	.0	27.7	34.8
Oak/pine	3.6	.0	.0	.0	3.6	99.6
Oak/hickory	130.7	53.3	10.4	.0	194.4	7.6
Northern hardwoods	41.2	17.3	15.1	.0	73.6	19.6
Total, all groups	185.5	84.4	29.4	.0	299.3	1.9
Sampling error (percent)	8.6	17.5	34.4	.0	1.9	
<u>Green tons per acre^a</u>						
White/red pine	11.6	3.1	5.0	.0	6.4	
Oak/pine	23.4	.0	.0	.0	23.4	
Oak/hickory	13.3	10.4	6.4	.0	12.1	
Northern hardwoods	12.5	17.3	4.3	.0	11.9	
All groups	13.2	10.6	5.1	.0	11.7	
<u>Dry tons per acre^a</u>						
White/red pine	7.0	1.7	2.9	.0	3.8	
Oak/pine	12.0	.0	.0	.0	12.0	
Oak/hickory	7.9	5.9	3.7	.0	7.1	
Northern hardwoods	7.5	10.2	2.6	.0	7.1	
All groups	7.8	6.1	3.0	.0	6.9	

^aPer acre estimates are based on the timberland area in each forest-type group and stand-size class.

Table 69.--Net aboveground tree biomass of cull and salvable dead trees (5.0+ inches d.b.h.) on timberland, by forest-type group and stand-size class, St. Mary's County, Maryland, 1986

Forest-type group	Stand-size class				All classes	Sampling error (percent)
	Sawtimber	Poletimber	Sapling and seedling	Nonstocked		
<u>Thousand acres</u>						
Loblolly/shortleaf	26.9	3.7	.0	.0	30.6	28.2
Oak/pine	16.5	.0	1.4	.0	17.9	39.4
Oak/hickory	63.9	3.1	1.2	.0	68.2	14.2
Oak/gum/cypress	8.9	.0	.0	.0	8.9	56.0
Elm/ash/red maple	2.9	.0	.0	.0	2.9	100.3
Total, all groups	119.1	6.8	2.5	.0	128.5	3.5
Sampling error (percent)	5.4	66.5	70.8	.0	3.5	
<u>Green tons per acre^a</u>						
Loblolly/shortleaf	2.7	33.1	.0	.0	6.4	
Oak/pine	1.2	.0	.0	.0	1.1	
Oak/hickory	9.6	4.0	2.4	.0	9.2	
Oak/gum/cypress	2.4	.0	.0	.0	2.4	
Elm/ash/red maple	11.9	.0	.0	.0	11.9	
All groups	6.4	19.9	1.4	.0	7.0	
<u>Dry tons per acre^a</u>						
Loblolly/shortleaf	1.5	18.6	.0	.0	3.6	
Oak/pine	.7	.0	.0	.0	.7	
Oak/hickory	5.5	2.5	1.7	.0	5.3	
Oak/gum/cypress	1.4	.0	.0	.0	1.4	
Elm/ash/red maple	5.9	.0	.0	.0	5.9	
All groups	3.6	11.3	.9	.0	4.0	

^aPer acre estimates are based on the timberland area in each forest-type group and stand-size class.

Table 70.--Net aboveground tree biomass of cull and salvable dead trees (5.0+ inches d.b.h.) on timberland, by forest-type group and stand-size class, Somerset County, Maryland, 1986

Forest-type group	Stand-size class				All classes	Sampling error (percent)
	Sawtimber	Poletimber	Sapling and seedling	Nonstocked		
	<u>Thousand acres</u>					
Loblolly/shortleaf	13.5	8.7	7.6	.0	29.9	31.7
Oak/pine	14.4	.0	10.3	.0	24.7	33.7
Oak/hickory	19.2	4.6	1.6	.0	25.5	30.9
Oak/gum/cypress	3.4	.0	.0	.0	3.4	100.2
Elm/ash/red maple	3.7	.0	.0	.0	3.7	100.1
Total, all groups	54.2	13.4	19.5	.0	87.2	4.2
Sampling error (percent)	18.1	57.9	38.1	.0	4.2	
	<u>Green tons per acre^a</u>					
Loblolly/shortleaf	1.2	2.4	.0	.0	1.2	
Oak/pine	4.9	.0	.0	.0	2.9	
Oak/hickory	3.6	13.3	.0	.0	5.1	
Oak/gum/cypress	3.1	.0	.0	.0	3.1	
Elm/ash/red maple	30.8	.0	.0	.0	30.8	
All groups	5.2	6.1	.0	.0	4.1	
	<u>Dry tons per acre^a</u>					
Loblolly/shortleaf	.5	1.1	.0	.0	.5	
Oak/pine	2.6	.0	.0	.0	1.5	
Oak/hickory	2.1	3.1	.0	.0	3.3	
Oak/gum/cypress	1.9	.0	.0	.0	1.9	
Elm/ash/red maple	17.3	.0	.0	.0	17.3	
All groups	2.9	3.8	.0	.0	2.4	

^aPer acre estimates are based on the timberland area in each forest-type group and stand-size class.

Table 71.--Net aboveground tree biomass of cull and salvable dead trees (5.0+ inches d.b.h.) on timberland, by forest-type group and stand-size class, Washington County, Maryland, 1986

Forest-type group	Stand-size class				All classes	Sampling error (percent)
	Sawtimber	Poletimber	Sapling and seedling	Nonstocked		
<u>Thousand acres</u>						
Oak/pine	11.3	.0	.0	.0	11.3	71.5
Oak/hickory	54.2	13.8	.0	.0	68.0	15.9
Elm/ash/red maple	6.1	.0	.0	.0	6.1	89.7
Northern hardwoods	.0	5.1	.0	.0	5.1	95.0
Total, all groups	71.5	18.9	.0	.0	90.4	6.4
Sampling error (percent)	14.0	47.3	.0	.0	6.4	
<u>Green tons per acre^a</u>						
Oak/pine	11.4	.0	.0	.0	11.4	
Oak/hickory	10.4	21.2	.0	.0	12.6	
Elm/ash/red maple	19.1	.0	.0	.0	19.1	
Northern hardwoods	.0	2.4	.0	.0	2.4	
All groups	11.3	16.1	.0	.0	12.3	
<u>Dry tons per acre^a</u>						
Oak/pine	6.3	.0	.0	.0	6.3	
Oak/hickory	6.2	12.2	.0	.0	7.4	
Elm/ash/red maple	11.1	.0	.0	.0	11.1	
Northern hardwoods	.0	1.3	.0	.0	1.3	
All groups	6.7	9.3	.0	.0	7.2	

^aPer acre estimates are based on the timberland area in each forest-type group and stand-size class.

Table 72.--Net aboveground tree biomass of cull and salvable dead trees (5.0+ inches d.b.h.) on timberland, by forest-type group and stand-size class, Wicomico County, Maryland, 1986

Forest-type group	Stand-size class				All classes	Sampling error (percent)
	Sawtimber	Poletimber	Sapling and seedling	Nonstocked		
	<u>Thousand acres</u>					
Loblolly/shortleaf	24.2	6.7	1.8	.0	32.7	29.6
Oak/pine	20.0	1.8	.0	.0	21.8	39.8
Oak/hickory	22.8	4.7	2.9	.0	30.4	29.8
Oak/gum/cypress	9.2	7.9	2.5	.0	19.6	31.0
Total, all groups	76.2	21.1	7.3	.0	104.6	2.7
Sampling error (percent)	9.6	31.6	58.5	.0	2.7	
	<u>Green tons per acre^a</u>					
Loblolly/shortleaf	1.8	.0	.8	.0	1.4	
Oak/pine	3.8	.0	.0	.0	3.4	
Oak/hickory	.8	2.4	.0	.0	1.0	
Oak/gum/cypress	14.3	4.7	.0	.0	8.6	
All groups	3.5	2.3	.2	.0	3.0	
	<u>Dry tons per acre^a</u>					
Loblolly/shortleaf	1.1	.0	.4	.0	.8	
Oak/pine	2.2	.0	.0	.0	2.0	
Oak/hickory	.5	1.4	.0	.0	.6	
Oak/gum/cypress	8.7	2.7	.0	.0	5.2	
All groups	2.1	1.3	.1	.0	1.8	

^aPer acre estimates are based on the timberland area in each forest-type group and stand-size class.

Table 73.--Net aboveground tree biomass of cull and salvable dead trees (5.0+ inches d.b.h.) on timberland, by forest-type group and stand-size class, Worcester County, Maryland, 1986

Forest-type group	Stand-size class				All classes	Sampling error (percent)
	Sawtimber	Poletimber	Sapling and seedling	Nonstocked		
	<u>Thousand acres</u>					
Loblolly/shortleaf	11.7	17.5	6.2	.0	35.4	27.4
Oak/pine	23.5	4.1	6.2	.0	33.7	29.3
Oak/hickory	45.7	17.6	4.2	.0	67.5	17.5
Oak/gum/cypress	9.9	.0	3.1	.0	13.0	47.3
Elm/ash/red maple	2.8	.0	3.8	.0	6.5	70.4
Total, all groups	93.6	39.2	23.4	.0	156.1	2.5
Sampling error (percent)	12.2	26.0	37.7	.0	2.5	
	<u>Green tons per acre^a</u>					
Loblolly/shortleaf	3.5	2.8	.0	.0	2.5	
Oak/pine	4.6	.0	4.9	.0	4.1	
Oak/hickory	7.3	4.5	.0	.0	6.1	
Oak/gum/cypress	50.1	.0	9.1	.0	40.3	
Elm/ash/red maple	38.3	.0	2.0	.0	17.7	
All groups	11.6	3.3	2.8	.0	8.2	
	<u>Dry tons per acre^a</u>					
Loblolly/shortleaf	1.9	1.3	.0	.0	1.3	
Oak/pine	2.3	.0	2.7	.0	2.4	
Oak/hickory	4.5	2.6	.0	.0	3.7	
Oak/gum/cypress	26.9	.0	5.4	.0	21.8	
Elm/ash/red maple	22.9	.0	1.2	.0	10.5	
All groups	6.7	1.8	1.6	.0	4.7	

^aPer acre estimates are based on the timberland area in each forest-type group and stand-size class.

Table 74.--Net aboveground tree biomass of cull and salvable dead trees (5.0+ inches d.b.h.) on timberland, by forest-type group and stand-size class, Anne Arundel/Howard Counties, Maryland, 1986

Forest-type group	Stand-size class				All classes	Sampling error (percent)
	Sawtimber	Poletimber	Sapling and seedling	Nonstocked		
<u>Thousand acres</u>						
Loblolly/shortleaf	14.3	.0	3.1	.0	17.5	56.9
Oak/pine	9.8	.0	1.8	.0	11.7	59.7
Oak/hickory	79.0	21.3	2.8	.0	103.1	14.5
Elm/ash/red maple	15.7	.0	.0	.0	15.7	64.7
Total, all groups	118.9	21.3	7.8	.0	147.9	5.9
Sampling error (percent)	10.9	51.6	57.1	.0	5.9	
<u>Green tons per acre^a</u>						
Loblolly/shortleaf	1.5	.0	.0	.0	1.2	
Oak/pine	30.4	.0	.0	.0	25.5	
Oak/hickory	6.5	1.2	1.6	.0	5.3	
Elm/ash/red maple	2.4	.0	.0	.0	2.4	
All groups	7.3	1.2	.6	.0	6.1	
<u>Dry tons per acre^a</u>						
Loblolly/shortleaf	.8	.0	.0	.0	.7	
Oak/pine	17.3	.0	.0	.0	14.5	
Oak/hickory	3.8	.7	1.1	.0	3.1	
Elm/ash/red maple	1.4	.0	.0	.0	1.4	
All groups	4.3	.7	.4	.0	3.6	

^aPer acre estimates are based on the timberland area in each forest-type group and stand-size class.

Table 75.--Net aboveground tree biomass of cull and salvable dead trees (5.0+ inches d.b.h.) on timberland, by forest-type group and stand-size class, Caroline/Talbot Counties, Maryland, 1986

Forest-type group	Stand-size class				All classes	Sampling error (percent)
	Sawtimber	Poletimber	Sapling and seedling	Nonstocked		
	<u>Thousand acres</u>					
Loblolly/shortleaf	7.4	.0	.0	.0	7.4	53.9
Oak/pine	12.5	3.2	.0	.0	15.7	52.1
Oak/hickory	53.7	18.4	4.9	.0	77.0	12.2
Total, all groups	73.5	21.6	4.9	.0	100.0	4.3
Sampling error (percent)	12.3	37.3	75.2	.0	4.3	
	<u>Green tons per acre^a</u>					
Loblolly/shortleaf	14.8	.0	.0	.0	14.8	
Oak/pine	1.8	.0	.0	.0	1.4	
Oak/hickory	5.0	6.2	.0	.0	5.0	
All groups	5.5	3.1	.0	.0	5.2	
	<u>Dry tons per acre^a</u>					
Loblolly/shortleaf	8.1	.0	.0	.0	8.1	
Oak/pine	1.1	.0	.0	.0	.9	
Oak/hickory	2.9	3.3	.0	.0	2.8	
All groups	3.1	2.8	.0	.0	2.9	

^aPer acre estimates are based on the timberland area in each forest-type group and stand-size class.

Table 76.--Net aboveground tree biomass of cull and salvable dead trees (5.0+ inches d.b.h.) on timberland, by forest-type group and stand-size class, Cecil/Harford Counties, Maryland, 1986

Forest-type group	Stand-size class				All classes	Sampling error (percent)
	Sawtimber	Poletimber	Sapling and seedling	Nonstocked		
<u>Thousand acres</u>						
Loblolly/shortleaf	.0	.0	7.9	.0	7.9	91.4
Oak/pine	9.1	.0	.0	.0	9.1	72.5
Oak/hickory	96.2	23.9	14.1	.0	134.3	10.3
Oak/gum/cypress	.8	.0	.0	.0	.8	51.4
Elm/ash/red maple	5.3	.0	.0	.0	5.3	101.6
Northern hardwoods	1.4	.0	4.8	.0	6.2	79.1
Total, all groups	112.8	23.9	26.8	.0	163.5	5.9
Sampling error (percent)	12.9	42.0	36.3	.0	5.9	
<u>Green tons per acre^a</u>						
Oak/pine	16.2	.0	.0	.0	16.2	
Oak/hickory	13.4	19.0	1.2	.0	13.1	
Oak/gum/cypress	22.6	.0	.0	.0	22.6	
Elm/ash/red maple	12.5	.0	.0	.0	12.5	
Northern hardwoods	25.6	.0	9.0	.0	12.8	
All groups	13.8	19.0	2.2	.0	12.7	
<u>Dry tons per acre^a</u>						
Oak/pine	9.1	.0	.0	.0	9.1	
Oak/hickory	7.8	11.1	.7	.0	7.6	
Oak/gum/cypress	13.5	.0	.0	.0	13.5	
Elm/ash/red maple	7.5	.0	.0	.0	7.5	
Northern hardwoods	15.4	.0	4.6	.0	7.6	
All groups	8.0	11.1	1.3	.0	7.4	

^aPer acre estimates are based on the timberland area in each forest-type group and stand-size class.

Table 77.--Net aboveground tree biomass of cill and salvable dead trees (5.0+ inches d.b.h.) on timberland, by forest-type group and stand-size class, Kent/Queen Anne's Counties, Maryland, 1986

Forest-type group	Stand-size class				All classes	Sampling error (percent)
	Sawtimber	Poletimber	Sapling and seedling	Nonstocked		
<u>Thousand acres</u>						
Loblolly/shortleaf	9.3	.0	.0	.0	9.3	65.3
Oak/pine	14.5	.0	.0	.0	14.5	62.2
Oak/hickory	65.4	.0	.0	.0	65.4	21.9
Oak/gum/cypress	12.1	.0	.0	.0	12.1	73.0
Elm/ash/red maple	7.0	2.1	1.9	.0	11.0	49.9
Total, all groups	108.2	2.1	1.9	.0	112.3	11.4
Sampling error (percent)	11.6	98.6	98.8	.0	11.4	
<u>Green tons per acre^a</u>						
Loblolly/shortleaf	2.5	.0	.0	.0	2.5	
Oak/pine	2.9	.0	.0	.0	2.9	
Oak/hickory	6.5	.0	.0	.0	6.5	
Oak/gum/cypress	.2	.0	.0	.0	.2	
Elm/ash/red maple	25.6	.6	.0	.0	16.4	
All groups	6.2	.6	.0	.0	6.0	
<u>Dry tons per acre^a</u>						
Loblolly/shortleaf	1.2	.0	.0	.0	1.2	
Oak/pine	1.6	.0	.0	.0	1.6	
Oak/hickory	3.8	.0	.0	.0	3.8	
Oak/gum/cypress	.1	.0	.0	.0	.1	
Elm/ash/red maple	14.6	.2	.0	.0	9.3	
All groups	3.6	.2	.0	.0	3.4	

^aPer acre estimates are based on the timberland area in each forest-type group and stand-size class.

Table 78.--Net aboveground tree biomass of cull and salvable dead trees (5.0+ inches d.b.h.) on timberland, by forest-type group and stand-size class, Montgomery/Prince George's Counties, Maryland, 1986

Forest-type group	Stand-size class				All classes	Sampling error (percent)
	Sawtimber	Poletimber	Sapling and seedling	Nonstocked		
<u>Thousand acres</u>						
Loblolly/shortleaf	6.9	11.8	.0	.0	18.7	46.6
Oak/pine	16.2	.0	.0	.0	16.2	51.2
Oak/hickory	77.1	12.6	12.2	.0	102.0	13.9
Oak/gum/cypress	8.0	.0	.0	.0	8.0	71.3
Elm/ash/red maple	.0	4.1	.0	.0	4.1	100.8
Northern hardwoods	.0	.0	4.1	.0	4.1	100.8
Total, all groups	108.2	28.5	16.3	.0	153.0	6.8
Sampling error (percent)	11.6	37.7	42.6	.0	6.8	
<u>Green tons per acre^a</u>						
Loblolly/shortleaf	12.9	2.0	.0	.0	6.0	
Oak/pine	.6	.0	.0	.0	.6	
Oak/hickory	13.6	5.7	.0	.0	11.0	
Oak/gum/cypress	1.1	.0	.0	.0	1.1	
Elm/ash/red maple	.0	5.9	.0	.0	5.9	
Northern hardwoods	.0	.0	7.5	.0	7.5	
All groups	10.6	4.2	1.9	.0	8.5	
<u>Dry tons per acre^a</u>						
Loblolly/shortleaf	7.6	1.0	.0	.0	3.4	
Oak/pine	.3	.0	.0	.0	.3	
Oak/hickory	7.8	3.3	.0	.0	6.3	
Oak/gum/cypress	.7	.0	.0	.0	.7	
Elm/ash/red maple	.0	3.6	.0	.0	3.6	
Northern hardwoods	.0	.0	3.7	.0	3.7	
All groups	6.1	2.4	.9	.0	4.9	

^aPer acre estimates are based on the timberland area in each forest-type group and stand-size class.

Table 79.--Net aboveground tree biomass of cull and salvable dead trees on timberland, by species group and diameter group, Maryland, 1986

Species group	Diameter group (inches at breast height)			All cull	Salvable dead	Total
	5.0-10.9	11.0-20.9	21+			
<u>Thousand green tons</u>						
Softwoods	195.6	109.4	19.1	324.1	549.0	873.1
Hardwoods	5,182.1	5,726.9	3,968.7	14,877.7	4,227.0	19,104.7
Total, all species	5,377.7	5,836.3	3,987.8	15,201.8	4,776.0	19,977.8
<u>Thousand dry tons</u>						
Softwoods	95.2	53.4	10.5	159.1	263.4	422.5
Hardwoods	2,941.4	3,378.1	2,367.4	8,686.9	2,448.2	11,135.1
Total, all species	3,036.6	3,431.5	2,377.9	8,846.0	2,711.6	11,557.6

Table 80.--Net aboveground tree biomass of cull and salvable dead trees on timberland, by species group and diameter group, Allegany County, Maryland, 1986

Species group	Diameter group (inches at breast height)			All cull	Salvable dead	Total
	5.0-10.9	11.0-20.9	21+			
<u>Thousand green tons</u>						
Softwoods	9.8	20.0	.0	29.8	3.8	33.6
Hardwoods	803.4	703.9	761.5	2,268.8	548.0	2,816.8
Total, all species	813.2	723.9	761.5	2,298.6	551.9	2,850.5
<u>Thousand dry tons</u>						
Softwoods	5.1	10.7	.0	15.8	2.0	17.8
Hardwoods	476.8	420.1	456.9	1,353.8	324.0	1,677.8
Total, all species	481.8	430.8	456.9	1,369.6	326.0	1,695.6

Table 81.--Net aboveground tree biomass of cull and salvable dead trees on timberland, by species group and diameter group, Baltimore County, Maryland, 1986

Species group	Diameter group (inches at breast height)			All cull	Salvable dead	Total
	5.0-10.9	11.0-20.9	21+			
<u>Thousand green tons</u>						
Softwoods	2.4	10.1	.0	12.5	44.9	57.4
Hardwoods	145.0	221.0	63.9	429.9	79.5	509.4
Total, all species	147.5	231.0	63.9	442.4	124.4	566.8
<u>Thousand dry tons</u>						
Softwoods	1.0	4.1	.0	5.1	23.4	28.5
Hardwoods	82.5	129.2	36.4	248.1	46.1	294.2
Total, all species	83.5	133.3	36.4	253.2	69.5	322.7

Table 82.--Net aboveground tree biomass of cull and salvable dead trees on timberland, by species group and diameter group, Calvert County, Maryland, 1986

Species group	Diameter group (inches at breast height)			All cull	Salvable dead	Total
	5.0-10.9	11.0-20.9	21+			
<u>Thousand green tons</u>						
Softwoods	3.5	.0	19.1	22.5	10.8	33.3
Hardwoods	91.6	119.6	67.7	278.9	295.9	574.8
Total, all species	95.1	119.6	86.8	301.5	306.6	608.1
<u>Thousand dry tons</u>						
Softwoods	1.8	.0	10.5	12.4	5.8	18.2
Hardwoods	45.9	69.6	38.7	154.2	162.7	316.9
Total, all species	47.7	69.6	49.2	166.6	168.5	335.1

Table 83.--Net aboveground tree biomass of cull and salvable dead trees on timberland, by species group and diameter group, Carroll County, Maryland, 1986

Species group	Diameter group (inches at breast height)			All cull	Salvable dead	Total
	5.0-10.9	11.0-20.9	21+			
<u>Thousand green tons</u>						
Hardwoods	91.1	14.7	.0	105.9	232.4	338.3
Total, all species	91.1	14.7	.0	105.9	232.4	338.3
<u>Thousand dry tons</u>						
Hardwoods	53.8	8.7	.0	62.5	135.8	198.3
Total, all species	53.8	8.7	.0	62.5	135.8	198.3

Table 84.--Net aboveground tree biomass of cull and salvable dead trees on timberland, by species group and diameter group, Charles County, Maryland, 1986

Species group	Diameter group (inches at breast height)			All cull	Salvable dead	Total
	5.0-10.9	11.0-20.9	21+			
<u>Thousand green tons</u>						
Softwoods	49.9	28.1	.0	78.0	43.5	121.5
Hardwoods	377.4	257.0	185.5	819.9	79.3	899.2
Total, all species	427.3	285.1	185.5	897.9	122.8	1,020.7
<u>Thousand dry tons</u>						
Softwoods	25.1	14.1	.0	39.2	21.3	60.5
Hardwoods	197.6	146.8	109.3	453.7	47.6	501.3
Total, all species	222.7	160.9	109.3	492.8	68.9	561.8

Table 85.--Net aboveground tree biomass of cull and salvable dead trees on timberland, by species group and diameter group, Dorchester County, Maryland, 1986

Species group	Diameter group (inches at breast height)			All cull	Salvable dead	Total
	5.0-10.9	11.0-20.9	21+			
<u>Thousand green tons</u>						
Softwoods	10.9	5.0	.0	15.9	109.4	125.3
Hardwoods	99.9	181.6	22.2	303.7	196.1	499.8
Total, all species	110.8	186.6	22.2	319.6	305.5	625.1
<u>Thousand dry tons</u>						
Softwoods	4.9	2.1	.0	7.0	48.7	55.7
Hardwoods	57.6	108.0	15.0	180.7	105.5	286.2
Total, all species	62.5	110.1	15.0	187.6	154.2	341.9

Table 86.--Net aboveground tree biomass of cull and salvable dead trees on timberland, by species group and diameter group, Frederick County, Maryland, 1986

Species group	Diameter group (inches at breast height)			All cull	Salvable dead	Total
	5.0-10.9	11.0-20.9	21+			
<u>Thousand green tons</u>						
Hardwoods	294.3	286.5	287.4	868.3	175.9	1,044.2
Total, all species	294.3	286.5	287.4	868.3	175.9	1,044.2
<u>Thousand dry tons</u>						
Hardwoods	164.0	162.1	168.8	494.9	101.6	596.5
Total, all species	164.0	162.1	168.8	494.9	101.6	596.5

Table 87.--Net aboveground tree biomass of cull and salvable dead trees on timberland, by species group and diameter group, Garrett County, Maryland, 1986

Species group	Diameter group (inches at breast height)			All cull	Salvable dead	Total
	5.0-10.9	11.0-20.9	21+			
<u>Thousand green tons</u>						
Softwoods	31.0	10.2	.0	41.2	22.0	63.2
Hardwoods	1,273.1	759.2	736.4	2,768.7	663.4	3,432.1
Total, all species	1,304.1	769.4	736.4	2,809.9	685.5	3,495.3
<u>Thousand dry tons</u>						
Softwoods	13.3	4.6	.0	17.8	10.8	28.6
Hardwoods	739.0	459.1	430.4	1,628.5	401.6	2,030.1
Total, all species	752.2	463.7	430.4	1,646.4	412.4	2,058.7

Table 88.--Net aboveground tree biomass of cull and salvable dead trees on timberland, by species group and diameter group, St. Mary's County, Maryland, 1986

Species group	Diameter group (inches at breast height)			All cull	Salvable dead	Total
	5.0-10.9	11.0-20.9	21+			
<u>Thousand green tons</u>						
Softwoods	3.2	.0	.0	3.2	46.6	49.8
Hardwoods	240.1	226.6	148.6	615.3	233.7	849.0
Total, all species	243.2	226.6	148.6	618.5	280.3	898.8
<u>Thousand dry tons</u>						
Softwoods	1.7	.0	.0	1.7	22.8	24.5
Hardwoods	131.7	131.6	85.7	349.0	138.0	487.0
Total, all species	133.4	131.6	85.7	350.7	160.8	511.5

Table 89.--Net aboveground tree biomass of cull and salvable dead trees on timberland, by species group and diameter group, Somerset County, Maryland, 1986

Species group	Diameter group (inches at breast height)			All cull	Salvable dead	Total
	5.0-10.9	11.0-20.9	21+			
<u>Thousand green tons</u>						
Softwoods	5.4	.0	.0	5.4	34.2	39.6
Hardwoods	63.3	179.5	38.8	281.6	40.5	322.1
Total, all species	68.7	179.5	38.8	287.0	74.7	361.7
<u>Thousand dry tons</u>						
Softwoods	2.4	.0	.0	2.4	15.4	17.8
Hardwoods	34.4	103.5	28.8	166.7	23.5	190.2
Total, all species	36.7	103.5	28.8	169.1	38.9	208.0

Table 90.--Net aboveground tree biomass of cull and salvable dead trees on timberland, by species group and diameter group, Washington County, Maryland, 1986

Species group	Diameter group (inches at breast height)			All cull	Salvable dead	Total
	5.0-10.9	11.0-20.9	21+			
<u>Thousand green tons</u>						
Softwoods	37.9	.0	.0	37.9	35.2	73.1
Hardwoods	261.0	211.7	140.8	613.5	428.3	1,041.8
Total, all species	298.9	211.7	140.8	651.4	463.5	1,114.9
<u>Thousand dry tons</u>						
Softwoods	19.3	.0	.0	19.3	18.6	37.9
Hardwoods	145.2	131.2	88.5	364.9	247.6	612.5
Total, all species	164.5	131.2	88.5	384.2	266.3	650.4

Table 91.--Net aboveground tree biomass of cull and salvable dead trees on timberland, by species group and diameter group, Wicomico County, Maryland, 1986

Species group	Diameter group (inches at breast height)			All cull	Salvable dead	Total
	5.0-10.9	11.0-20.9	21+			
<u>Thousand green tons</u>						
Softwoods	1.5	2.3	.0	3.9	.0	3.9
Hardwoods	36.9	120.2	39.9	197.0	117.3	314.3
Total, all species	38.4	122.5	39.9	200.9	117.3	318.2
<u>Thousand dry tons</u>						
Softwoods	.8	1.2	.0	2.0	.0	2.0
Hardwoods	21.9	71.5	23.9	117.2	70.0	187.2
Total, all species	22.7	72.6	23.9	119.2	70.0	189.2

Table 92.--Net aboveground tree biomass of cull and salvable dead trees on timberland, by species group and diameter group, Worcester County, Maryland, 1986

Species group	Diameter group (inches at breast height)			All cull	Salvable dead	Total
	5.0-10.9	11.0-20.9	21+			
<u>Thousand green tons</u>						
Softwoods	14.2	.0	.0	14.2	26.5	40.7
Hardwoods	308.1	668.3	208.3	1,184.8	51.8	1,236.6
Total, all species	322.3	668.3	208.3	1,199.0	78.3	1,277.3
<u>Thousand dry tons</u>						
Softwoods	6.2	.0	.0	6.2	10.7	16.9
Hardwoods	164.6	381.6	136.5	682.6	30.8	713.4
Total, all species	170.8	381.6	136.5	688.8	41.4	730.3

Table 93.--Net aboveground tree biomass of cull and salvable dead trees on timberland, by species group and diameter group, Anne Arundel/Howard Counties, Maryland, 1986

Species group	Diameter group (inches at breast height)			All cull	Salvable dead	Total
	5.0-10.9	11.0-20.9	21+			
<u>Thousand green tons</u>						
Softwoods	.0	21.2	.0	21.2	52.2	73.4
Hardwoods	371.5	96.0	133.1	600.6	227.2	827.8
Total, all species	371.5	117.2	133.1	621.7	279.5	901.2
<u>Thousand dry tons</u>						
Softwoods	.0	11.4	.0	11.4	26.0	37.4
Hardwoods	228.4	57.2	77.5	363.2	125.7	488.9
Total, all species	228.4	68.7	77.5	374.6	151.7	526.3

Table 94.--Net aboveground tree biomass of cull and salvable dead trees on timberland, by species group and diameter group, Caroline/Talbot Counties, Maryland, 1986

Species group	Diameter group (inches at breast height)			All cull	Salvable dead	Total
	5.0-10.9	11.0-20.9	21+			
<u>Thousand green tons</u>						
Softwoods	.0	3.4	.0	3.4	39.7	43.1
Hardwoods	159.7	43.9	142.0	345.6	126.5	472.1
Total, all species	159.7	47.3	142.0	349.0	166.2	515.2
<u>Thousand dry tons</u>						
Softwoods	.0	1.4	.0	1.4	17.2	18.6
Hardwoods	88.4	25.9	85.0	199.3	73.6	272.9
Total, all species	88.4	27.3	85.0	200.7	90.8	291.5

Table 95.--Net aboveground tree biomass of cull and salvable dead trees on timberland, by species group and diameter group, Cecil/Harford Counties, Maryland, 1986

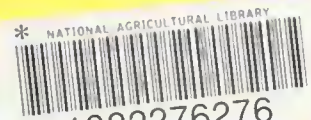
Species group	Diameter group (inches at breast height)			All cull	Salvable dead	Total
	5.0-10.9	11.0-20.9	21+			
<u>Thousand green tons</u>						
Softwoods	25.8	.0	.0	25.8	54.5	80.3
Hardwoods	256.1	969.9	299.6	1,525.7	462.4	1,988.1
Total, all species	281.9	969.9	299.6	1,551.5	516.9	2,068.4
<u>Thousand dry tons</u>						
Softwoods	13.8	.0	.0	13.8	29.0	42.8
Hardwoods	141.8	581.3	176.2	899.3	265.6	1,164.9
Total, all species	155.5	581.3	176.2	913.0	294.6	1,207.7

Table 96.--Net aboveground tree biomass of cull and salvable dead trees on timberland, by species group and diameter group, Kent/Queen Anne's Counties, Maryland, 1986

Species group	Diameter group (inches at breast height)			All cull	Salvable dead	Total
	5.0-10.9	11.0-20.9	21+			
<u>Thousand green tons</u>						
Softwoods	.0	9.2	.0	9.2	25.6	34.8
Hardwoods	152.1	230.4	124.8	507.3	128.1	635.4
Total, all species	152.1	239.6	124.8	516.5	153.7	670.2
<u>Thousand dry tons</u>						
Softwoods	.0	3.8	.0	3.8	11.8	15.6
Hardwoods	89.9	138.5	74.5	302.9	68.9	371.8
Total, all species	89.9	142.2	74.5	306.6	80.7	387.4

Table 97.--Net aboveground tree biomass of cull and salvable dead trees on timberland, by species group and diameter group, Montgomery/Prince George's Counties, Maryland, 1986

Species group	Diameter group (inches at breast height)			All cull	Salvable dead	Total
	5.0-10.9	11.0-20.9	21+			
<u>Thousand green tons</u>						
Hardwoods	157.5	436.8	568.2	1,162.5	140.4	1,302.9
Total, all species	157.5	436.8	568.2	1,162.5	140.4	1,302.9
<u>Thousand dry tons</u>						
Hardwoods	77.9	252.3	335.2	665.4	79.5	744.9
Total, all species	77.9	252.3	335.2	665.4	79.5	744.9



Frieswyk, Thomas S.; DiGiovanni, Dawn M. 1990. **Biomass statistics for Maryland--1986**. Resour. Bull. NE-113. Radnor, PA: U.S. Department of Agriculture, Forest Service, Northeastern Forest Experiment Station. 138 P.

A statistical report on the fourth forest survey of Maryland (1986). Findings are displayed in 97 tables containing estimates of forest area, tree biomass, and timber volume. Data are presented by state and county level.

Keywords: Forest survey, inventory, area, volume, biomass.



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