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Forest Statistics for West Virginia: 1989 and 2000

Douglas M. Griffith
Richard H. Widmann

Abstract

A statistical report on the fifth forest inventory of West Virginia conducted in 2000 by the Forest Inventory and Analysis Unit of the Northeastern Research Station. Statistics for forest area, numbers of trees, tree biomass, timber volume, growth, and change are displayed at the state and, where appropriate, the county level. The current inventory indicates that there are approximately 22 billion cubic feet of growing-stock volume on 12 million acres of timberland in West Virginia.

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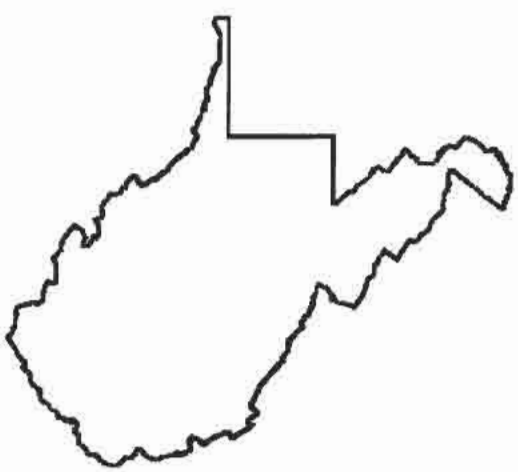

Visit the Forest Inventory and Analysis homepage at: **www.fs.fed.us/ne/fia**

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Highlights

Forest-Land Area

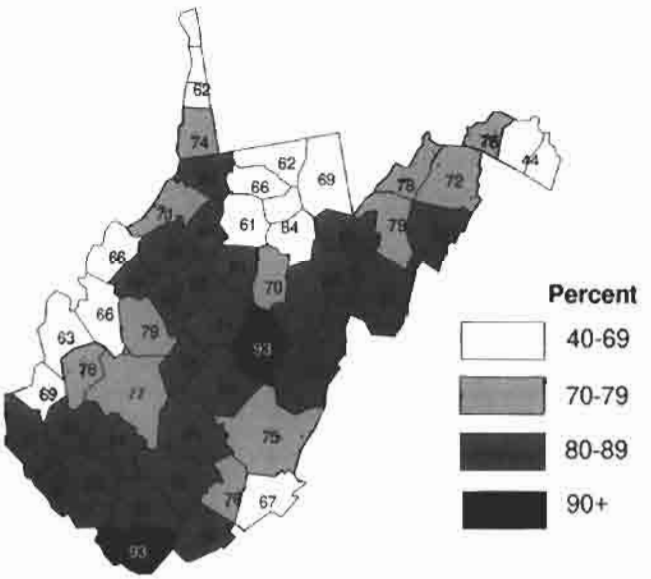
West Virginia is the third most heavily forested state in the Nation. Forests cover 12.0 million acres or 78 percent of the State. This is a decrease of 112,500 acres since the previous forest inventory in 1989. Statistically, there was no significant change in forest-land area since the two estimates are within the range of the sampling errors. Ninety-eight percent of the forest land is considered timberland and available for timber production.

(Thousands of acres at each inventory)

	1961	1975	1989**	2000
Timberland	11,389	11,483.7	11,905.1	11,797.0
Reserved and other forest land	80	148.9	209.0	209.9
Total forest land	11,469	11,632.6	12,114.0	12,006.9
Percent forested	74%	75%	78%	78%
Total land area*	15,411	15,413.8	15,415.4	15,415.4

*Estimates of the total land area have changed because of new measurement techniques and refinements in the classification of small bodies of water and streams.
**Based on reprocessing of 1989 data.

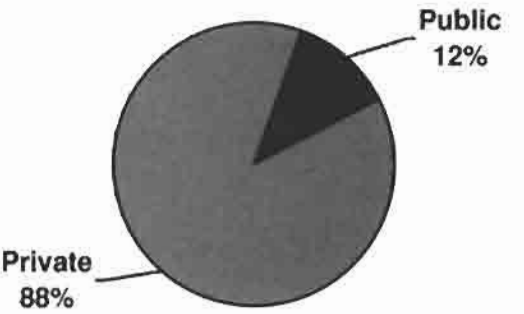
Percentage of land in forest by county



Webster and McDowell Counties are the most heavily forested, each with 93 percent of its area in forest.

Nearly 12 percent of timberland is in public ownership. These include state, county, municipal, and miscellaneous federal governments. Most forest land classified as Reserved and Other is in public ownership.

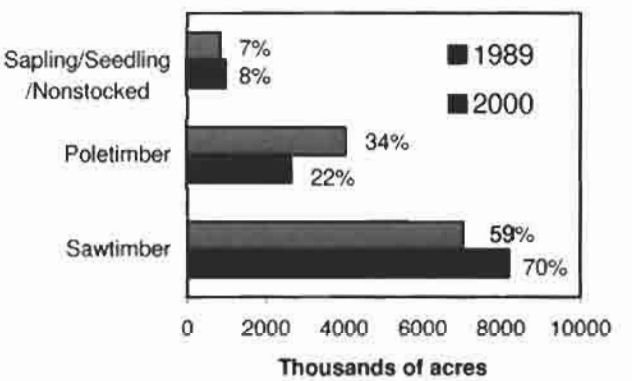
Ownership of timberland



Sawtimber-size stands increased by 16 percent since the previous inventory and account for 70 percent of the timberland. Poletimber-size stands declined by 35 percent and account for 22 percent of timberland. The area in sapling/seedling and nonstocked stands increased and represents 8 percent of the timberland. Nearly all (92 percent) of the sapling/seedling and nonstocked stands are in private ownership.

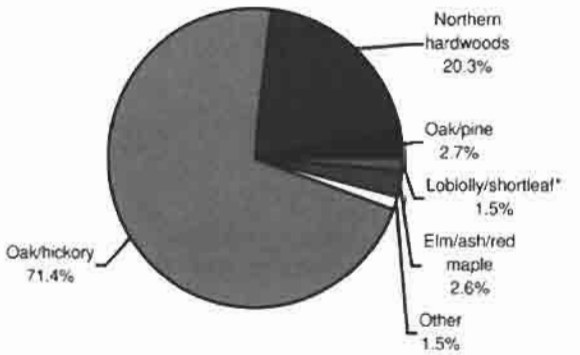
Area by Forest-Type Group

Timberland by stand-size class



Oak/hickory is the dominant forest-type group, occupying 71 percent (8.4 million acres) of the timberland, followed by the northern hardwoods group with 20.3 percent. Red and white oaks, yellow-poplar, American beech, and red maple are the most common species in the oak/hickory group.

Area of timberland by forest-type group

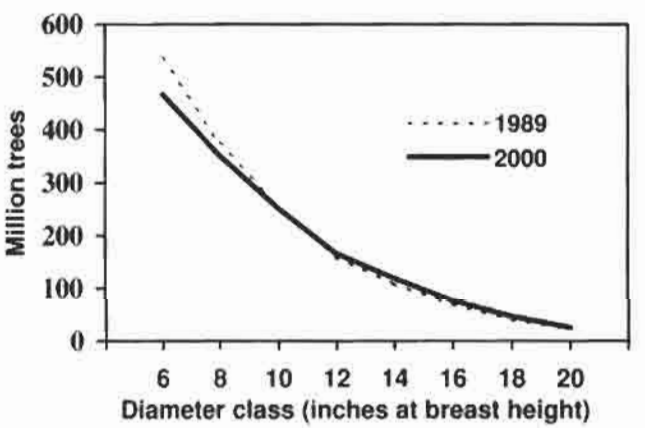


*Includes pitch pine, Virginia pine, table mountain pine, and eastern redcedar forest types

Numbers of Trees Growing on Timberland

The total number of growing-stock trees at least 5 inches in diameter at breast height on timberland has decreased by 3 percent since 1989. The number of trees in the 6-, 8-, and 10-inch diameter classes deceased while there were increases the numbers of trees in all diameter classes above 10 inches. Red maple was the most numerous species in the 6-, 8-, and 10-inch classes and yellow-poplar was the most numerous species in all diameter classes above 10 inches. The average number of trees per acre decreased from 138 to 134 between inventories.

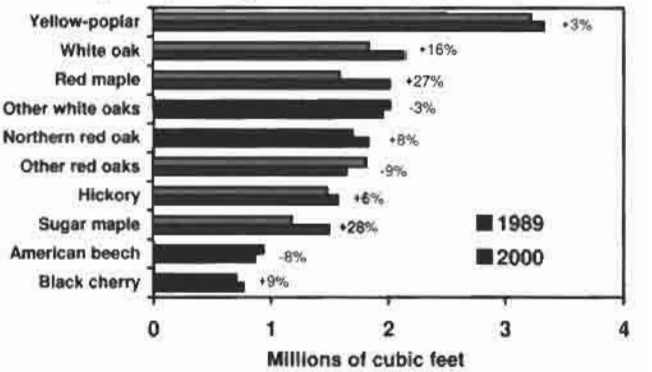
Number of growing-stock trees at each inventory



Volume

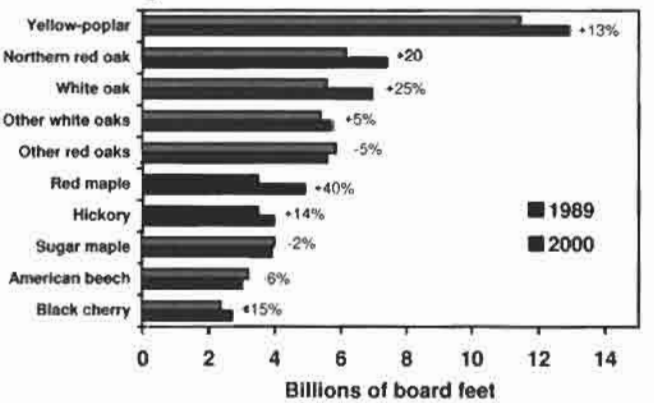
The total volume of growing-stock trees increased by 6.5 percent to 22.4 billion cubic feet. The average volume per acre increased from 1,763 cubic feet in 1989 to 1,895 cubic feet in 2000. Yellow-poplar continued to have the greatest volume, accounting for 14.8 percent of total volume. Red maple and sugar maple had the largest volume increases, each increasing by 27 percent.

Change in growing-stock volume, top 10 species



The volume in trees large enough to produce sawlogs increased by 14.4 percent to 71.4 billion board feet. Yellow-poplar has the most board-foot volume.

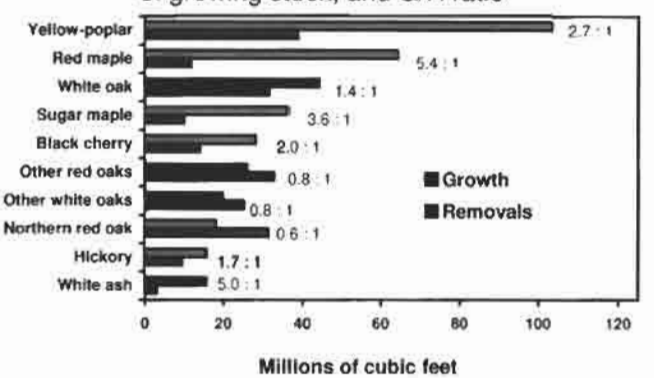
Change in volume of sawtimber-size trees



Growth and Removals

On an annual basis, net growth of growing stock on West Virginia's timberland has averaged 430.4 million cubic feet of wood and the average annual harvest plus other removals has averaged 247.9 million cubic feet. The ratio of net growth to removals has averaged about 1.7 : 1 over the past inventory period. Oak species accounted for 47.7 percent of total removals. On an annual basis, mortality has averaged 159.7 million cubic feet or 0.7 percent of the current inventory.

Average annual net growth and removals of growing stock, and G/R ratio



Introduction

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 USDA Forest Service conducts periodic inventories of all states to provide up-to-date information on the forest resources of the Nation. The initial inventory of West Virginia's forest resources was conducted in 1948-49. Succeeding inventories were carried out in 1961, 1974, and 1989. This report presents forest-resource data from the fifth inventory, which was conducted in 2000. This inventory was a cooperative effort among the Northeastern Research Station, West Virginia Division of Forestry, and the landowners of West Virginia.

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

During the 2000 inventory of West Virginia, a new system of selecting ground plots was implemented, that has been adopted by all of the FIA units in the United States as the basis for the upcoming *Annual Inventory Program*. Specifically, a hexagonal grid with each cell representing nearly 5,750 acres was placed over the United States. Within West Virginia, each hexagon was populated with one sample ground plot. If the hexagon contained one or more ground plots from the 1989 inventory, the plot located closest to the hexagon center was selected; otherwise, a new ground plot was established at random near the hexagon center.

There were 1,176 ground plots from the previous inventory that were remeasured, and 1,365 ground plots that were established for the first time. The data collected were summarized using the FINSYS computer program developed at the Northeastern Research Station. Reports analyzing the West Virginia's forest resource in greater detail are being prepared.

The forest area, numbers of trees, biomass, timber volume, growth, and change statistics in this report summarize the information collected (see Index to Tables). Other information or additional summaries may be developed.

For more information contact the **Forest Inventory and Analysis Unit, USDA Forest Service, 11 Campus Boulevard, Suite 200, Newtown Square, PA 19073 Telephone: 610-557-4075; Fax: 610-557-4200; Web address: www.fs.fed.us/ne/fia**

Reliability of the Estimates

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

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

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

Here is an example of how the sampling error is used to indicate reliability. The estimate of timberland for West Virginia is 11,797,000 acres. The associated sampling error is 0.6 percent, or 70,782 acres. This means that if there are no errors in the procedure, we are 68 percent confident that the true number of acres is between 11,867,782 and 11,726,218 acres, or 11,797,000 $\pm$ 70,782 (one standard error). Similarly, we are 95 percent confident that the true number of acres is within $\pm$ 141,564 acres (two standard errors). County estimates are less precise. In West Virginia, for example, while the sampling error for timberland at the state level is 0.6 percent, the sampling error for Greenbrier County is 2.5 percent. In general, as the size of the sample decreases, the sampling error, expressed as a percentage of the estimate, increases. A high amount of variance within a county increases the sampling error.

For many of the tables in this report, both the last column and last row are labeled "SE." These figures are the sampling errors of the column and row totals. The last sampling error given (SE) is for the table total. To

calculate the approximate sampling error (SE_{ij}) for a table cell (ij), use the following formula **(this formula is reliable only for estimating sampling errors of individual cells in AREA tables):**

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

where:

n = total number of sample plots of a population
P_{ij} = A_{ij} / A
A_{ij} = cell estimate
A = total land area of a population
ij = row(i) and column(j)

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

Comparison Between Inventories

To evaluate the condition of the forest resource, it is useful to compare the current estimates with those from the previous inventory. However, as a result of ongoing efforts to improve the efficiency of the inventory, we have made several changes in procedures and definitions since 1989. Because these changes make inappropriate the direct comparison of some of the current estimates with those published by DiGiovanni (1989), readers should use caution when comparing the data in this report with those in the 1989 report. In this report, several tables containing 1989 data are provided to allow comparisons. The changes in methods and definitions follow.

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

On all selected remeasured plot locations, a subsample of the trees that were recorded in the past was reconciled, and growth and removal estimates were calculated using these data. Condition mapping was ignored for calculations of estimates of change because this procedure was not used at the previous occasion.

FIA uses Bureau of Census estimates of total land area in a state or county as the basis for estimating land area by various classes. For the 1989 report, 1980 Bureau of Census data were used; in 2000, the 1990 data were used. Between 1980 and 1990, the Bureau of Census changed its estimating procedures. It now can identify streams more than 200 feet wide and bodies of water 4.5 acres and larger in area as inland water. Previously, the minimum width was 660 feet for streams and the minimum area was 40 acres for bodies of water. This procedure results in a decrease in total land area. For comparison of land area between inventories, 1989 estimates of land area by class were recalculated using 1990 land-area values from the Bureau of Census.

Stocking is a quantitative expression of live tree stand density that can be expressed in absolute terms, e.g. basal area per acre, volume per acre, or number of trees per acre, or in relative terms, e.g.as a percentage of a previously defined standard (Arner et al. 2000).[1] For the 1989 inventory statistics, the stocking value of a tree was calculated using the basal area of the tree as a percent of 75 square feet per acre, which is the basal area standard for full use of the site (Anonymous 1967).[2] Basal-area stocking may well describe current timber volume, but it is inadequate to describe stand composition in a multiresource inventory in that it neither adequately measures current site utilization nor describes small-diameter stands. For the statistics in this publication, stocking is calculated using relative density, which represents site occupancy based on normal yield tables. Basal area is diameter-dependent only, whereas relative density reflects species composition, stage of development, and the social position of the trees present. A relative measure of stand density is useful for interpreting findings of extensive inventories, such as those performed by FIA, where a wide variety of stands are sampled. A procedure using relative density to calculate stocking was developed and accepted as the standard to be used by all FIA units in the country.

Stand size is a classification (nonstocked, sapling/seedling, poletimber, or sawtimber) of forest land based

[1]Arner, Stanford L. et al. 2000. **National Algorithms for Determining Stocking Class, Stand Size Class, and Forest Type for Forest Inventory and Analysis Plots.** Unpublished document on file at Northeastern Research Station Forest Inventory and Analysis, 11 Campus Boulevard, Suite 200, Newtown Square, PA 19073.

[2]Anonymous. 1967. **Forest Survey Handbook.** Unpublished document on file at Northeastern Research Station Forest Inventory and Analysis, 11 Campus Boulevard, Suite 200, Newtown Square, PA 19073.

on the size of the trees that dominate an area. Forest type is a classification of forest land based on the species found in the area. Both stand size and forest type are calculated based on stocking of all live trees, and, therefore, are affected by the change in the procedure to calculate stocking. To allow comparisons, this report includes several 1989 area tables showing estimates of area of timberland by stand-size class, forest type, and forest-type group that are calculated based on relative density.

Forest type is a classification of forest land based on species that form a plurality of live-tree stocking. Prior to 1995, basal area was used to determine plurality of live-tree stocking. Currently, the forest type classification is based on stocking values calculated using relative density. There have been minor refinements with respect to how several species (e.g., red maple and beech) are allocated to local types since the previous inventory, and a programming error that affected the white pine type was corrected.

Forty-six percent of the plots that were visited during the 1989 inventory were remeasured in 2000. The estimates of average annual change are derived from this set of data. These estimates afford an opportunity to look at components of change in the overall volume from occasion to occasion or from plot to plot.

The tables showing 1989 information are from the plots that were selected at the prior inventory to produce an estimate of the area and volume. This dataset has been reprocessed using current procedures to produce a new estimate of the area and volume of the 1989 inventory.

Because the tables of estimates for average annual change only contain a portion of the plots from the 1989 survey, inconsistencies in trends may result when the recalculated estimates of 1989 are compared with the estimates of average annual change between the 1989 and 2000 tables.

Sampling errors have been included to indicate the precision of the data calculated. In addition to the traditional data gathered to estimate forest area and tree volumes, information was collected to describe forest wildlife habitat and forest-tree biomass.

Definitions of Terms

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

Accretion. The estimated net growth on growing-stock trees that were measured during the previous inventory (divided by the number of growing seasons between surveys to produce average annual accretion). It does not include the growth on trees that were cut during the period, nor those trees that died.

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

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

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

Bog/marsh/swamp. Land that has less than 10.0 percent stocking with live trees and which characteristically supports low, generally herbaceous or shrubby vegetation, and which is intermittently covered with water during all seasons; includes tidal areas that are covered with brackish water during high tides.

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

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

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

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

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

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

Cull tree. A rough tree or a rotten tree.

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

Diameter at breast height (d.b.h.). The diameter outside bark of a standing tree measured at 4-1/2 feet above the ground.

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

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

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

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

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

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

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

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

Forest-type group. A classification of forest land based on the species forming a plurality of live-tree stocking. A combination of forest types that share closely associated species or site requirements are combined into the

following major forest-type groups (the descriptions apply to forests in this state):

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

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

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

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

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

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

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

h. Northern hardwoods (also called maple/beech/birch). Forests in which sugar maple, beech, yellow birch, black cherry, or red maple (when associated with northern hardwoods), singly or in combination, make up a plurality of the stocking; common associates include white ash, eastern hemlock, basswood, aspens, and red oak.

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

Gross growth. The sum of accretion and ingrowth.

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

Growing-stock volume. Net volume, in cubic feet, of growing-stock trees 5.0 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.

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

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

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

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

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

Indian lands. (a) Lands held in trust by the United States or States for Indian tribes or individual Indians. (b) Lands owned in fee by Indian tribes whether subject to Federal or State restrictions against alienation or not.

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

Ingrowth. The estimated net volume of growing-stock trees that became 5.0 inches d.b.h. or larger during the period between inventories (divided by the number of growing seasons between surveys to produce average annual ingrowth). Also, the estimated net volume of growing-stock trees 5.0 inches d.b.h. and larger that are growing on land that was reclassified from noncommercial forest land or nonforest land to timberland.

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

Board-foot volume = (0.22D2 - 0.71D)(0.904762)

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

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

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

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

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

Miscellaneous private lands. Privately owned lands other than forest industry and farmer-owned lands.

Mortality. The estimated net volume of growing-stock trees at the previous inventory that died from natural causes before the current inventory (divided by the number of growing seasons between surveys to produce average annual mortality) .

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

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

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

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

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

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

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

Nonforest land. Land that has never supported forests, or land formerly forested but now in nonforest use such as cropland, pasture, residential areas, marshes, swamps, highways, industrial or commercial sites, or noncensus water.

Nonsalvable dead tree. A dead tree with most or all of its bark missing that is at least 5.0 inches d.b.h. and is at least 4.5 feet tall.

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

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

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

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

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

Ownership class. A classification of forest land based on ownership and nature of business or control of

decisionmaking for the land. It encompasses all types of legal entities having ownership interest in the land, whether public or private.

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

Pastured cropland. Includes rotation pasture and grazing land that would have been used for crops without additional improvement.

Pastured timberland. Land that is partially developed, maintained, or managed for pasture and grazing, but which continues to meet the definition of timberland.

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

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

Preferred tree. A high-quality tree, from a lumber viewpoint, that would be favored in cultural operations. General characteristics include grade 1 butt log (if sawtimber size), good form, good vigor, and freedom from serious damage.

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

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

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

Reserved productive forest land. Forest land sufficiently productive to qualify as timberland but withdrawn from timber utilization through statute or administrative designation; land exclusively used for Christmas tree production.

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

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

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

Salvable dead tree. A tree at least 5.0 inches d.b.h. that has died recently and still has intact bark; may be standing, fallen, windthrown, knocked down, or broken off.

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

Sapling. All live trees 1.0 through 4.9 inches d.b.h.

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

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

Sawlog portion. That part of the bole of a sawtimber tree between the stump and the sawlog top.

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 at least 10 percent stocked with live trees of which half or more of such stocking is in poletimber or sawtimber trees or both, and in which the stocking of sawtimber is at least equal to that of poletimber.

Sawtimber tree. A live tree of commercial species at least 9.0 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.

SE. See Sampling error.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Unproductive forest land. See Other forest land.

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

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

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

Veneer log or bolt. A roundwood product from which veneer is sliced or sawn that usually meets certain minimum standards of diameter, length, and defect.

Volume suitable for pulpwood. The sound volume (only rotten cull excluded) of growing-stock and rough trees.

Windbreak/hedgerow. Linear areas, less than 120 feet in width, with predominantly tree and/or shrub vegetation.

Species Groups of West Virginia

Species group	Scientific name	Common name
Balsam fir	*Abies balsamea*	balsam fir
	Abies fraseri	Fraser fir
Atlantic white-cedar	*Chamaecyparis thyoides*	Atlantic white-cedar
White spruce	*Picea glauca*	white spruce
Black spruce	*Picea mariana*	black spruce
Red spruce	*Picea rubens*	red spruce
Red pine	*Pinus resinosa*	red pine
Pitch pine	*Pinus rigida*	pitch pine
Eastern white pine	*Pinus strobus*	eastern white pine
Loblolly pine	*Pinus taeda*	loblolly pine
Virginia pine	*Pinus virginiana*	Virginia pine
Other yellow pines	*Pinus banksiana*	jack pine
	Pinus echinata	shortleaf pine
	Pinus pungens	Table mountain pine
	Pinus serotina	pond pine
	Pinus sylvestris	Scotch pine
Northern white-cedar	*Tsuga occidentalis*	northern white-cedar
Eastern hemlock	*Tsuga canadensis*	eastern hemlock
Other softwoods	*Juniperus virginiana*	eastern redcedar
	Larix sp.	larch (introduced)
	Larix laricina	larch (native)
	Picea abies	Norway spruce
	Picea pungens	blue spruce
	Pinus nigra	Austrian pine
	Pseudotsuga menziesii	Douglas fir
	Taxodium distichum	baldcypres
Red maple	*Acer rubrum*	red maple
Sugar maple	*Acer saccharum*	sugar maple
Yellow birch	*Betula alleghaniensis*	yellow birch
Paper birch	*Betula papyrifera*	paper birch
Hickory	*Caraya sp.*	hickory
	Carya cordiformis	bitternut hickory
	Carya glabra	pignut hickory
	Carya ovata	shagbark hickory
	Carya tomentosa	mockernut hickory
American beech	*Fagus grandifolia*	American beech
White ash	*Fraxinus americana*	white ash

Species Group	Scientific name	Common name
Sweetgum	*Liquidambar styraciflua*	sweetgum
Yellow-poplar	*Liriodendron tulipifera*	yellow-poplar
Blackgum	*Nyssa sylvatica*	blackgum
Aspen	*Poplus balsamifera*	balsam poplar
	Populus deltoids	eastern cottonwood
	Populus grandidentata	bigtooth aspen
	Populus heterophylla	swamp cottonwood
	Populus tremuloides	quaking aspen
Black cherry	*Prunus serotina*	black cherry
White oak	*Quercus alba*	white oak
Northern red oak	*Quercus rubra*	northern red oak
Other white oaks	*Quercus bicolor*	swamp white oak
	Quercus macrocarpa	bur oak
	Quercus sp.	oak
	Quercus prinus	chestnut oak
	Quercus stellata	post oak
Other red oaks	*Quercus coccinea*	scarlet oak
	Quercus falcata var. falcata	southern red oak
	Quercus palustris	pin oak
	Quercus phellos	willow oak
	Quercus shumardi	Shumard oak
	Quercus velutina	black oak
American basswood	*Tilia americana*	American basswood
Elm	*Ulmus americana*	American elm
	Ulmus rubra	slippery elm
	Ulmus thomasii	rock elm
Other hardwoods	*Acer negundo*	boxelder
	Acer pensylvanicum	striped maple
	Acer saccharinum	silver maple
	Acer spicatum	mountain maple
	Acer platanoides	Norway maple
	Ailanthus altissima	ailanthus
	Amelanchier sp.	serviceberry
	Betula lenta	sweet birch
	Betula nigra	river birch
	Betula populifolia	gray birch
	Carpinus caroliniana	American hornbeam
	Castanea dentate	American chestnut
	Catalpa sp.	catalpa
	Celtis occidentalis	hackberry
	Cornus florida	flowering dogwood
	Crataegus sp.	Hawthorn
	Diospyros virginiana	common persimmon
	Fraxinus sp.	ash
	Fraxinus nigra	black ash

Species Group	Scientific name	Common name
	Fraxinus pennsylvanica	green ash
	Ilex opaca	American holly
	Juglans cinerea	butternut
	Juglans nigra	black walnut
	Maclura pomifera	Osage-orange
	Magnolia sp.	magnola
	Magnolia acuminata	cucumbertree
	Magnolia virginiana	sweetbay
	Malus sp.	apple
	Morris sp.	mulberry
	Ostrya virginiana	eastern hophornbeam
	Oxydendron arboreum	sourwood
	Paulownia tomentosa	Paulownia
	Platanus deltoides	sycamore
	Prunus pensylvanica	pin cherry
	Prunus sp.	cherry
	Prunus virginiana	chokecherry
	Quercus ilicifolia	bear oak
	Robinia pseudoacacia	black locust
	Salix sp.	willow
	Salix nigra	black willow
	Sassafras albidum	sassafras
		unknown or not listed tree

Tree-Grade Classification

HARDWOOD TREE GRADES

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

[a]Whenever a 14- or 16-foot section of the butt 16-foot log is better than the best 12-foot section, the grade of the longer section will become the grade of the tree. This longer section, when used, is the basis for determining the grading factors, such as diameter and cull deduction.

[b]In basswood and ash, diameter inside bark at the top of the grading section may be 12 inches and DBH may be 15 inches.

[c]Grade 2 trees can be 10 inches diameter inside bark at the top of the grading section if otherwise meeting surface requirements for small grade 1's.

[d]A clear cutting is a portion of a face free of defects, extending the width of the face. A face is one-fourth of the surface of the grading section as divided lengthwise.

[e]Fifteen percent crook and sweep, or 40 percent total cull deduction are permitted in grade 2 if size and surface of grading section qualify as grade 1. If rot shortens the required clear cuttings to the extent of dropping the butt log to grade 2, do not drop the tree's grade to 3 unless the cull deduction for rot is greater than 40 percent.

TIE AND TIMBER GRADE

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

[a]Knot collar is the average of the vertical and horizontal diameters of the limb, or knot swelling, as measured flush with the surface of the log.

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

EASTERN WHITE PINE TREE GRADE SPECIFICATIONS

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

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

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

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

[1]Trees under 16 inches DBH require four full length good faces.

[2]Scaling diameter is estimated at the top of the 16-foot grading section.

[3] No tree will be designated below Grade 4 unless net tree scale is less than one-third of gross tree scale.

SOUTHERN PINE TREE GRADES

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

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

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

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

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

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

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

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

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

SPRUCE, FIR, CEDAR, TAMARACK, AND HEMLOCK LOGS

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

[1] ...at small end of log.
[2] ...without trim.

TREE GRADE 5 (ALL SPECIES)

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

Metric Equivalents

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

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

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Index to Tables

The following tables are divided into three sections: State, Unit, and County.

State Tables

Area

Number of Trees

Volume

Northwestern Unit Tables

County Tables

Table 1. Land area by land-use class, West Virginia, 1989 and 2000[ae]

(In thousands of acres)

Land class	2000		1989	
	Area	Percent	Area	Percent
Timberland:				
Rural	11,784.6	76.4	11,873.3	77.0
Urban	12.4	.1	31.8	.2
Total timberland	11,797.0	76.5	11,905.1	77.2
Forested land:				
Productive reserved	174.0	1.1	182.0	1.2
Unproductive reserved	0	0	3.1	0
Other forest land[c]	35.9	.2	23.9	.2
Total forest land	12,006.9	77.9	12,114.0	78.6
Nonforest land:				
Cropland	536.0	3.5	557.2	3.6
Pasture	1,008.1	6.5	1,058.5	6.9
Other	1,812.7	11.8	1,654.5	10.7
Noncensus water	51.7	.3	31.1	.2
Total nonforest land	3,408.5	22.1	3,301.3	21.4
Total land area[d]	15,415.4[b]	100.0	15,415.4[b]	100.0

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

[b] Rows and columns in all tables may not sum due to rounding.

[c] "Other forest land" formerly known as unproductive forest land.

[d] Source: 1990 United States Department of Commerce, Bureau of Census.

[e] All estimates are derived from ground plots except for 1989 productive reserved total.

Table 2. Area of timberland by forest type, forest-type group, and stand-size class, West Virginia, 1989

(In thousands of acres)

Forest type	Stand-size class				All classes	SE
	Saw-timber	Pole-timber	Sapling and seedling	Non-stocked		
Red pine	.0	3.7	12.6	.0	16.3	80.6
White pine	20.8	10.4	3.5	2.9	37.5	34.9
White pine/hemlock	15.3	.0	.0	.0	15.3	59.3
Hemlock	33.2	.0	.0	.0	33.2	37.7
Scotch pine	.0	3.6	.0	.0	3.6	100.0
White/red pine group	69.3	17.7	16.2	2.9	106.0	22.9
Red spruce	16.7	9.7	.0	.0	26.4	55.0
Red spruce/balsam fir	.0	3.9	.0	.0	3.9	100.0
Spruce/fir group	16.7	13.6	.0	.0	30.4	49.6
Shortleaf pine	4.1	6.1	.0	.0	10.2	72.1
Virginia pine	72.1	103.7	15.8	5.3	196.8	16.2
Pitch pine	12.0	4.6	.0	.0	16.6	58.5
Table mountain pine	3.9	4.6	.0	.0	8.5	70.9
Loblolly/shortleaf group	92.0	119.0	15.8	5.3	232.1	14.9
Wh. pine/no.red oak/wh. ash	9.0	8.6	.0	.0	17.5	70.7
Eastern redcedar/hardwood	2.0	.0	4.5	.0	6.5	75.7
Shortleaf pine/oak	3.3	.0	.0	.0	3.3	100.0
Virginia pine/oak	129.5	97.7	30.9	.0	258.1	13.6
Other oak/pine	18.4	36.9	.0	.0	55.3	30.4
Oak/pine group	162.2	143.1	35.4	.0	340.6	12.0
Post, black, or bear oak	15.1	8.4	.0	.0	23.6	45.1
Chestnut oak	317.6	171.6	4.9	2.6	496.7	9.7
White oak/red oak/hickory	543.4	404.6	28.8	.0	976.8	6.6
White oak	236.3	134.0	9.4	.0	379.7	11.3
Northern red oak	83.7	7.4	11.7	.0	102.9	22.8
Y-poplar/wh. oak/no.red oak	148.9	64.4	.0	.0	213.4	15.3
Black locust	30.4	60.7	43.6	.0	134.7	18.1
Sweetgum/yellow-poplar	.0	4.7	.0	.0	4.7	100.0
Black walnut	10.8	3.5	.0	.0	14.4	59.0

Table 2. continued

(In thousands of acres)

Forest type	Stand-size class				All classes	SE
	Saw-timber	Pole-timber	Sapling and seedling	Non-stocked		
Yellow-poplar	121.1	150.0	14.4	2.6	288.1	12.8
Hawthorn/reverting field	.0	3.2	26.1	.0	29.3	38.7
Scarlet oak	25.2	26.3	.0	.0	51.5	32.5
Sassafras/persimmon	5.4	23.3	28.8	.0	57.5	28.7
Red maple/central hardwood	26.9	54.2	17.1	.0	98.2	22.8
Mixed central hardwoods	3,624.5	2,027.7	338.7	.0	5,991.0	2.0
Oak/hickory group	5,189.6	3,144.1	523.5	5.1	8,862.3	1.3
Black ash/Amer. elm/red maple	57.5	65.7	20.5	.0	143.8	18.0
Red maple(upland)	1.8	.0	7.7	6.2	15.7	64.0
River birch/sycamore	43.7	13.7	.0	.0	57.4	29.8
Willow	.0	.0	4.0	.0	4.0	100.0
Sycamore/pecan/American elm	13.8	5.2	.0	.0	18.9	50.1
American elm/green ash	3.5	.0	9.9	.0	13.5	59.9
Elm/ash/red maple group	120.3	84.5	42.2	6.2	253.3	13.5
Sugar maple/beech/yellow birch	912.0	251.9	41.4	.0	1,205.3	6.2
Black cherry	42.4	62.4	36.2	.0	141.0	18.6
Red maple/northern hardwoods	84.4	44.1	23.4	.0	151.9	18.1
Pin cherry/reverting field	.0	8.6	27.5	.0	36.0	36.4
Mixed northern hardwoods	342.0	135.6	53.6	.0	531.1	9.7
Northern hardwoods group	1,380.8	502.6	182.1	.0	2,065.5	4.4
Aspen	.0	8.4	6.4	.0	14.8	59.1
Aspen/birch group	.0	8.4	6.4	.0	14.8	59.1
All forest types	7,031.0	4,033.1	821.5	19.5	11,905.1	.5
SE	1.7	2.8	7.1	48.1	.5	

Table 3. Area of timberland by forest type, forest-type group, and stand-size class, West Virginia, 2000

(In thousands of acres)

Forest type	Stand-size class				All classes	SE
	Saw-timber	Pole-timber	Sapling and seedling	Non-stocked		
White pine	49.6	5.6	3.6	3.3	62.1	27.1
White pine/hemlock	10.5	.0	.0	.0	10.5	70.7
Hemlock	66.3	3.7	.0	.0	70.0	28.4
White/red pine group	126.4	9.3	3.6	3.3	142.6	19.1
Red spruce	23.6	.0	.0	.0	23.6	48.6
Spruce/fir group	23.6	.0	.0	.0	23.6	48.6
Virginia pine	76.4	41.0	17.3	.0	134.7	18.6
Eastern redcedar	2.4	1.3	.0	.0	3.7	57.9
Pitch pine	15.8	5.3	11.7	.0	32.8	39.3
Table mountain pine	.0	6.8	.0	1.1	7.9	87.0
Loblolly/shortleaf group	94.6	54.4	29.1	1.1	179.2	16.1
Wh. pine/no.red oak/wh. ash	11.6	.0	.0	.0	11.6	71.2
Eastern redcedar/hardwood	.0	6.6	.0	.0	6.6	71.4
Shortleaf pine/oak	.0	.0	6.6	.0	6.6	100.0
Virginia pine/oak	144.2	101.5	17.0	.0	262.7	14.0
Loblolly pine/hardwood	.0	.0	4.0	.0	4.0	100.0
Other oak/pine	22.5	1.1	2.1	.0	25.7	40.8
Oak/pine group	178.2	109.1	29.7	.0	317.0	12.5
Post, black, or bear oak	43.3	3.8	5.9	.0	53.0	28.9
Chestnut oak	399.8	120.5	14.2	.0	534.5	10.0
White oak/red oak/hickory	795.4	239.5	31.3	.0	1,066.3	7.0
White oak	303.0	77.1	.0	.0	380.1	11.4
Northern red oak	192.3	7.4	6.8	.0	206.6	16.0
Y-poplar/wh. oak/no.red oak	221.5	49.1	7.6	.0	278.2	14.4
Black locust	29.8	44.5	67.3	17.8	159.4	16.9
Black walnut	1.6	9.4	.0	.0	10.9	62.8
Yellow-poplar	155.6	58.5	26.2	13.5	253.8	14.0

Table 3. continued

(In thousands of acres)

Forest type	Stand-size class				All classes	SE
	Saw-timber	Pole-timber	Sapling and seedling	Non-stocked		
Hawthorn/reverting field	.0	1.2	40.0	15.2	56.4	27.7
Scarlet oak	21.9	22.8	7.0	.0	51.7	31.2
Sassafras/persimmon	.0	20.8	20.2	1.5	42.5	35.9
Red maple/central hardwood	79.8	43.9	48.6	1.3	173.6	17.2
Mixed central hardwoods	3,649.0	1,211.4	285.6	4.9	5,150.9	2.5
Oak/hickory group	5,892.8	1,910.0	560.8	54.2	8,417.9	1.5
Black ash/Amer. elm/red maple	64.7	26.0	23.7	4.7	119.1	20.6
Red maple(lowland)	.0	.0	.0	3.1	3.1	100.0
Red maple(upland)	.0	7.3	14.3	8.9	30.5	32.8
River birch/sycamore	68.3	15.6	7.5	.0	91.4	23.6
Willow	1.6	.0	5.4	.0	7.0	80.3
Sycamore/pecan/American elm	47.4	7.4	.0	.0	54.8	33.5
American elm/green ash	6.5	1.5	.0	.0	8.0	83.3
Elm/ash/red maple group	188.6	57.8	50.9	16.6	313.9	12.6
Sugar maple/beech/yellow birch	1,004.3	207.8	55.3	.0	1,267.4	6.2
Black cherry	59.4	47.6	31.4	1.3	139.7	18.3
Red maple/northern hardwoods	129.7	62.8	17.7	.0	210.2	16.2
Pin cherry/reverting field	.0	.0	51.7	3.9	55.6	31.9
Mixed northern hardwoods	499.2	168.1	49.5	3.9	720.7	8.6
Northern hardwoods group	1,692.6	486.4	205.6	9.0	2,393.6	4.2
Aspen	.0	9.2	.0	.0	9.2	72.1
Aspen/birch group	.0	9.2	.0	.0	9.2	72.1
All forest types	8,196.9	2,636.2	879.6	84.3	11,797.0	.6
SE	1.5	4.0	7.2	22.0	.6	

Table 4. Area of timberland by forest-type group and ownership class, West Virginia, 2000

(In thousands of acres)

Forest-type group	Ownership class				All classes	SE
	National Forest	Other public	Forest industry	Other private		
White/red pine	30.7	5.9	.0	106.1	142.6	19.1
Spruce/fir	16.2	7.4	.0	.0	23.6	48.6
Loblolly/shortleaf	15.5	7.7	23.2	132.8	179.2	16.1
Oak/pine	17.4	18.0	22.2	259.4	317.0	12.5
Oak/hickory	463.0	304.2	677.8	6,972.8	8,417.9	1.5
Elm/ash/red maple	6.6	17.0	23.7	266.6	313.9	12.6
Northern hardwoods	430.8	62.1	347.9	1,552.8	2,393.6	4.2
Aspen/birch	.0	.0	.0	9.2	9.2	72.1
Total, all groups	980.2	422.2	1,094.8	9,299.8	11,797.0	.6
SE	6.4	11.9	6.7	1.2	.6	

Table 5. Area of timberland by ownership and stand-size classes, West Virginia, 2000

(In thousands of acres)

Ownership class	Stand-size class				All classes	SE
	Saw-timber	Pole-timber	Sapling and seedling	Non-stocked		
National Forest	745.7	192.2	34.3	8.0	980.2	6.4
Other federal	72.3	22.3	12.4	.0	107.0	24.0
State	121.2	27.8	15.8	.0	164.8	18.8
County and municipal	37.7	14.4	7.5	.0	59.6	34.1
Inter-governmental	17.4	.0	.0	.0	17.4	57.7
State Forest	49.0	24.4	.0	.0	73.4	28.9
Forest industry	785.4	165.5	132.0	11.9	1,094.8	6.7
Farmer	376.3	171.3	55.7	4.2	607.6	8.9
Misc. : corporate	1,490.8	469.8	169.6	4.6	2,134.8	4.2
: individual	4,195.1	1,463.4	449.0	54.5	6,162.0	2.1
: other	306.0	85.0	3.3	1.2	395.4	11.6
Total, all ownerships	8,196.9	2,636.2	879.6	84.3	11,797.0	.6
SE	1.5	4.0	7.2	22.0	.6	

Table 6. Area of timberland by cubic-foot stand-volume class and ownership class, West Virginia, 2000

(In thousands of acres)

Stand-volume class (cubic	Ownership class				All classes	SE
	National Forest	Other public	Forest industry	Other private		
0-499	64.2	39.4	146.8	863.7	1,114.1	6.2
500-999	61.6	32.8	65.1	1,216.7	1,376.2	6.0
1000-1499	124.4	67.7	171.1	1,703.2	2,066.3	4.8
1500-1999	171.1	90.1	183.0	1,853.6	2,297.8	4.5
2000-2499	149.6	48.0	193.4	1,531.2	1,922.2	5.1
2500+	409.4	144.1	335.5	2,131.3	3,020.3	3.7
All classes	980.2	422.2	1,094.8	9,299.8	11,797.0	.6
SE	6.4	11.9	6.7	1.2	.6	

Table 7. Area of timberland by board-foot stand-volume class and ownership class, West Virginia, 2000

(In thousands of acres)

Stand-volume class	Ownership class				All classes	SE
	National Forest	Other public	Forest industry	Other private		
0 - 1,999	129.9	80.3	220.6	2,119.9	2,550.7	4.0
2000 - 3,999	166.2	62.8	144.5	1,784.7	2,158.2	4.7
4000 - 5,999	86.4	74.8	217.6	1,740.0	2,118.7	4.8
6000 - 7,999	141.7	57.5	131.2	1,281.3	1,611.7	5.6
8000 - 9,999	124.2	40.4	150.7	972.2	1,287.5	6.3
10000+	331.9	106.5	230.3	1,401.6	2,070.3	4.7
Total, all classes	980.2	422.2	1,094.8	9,299.8	11,797.0	.6
SE	6.4	11.9	6.7	1.2	.6	

Table 8. Area of timberland by forest-type group and stocking class of all live trees, West Virginia, 1989

(In thousands of acres)

Forest-type group	Stocking class					All classes	SE
	Nonstocked	Poorly stocked	Moderately stocked	Fully stocked	Over-stocked		
White/red pine	2.9	12.6	18.8	60.6	11.1	106.0	22.9
Spruce/fir	.0	3.9	9.7	16.7	.0	30.4	49.6
Loblolly/shortleaf	5.3	32.0	110.8	80.9	3.1	232.1	14.9
Oak/pine	.0	29.1	163.0	141.6	6.9	340.6	12.0
Oak/hickory	5.1	512.9	2,946.7	5,002.5	399.4	8,866.8	1.3
Elm/ash/red maple	6.2	32.2	113.8	97.5	3.5	253.3	13.5
Northern hardwoods	.0	71.0	522.0	1,245.9	222.1	2,061.0	4.4
Aspen/birch	.0	10.4	4.5	.0	.0	14.8	59.1
Total, all groups	19.5	704.2	3,889.2	6,646.0	646.2	11,905.1	.5
SE	48.1	8.5	2.9	1.8	8.4	.5	

Table 9. Area of timberland by forest-type group and stocking class of all live trees, West Virginia, 2000

(In thousands of acres)

Forest-type group	Stocking class					All classes	SE
	Nonstocked	Poorly stocked	Moderately stocked	Fully stocked	Over-stocked		
White/red pine	3.3	14.6	41.5	73.2	10.0	142.6	19.1
Spruce/fir	.0	4.9	.0	17.6	1.1	23.6	48.6
Loblolly/shortleaf	1.1	29.1	55.5	90.5	3.0	179.2	16.1
Oak/pine	.0	22.2	145.3	140.0	9.4	317.0	12.5
Oak/hickory	54.2	522.2	2,844.9	4,637.8	358.9	8,417.9	1.5
Elm/ash/red maple	16.6	44.7	156.2	86.8	9.6	313.9	12.6
Northern hardwoods	9.0	204.0	734.4	1,277.3	168.9	2,393.6	4.2
Aspen/birch	.0	5.5	.0	3.7	.0	9.2	72.1
Total, all groups	84.3	847.1	3,977.8	6,326.8	561.0	11,797.0	.6
SE	22.0	7.7	3.1	2.1	9.0	.6	

Table 10. Area of timberland by forest-type group and stocking class of growing-stock trees, West Virginia, 1989

(In thousands of acres)

Forest-type group	Stocking class					All classes	SE
	Nonstocked	Poorly stocked	Moderately stocked	Fully stocked	Over-stocked		
White/red pine	2.9	16.2	15.2	60.6	11.1	106.0	22.9
Spruce/fir	.0	3.9	16.7	9.7	.0	30.4	49.6
Loblolly/shortleaf	11.8	25.5	120.9	73.9	.0	232.1	14.9
Oak/pine	.0	49.8	182.7	106.7	1.5	340.6	12.0
Oak/hickory	45.9	1,118.2	3,498.6	4,014.3	189.8	8,866.8	1.3
Elm/ash/red maple	6.2	70.2	102.4	74.5	.0	253.3	13.5
Northern hardwoods	10.4	144.5	736.0	1,054.4	115.8	2,061.0	4.4
Aspen/birch	.0	10.4	4.5	.0	.0	14.8	59.1
Total, all groups	77.2	1,438.7	4,677.0	5,394.0	318.2	11,905.1	.5
SE	25.4	5.6	2.6	2.2	12.7	.5	

Table 11. Area of timberland by forest-type group and stocking class of growing-stock trees, West Virginia, 2000

(In thousands of acres)

Forest-type group	Stocking class					All classes	SE
	Nonstocked	Poorly stocked	Moderately stocked	Fully stocked	Over-stocked		
White/red pine	6.8	19.6	44.2	62.0	10.0	142.6	19.1
Spruce/fir	.0	4.9	.0	17.6	1.1	23.6	48.6
Loblolly/shortleaf	1.1	41.4	85.6	51.1	.0	179.2	16.1
Oak/pine	2.3	49.2	167.2	97.1	1.3	317.0	12.5
Oak/hickory	106.5	992.3	3,308.2	3,817.9	192.9	8,417.9	1.5
Elm/ash/red maple	25.0	84.5	139.5	59.6	5.2	313.9	12.6
Northern hardwoods	31.6	306.0	923.8	1,063.9	68.2	2,393.6	4.2
Aspen/birch	.0	5.5	.0	3.7	.0	9.2	72.1
Total, all groups	173.4	1,503.4	4,668.5	5,172.8	278.8	11,797.0	.6
SE	15.8	5.6	2.8	2.5	12.6	.6	

Table 12. Area of timberland by forest-type group and basal-area class, West Virginia, 2000

(In thousands of acres)

Forest-type group	Basal area class (square feet per acre)							All classes	SE
	0-49	50-99	100-149	150-199	200-249	250-299	300+		
White/red pine	5.1	32.5	58.1	44.3	2.6	.0	.0	142.6	19.1
Spruce/fir	.0	4.9	5.1	12.5	1.1	.0	.0	23.6	48.6
Loblolly/shortleaf	39.6	72.3	67.0	.0	.2	.0	.0	179.2	16.1
Oak/pine	44.8	161.5	97.3	11.6	1.3	.0	.6	317.0	12.5
Oak/hickory	722.3	3,223.2	3,636.2	686.1	126.2	17.1	6.7	8,417.9	1.5
Elm/ash/red maple	62.8	165.3	63.1	22.8	.0	.0	.0	313.9	12.6
Northern hardwoods	254.7	872.4	916.0	280.1	58.7	8.5	3.3	2,393.6	4.2
Aspen/birch	5.5	.0	3.7	.0	.0	.0	.0	9.2	72.1
Total, all groups	1,134.9	4,532.0	4,846.5	1,057.3	190.1	25.6	10.6	11,797.0	.6
SE	6.3	2.8	2.7	6.9	16.6	42.6	34.1	.6	

Table 13. Number of standing dead trees (5.0+ inches d.b.h.) on timberland by species, condition class, and diameter class, West Virginia, 2000

(In thousands of trees)

Species group	Intact top				Broken top					
	5.0-10.9	11.0-14.9	15+	Total	5.0-10.9	11.0-14.9	15+	Total	Total all trees	SE
Red spruce	589	123	44	756	485	0	190	675	1,430	33.3
Red pine	67	0	0	67	109	0	0	109	175	79.7
Pitch pine	39	69	0	108	887	383	108	1,378	1,486	24.2
Eastern white pine	1,019	41	61	1,121	1,741	190	111	2,042	3,163	25.3
Loblolly pine	32	0	0	32	0	0	0	0	32	100.0
Virginia pine	3,539	426	0	3,965	5,929	729	176	6,833	10,799	12.2
Other yellow pines	304	149	0	453	464	174	0	638	1,092	26.0
Eastern hemlock	183	69	0	252	870	99	33	1,002	1,255	34.0
Other softwoods	32	0	0	32	32	0	0	32	63	69.8
Total softwoods	5,804	876	105	6,785	10,516	1,575	619	12,710	19,496	8.8
Red maple	1,547	103	0	1,650	4,116	220	257	4,594	6,244	9.1
Sugar maple	578	108	73	759	2,964	439	485	3,889	4,648	10.8
Yellow birch	576	41	78	695	4,400	632	201	5,233	5,928	15.9
Hickory	915	295	38	1,248	2,455	580	520	3,554	4,802	11.3
American beech	821	245	259	1,325	2,096	1,271	1,054	4,421	5,746	14.4
White ash	569	108	34	711	1,485	463	85	2,034	2,745	13.6
Sweetgum	34	0	0	34	38	0	0	38	72	70.8
Yellow-poplar	1,317	141	0	1,458	3,874	501	131	4,506	5,964	9.5
Blackgum	214	0	38	252	297	117	0	414	666	23.6
Aspen	0	0	0	0	479	216	0	695	695	33.1
Black cherry	1,309	178	0	1,487	1,918	114	122	2,154	3,641	17.6
White oak	2,283	254	189	2,726	6,671	392	321	7,383	10,110	7.9
Northern red oak	1,626	169	241	2,036	1,750	309	548	2,606	4,642	9.9
Other white oaks	2,687	1,069	220	3,977	6,078	842	731	7,650	11,627	10.0
Other red oaks	2,048	352	189	2,590	4,145	712	317	5,173	7,763	8.3
American basswood	175	0	37	213	552	216	117	885	1,098	21.8
Elm	2,300	338	159	2,797	1,708	223	101	2,032	4,829	11.8
Other commercial hardwoods	13,767	1,727	490	15,984	20,642	2,349	1,301	24,292	40,277	4.7
Noncommercial hardwoods	8,318	346	40	8,705	18,603	1,195	758	20,557	29,261	6.3
Total hardwoods	41,088	5,473	2,087	48,648	84,271	10,793	7,047	102,111	150,759	2.6
Total, all species	46,892	6,350	2,192	55,433	94,788	12,368	7,666	114,821	170,255	2.5
SE	4.0	9.9	13.5	3.8	2.9	6.1	7.7	2.7	2.5	

Table 14. Number of live trees (1.0+ inches d.b.h.) on timberland by species and diameter class, West Virginia, 2000

(In thousands of trees)

Species group	Diameter class (inches at breast height)						
	1.0-2.9	3.0-4.9	5.0-6.9	7.0-8.9	9.0-10.9	11.0-12.9	13.0-14.9
Atlantic white-cedar	0	0	0	0	36	0	0
White spruce	0	280	22	0	0	0	0
Red spruce	49,654	8,859	2,516	1,507	1,028	1,144	630
Red pine	844	516	514	160	75	0	0
Pitch pine	1,752	5,514	2,700	1,317	1,595	1,125	852
Eastern white pine	42,238	14,383	7,586	4,957	2,936	1,637	1,392
Loblolly pine	1,210	985	393	106	0	32	0
Virginia pine	22,182	14,296	12,637	12,823	8,786	5,343	2,805
Other yellow pines	5,077	3,369	1,233	1,149	1,124	420	117
Eastern hemlock	52,157	25,539	13,376	8,095	4,866	3,081	1,958
Other softwoods	3,055	4,137	1,596	820	556	202	68
Total softwoods	178,169	77,879	42,573	30,932	21,002	12,984	7,823
Red maple	508,832	161,270	81,652	49,822	31,226	18,564	11,158
Sugar maple	431,455	129,106	54,634	35,370	20,646	12,183	7,611
Yellow birch	22,867	11,540	8,491	5,692	4,885	2,643	1,093
Hickory	98,547	54,682	45,287	32,953	23,721	14,142	8,227
American beech	245,801	62,427	24,245	14,721	7,944	6,330	4,571
White ash	83,910	24,823	14,284	10,531	6,269	4,340	2,927
Sweetgum	0	0	38	103	0	38	0
Yellow-poplar	109,494	41,745	28,973	24,048	20,200	18,784	16,964
Blackgum	142,335	39,292	14,518	5,332	2,852	1,311	954
Aspen	3,477	0	1,077	978	769	909	579
Black cherry	92,919	20,298	12,720	10,407	7,835	5,105	4,432
White oak	25,652	24,500	28,288	29,200	24,996	18,451	13,620
Northern red oak	44,841	18,347	12,627	11,325	10,674	9,892	8,775
Other white oaks	40,573	29,950	32,690	33,401	25,752	20,930	13,564
Other red oaks	46,143	21,587	18,424	17,649	16,818	13,731	10,001
American basswood	33,296	10,961	6,713	6,173	5,644	4,328	3,129
Elm	64,895	30,248	14,382	8,317	4,279	1,862	1,608
Other commercial hardwoods	361,439	119,670	56,737	38,626	26,559	16,762	9,896
Noncommercial hardwoods	748,500	154,254	53,922	23,516	10,020	4,023	1,820
Total hardwoods	3,104,977	954,701	509,703	358,165	251,091	174,330	120,931
Total, all species	3,283,147	1,032,580	552,276	389,098	272,093	187,314	128,754
SE	2.2	2.6	1.5	1.5	1.7	1.8	2.0

Table 14. continued

(In thousands of trees)

Species group	Diameter class (inches at breast height)							
	15.0-16.9	17.0-18.9	19.0-20.9	21.0-28.9	29.0+	Total 5.0+	All classes	SE
Atlantic white-cedar	0	0	0	0	0	36	36	100.0
White spruce	0	0	0	0	0	22	302	100.0
Red spruce	624	328	243	146	0	8,166	66,679	31.4
Red pine	0	0	0	0	0	749	2,109	61.6
Pitch pine	181	144	85	32	0	8,029	15,295	24.9
Eastern white pine	1,045	627	382	540	147	21,249	77,869	14.7
Loblolly pine	36	0	0	0	0	567	2,761	47.6
Virginia pine	918	293	77	0	0	43,683	80,161	12.3
Other yellow pines	114	0	0	0	0	4,157	12,604	38.6
Eastern hemlock	1,200	528	394	647	67	34,212	111,909	14.2
Other softwoods	73	0	0	0	0	3,315	10,507	28.6
Total softwoods	4,192	1,920	1,180	1,365	214	124,186	380,235	8.1
Red maple	6,452	3,297	1,758	1,353	169	205,452	875,555	3.6
Sugar maple	4,421	2,713	1,467	2,020	409	141,475	702,036	4.2
Yellow birch	425	203	117	238	111	23,898	58,305	13.7
Hickory	5,168	2,150	892	879	0	133,419	286,648	4.5
American beech	2,934	2,476	1,115	2,459	367	67,164	375,392	5.8
White ash	1,942	1,200	591	627	79	42,790	151,523	6.9
Sweetgum	0	0	0	0	0	180	180	54.0
Yellow-poplar	11,280	6,823	4,269	5,341	307	136,989	288,228	5.9
Blackgum	665	384	447	221	0	26,685	208,311	7.6
Aspen	431	126	46	46	0	4,961	8,437	21.6
Black cherry	2,347	1,976	1,063	1,661	109	47,656	160,873	9.7
White oak	7,863	5,306	3,128	3,098	376	134,327	184,479	4.7
Northern red oak	6,633	5,467	3,500	6,105	802	75,802	138,990	5.7
Other white oaks	8,715	4,944	3,243	4,039	208	147,486	218,009	5.4
Other red oaks	7,765	4,933	1,712	3,108	353	94,495	162,225	6.7
American basswood	2,823	1,749	935	1,131	112	32,738	76,996	12.9
Elm	733	476	304	99	0	32,060	127,203	9.7
Other commercial hardwoods	6,072	3,560	1,337	1,524	297	161,372	642,481	3.7
Noncommercial hardwoods	775	341	126	173	0	94,716	997,471	3.7
Total hardwoods	77,443	48,126	26,052	34,124	3,701	1,603,665	5,663,343	1.5
Total, all species	81,635	50,046	27,232	35,489	3,915	1,727,851	6,043,578	1.5
SE	2.5	3.1	4.2	3.9	10.3	1.0	1.5	

Table 15. Number of growing-stock trees (5.0+ inches d.b.h.) on timberland by species and diameter class, West Virginia, 1989

(In thousands of trees)

Species group	Diameter class (inches at breast height)										All classes	SE
	5.0-6.9	7.0-8.9	9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9	21.0-28.9	29.0+		
Balsam fir	33	84	31	27	0	0	0	0	0	0	175	100.0
Red spruce	853	1,021	1,081	929	914	829	451	202	89	0	6,369	30.6
Red pine	229	793	446	191	12	0	18	0	0	0	1,690	73.8
Pitch pine	1,949	2,236	2,048	1,136	821	336	55	59	0	0	8,640	18.2
Eastern white pine	7,973	3,906	2,067	1,624	1,089	757	442	300	401	19	18,579	17.0
Virginia pine	16,977	17,518	10,642	4,778	1,843	495	167	46	0	0	52,465	9.1
Other yellow pines	4,380	1,522	853	544	291	135	36	0	0	0	7,761	27.5
Eastern hemlock	11,662	5,516	2,578	2,063	1,454	1,013	643	600	608	85	26,224	11.1
Other softwoods	698	385	69	0	48	0	9	0	0	0	1,209	28.1
Total softwoods	44,752	32,980	19,815	11,293	6,473	3,565	1,822	1,207	1,099	104	123,112	5.9
Red maple	79,227	40,922	22,896	12,275	7,267	4,109	1,922	911	1,057	54	170,640	3.4
Sugar maple	43,566	25,139	15,308	8,759	5,719	3,029	1,735	979	1,210	120	105,564	4.1
Yellow birch	9,890	6,864	4,024	1,497	598	295	136	97	218	31	23,650	12.6
Hickory	51,126	32,973	22,140	12,537	6,917	3,866	1,722	906	574	25	132,785	3.3
American beech	21,744	11,630	8,575	5,612	4,151	2,538	2,111	1,339	1,646	177	59,524	6.2
White ash	13,289	8,239	6,523	3,367	2,277	1,975	903	346	428	27	37,374	5.6
Sweetgum	113	132	151	81	62	13	0	0	0	0	552	67.6
Yellow-poplar	39,591	32,289	28,034	21,113	15,692	11,120	6,855	3,510	2,845	208	161,257	3.8
Blackgum	11,715	4,837	2,001	1,077	1,063	713	388	270	269	8	22,343	7.2
Aspen	1,495	871	572	489	203	137	57	25	0	0	3,850	21.3
Black cherry	13,814	9,056	7,182	4,935	3,299	2,439	1,670	813	818	47	44,075	6.9
White oak	38,280	32,956	23,216	14,869	11,176	6,885	3,694	2,029	2,136	286	135,528	4.0
Northern red oak	19,177	16,213	13,177	10,702	8,921	6,163	4,494	3,006	4,025	543	86,422	3.7
Other white oaks	44,800	40,341	28,121	18,044	12,166	7,983	4,384	2,704	3,117	368	162,029	3.9
Other red oaks	23,811	24,267	20,381	14,025	10,431	7,449	4,054	2,685	2,933	270	110,305	4.0
American basswood	8,278	6,531	4,377	4,261	3,170	2,317	1,137	692	533	40	31,336	7.1
Elm	15,183	6,820	3,869	1,579	1,137	499	411	152	206	4	29,862	6.8
Other hardwoods	56,115	41,456	25,828	12,734	7,801	4,670	2,449	1,143	853	120	153,169	3.7
Total hardwoods	491,216	341,537	236,375	147,957	102,051	66,198	38,123	21,608	22,868	2,329	1,470,263	1.0
Total, all species	535,969	374,517	256,191	159,250	108,525	69,763	39,945	22,815	23,967	2,433	1,593,375	1.0
SE	1.7	1.6	1.5	1.6	1.7	2.0	2.4	2.9	2.9	5.9	1.0	

Table 16. Number of growing-stock trees (5.0+ inches d.b.h.) on timberland by species and diameter class, West Virginia, 2000

(In thousands of trees)

Species group	Diameter class (inches at breast height)										Total all classes	SE
	5.0-6.9	7.0-8.9	9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9	21.0-28.9	29.0+		
White spruce	22	0	0	0	0	0	0	0	0	0	22	100.0
Red spruce	2,516	1,507	1,028	1,144	596	590	328	243	146	0	8,098	26.8
Red pine	514	160	75	0	0	0	0	0	0	0	749	58.5
Pitch pine	2,700	1,317	1,256	1,061	820	181	144	85	32	0	7,595	20.9
Eastern white pine	7,483	4,932	2,761	1,598	1,360	1,045	627	382	386	147	20,722	12.9
Loblolly pine	393	106	0	32	0	36	0	0	0	0	567	44.3
Virginia pine	12,007	12,671	7,771	4,917	2,698	918	230	77	0	0	41,289	9.8
Other yellow pines	1,233	1,149	953	420	117	114	0	0	0	0	3,986	40.1
Eastern hemlock	13,191	7,876	3,603	2,664	1,773	1,094	528	357	647	67	31,800	10.5
Other softwoods	1,463	705	228	104	0	36	0	0	0	0	2,537	25.8
Total softwoods	41,522	30,423	17,676	11,940	7,364	4,015	1,857	1,143	1,211	214	117,365	5.7
Red maple	77,288	47,732	30,365	16,735	10,307	6,014	3,012	1,679	1,172	136	194,441	3.1
Sugar maple	51,553	34,122	20,131	10,979	6,957	4,195	2,532	1,153	1,699	279	133,601	3.7
Yellow birch	8,081	5,572	4,799	2,265	850	384	203	117	201	37	22,510	12.1
Hickory	43,906	32,445	23,493	13,192	7,722	5,053	1,935	854	801	0	129,400	3.6
American beech	22,233	13,547	7,449	4,827	3,870	2,419	2,047	859	2,012	257	59,519	5.7
White ash	13,602	10,089	5,998	3,858	2,595	1,833	1,052	551	534	79	40,190	5.8
Sweetgum	38	103	0	38	0	0	0	0	0	0	180	54.0
Yellow-poplar	28,065	23,749	19,947	18,139	16,774	11,209	6,785	4,206	5,077	281	134,234	3.9
Blackgum	13,996	5,221	2,712	1,164	914	627	384	413	111	0	25,543	6.6
Aspen	966	978	769	870	579	431	126	46	46	0	4,811	19.8
Black cherry	11,719	9,997	7,631	4,083	3,767	2,107	1,846	1,026	1,518	109	43,804	6.8
White oak	27,184	28,734	24,768	17,698	13,455	7,745	5,094	3,049	2,892	293	130,913	4.1
Northern red oak	12,104	11,006	10,637	9,407	8,501	6,445	5,313	3,377	5,828	763	73,381	4.2
Other white oaks	31,355	32,963	25,601	19,325	12,821	8,343	4,495	2,940	3,578	171	141,591	4.4
Other red oaks	17,580	17,000	16,473	13,027	9,702	7,584	4,857	1,670	2,790	353	91,036	4.6
American basswood	6,219	5,853	5,545	4,179	3,053	2,781	1,677	898	1,053	75	31,333	7.5
Elm	13,159	8,134	4,279	1,441	1,507	635	406	276	99	0	29,937	6.7
Other hardwoods	47,118	34,477	23,965	13,227	8,449	5,144	3,063	1,149	1,193	257	138,043	3.7
Total hardwoods	426,167	321,722	234,562	154,455	111,823	72,949	44,827	24,263	30,604	3,092	1,424,466	1.1
Total, all species	467,689	352,145	252,238	166,395	119,188	76,964	46,685	25,406	31,815	3,306	1,541,831	1.1
SE	1.6	1.6	1.7	1.9	2.1	2.6	3.2	4.3	4.1	11.1	1.1	

Table 17. Number of seedlings on timberland by species and stand-size class, West Virginia, 2000

(In millions of stems)

Species	Stand-size class				All classes	SE
	Saw-timber	Pole-timber	Sapling and seedling	Non-stocked		
eastern redcedar	11	7	4	0	22	27.6
Norway spruce	0	1	0	0	1	100.0
red spruce	103	29	5	0	137	33.7
shortleaf pine	1	0	28	0	29	90.5
Table Mountain pine	0	2	0	0	2	100.0
pitch pine	6	19	1	0	26	69.7
eastern white pine	83	128	1	0	213	41.6
Virginia pine	82	19	9	0	110	33.4
eastern hemlock	83	14	3	0	99	24.2
boxelder	106	49	12	0	168	19.6
black maple	4	0	0	0	4	100.0
striped maple	784	161	22	0	967	11.8
red maple	2,568	553	437	0	3,558	6.1
sugar maple	2,035	199	132	0	2,365	6.7
mountain maple	0	2	0	0	2	100.0
buckeye	2	1	0	0	3	73.9
Ohio buckeye	1	0	0	0	1	100.0
yellow buckeye	207	21	0	0	228	15.9
ailanthus	93	43	18	0	154	21.5
serviceberry	445	234	34	0	713	12.4
pawpaw	602	51	21	0	675	13.5
yellow birch	63	11	9	0	83	27.7
sweet birch	1,000	207	188	0	1,394	13.6
river birch	7	0	9	0	15	67.1
American hornbeam	491	258	36	0	786	14.1
hickory	3	1	15	0	19	61.6
water hickory	3	1	0	0	5	57.9
bitternut hickory	125	31	18	0	175	12.8
pignut hickory	227	96	29	0	352	10.4
shellbark hickory	3	0	0	0	3	100.0
shagbark hickory	100	14	12	0	127	33.2
mockernut hickory	263	118	26	0	408	9.6
American chestnut	71	33	0	0	103	20.6
catalpa	0	2	0	0	2	100.0
hackberry	36	10	2	0	47	37.6
eastern redbud	457	112	44	0	614	11.9
yellowwood	1	0	0	0	1	100.0
flowering dogwood	659	173	62	0	894	9.3
hawthorn	180	111	225	0	516	24.8
common persimmon	7	10	2	0	19	42.5
American beech	2,026	343	154	0	2,523	8.1
ash	11	3	0	0	14	75.0
white ash	1,238	343	158	0	1,739	6.8

Table 17. continued

(In millions of stems)

Species	Stand-size class				All classes	SE
	Saw-timber	Pole-timber	Sapling and seedling	Non-stocked		
green ash	40	42	0	0	81	25.4
Kentucky coffeetree	2	0	0	0	2	100.0
American holly	46	5	13	0	64	48.3
black walnut	9	1	3	0	13	33.6
sweetgum	6	12	0	0	18	71.1
yellow-poplar	865	162	134	0	1,161	15.4
Osage-orange	0	0	17	0	17	100.0
magnolia	40	5	3	0	47	33.0
cucumbertree	148	51	9	0	209	16.4
mountain magnolia	41	13	0	0	53	31.4
apple	9	8	26	0	43	38.6
red mulberry	1	0	0	0	1	100.0
blackgum	672	191	60	0	924	8.8
eastern hophornbeam	750	112	51	0	913	11.5
sourwood	509	189	74	0	771	13.8
Paulownia	8	0	3	0	11	54.6
sycamore	30	5	4	0	39	41.3
bigtooth aspen	7	30	1	0	38	61.9
cherry, plum	10	0	0	0	10	73.3
pin cherry	13	3	31	0	47	36.3
black cherry	995	308	175	0	1,478	9.7
chokecherry	2	0	3	0	5	74.1
white oak	361	217	24	0	603	13.7
scarlet oak	98	55	15	0	168	17.3
bear oak, scrub oak	21	10	115	0	146	48.0
chestnut oak	559	194	85	0	839	17.7
northern red oak	581	280	117	0	978	9.8
post oak	15	30	3	0	48	47.6
black oak	278	101	24	0	404	11.0
black locust	104	77	149	0	330	16.9
willow	22	0	1	0	23	95.7
black willow	10	0	10	0	20	61.7
sassafras	1,366	392	359	0	2,117	8.3
American basswood	190	13	4	0	206	26.1
white basswood	8	0	0	0	8	100.0
elm	3	0	0	0	3	70.8
winged elm	4	0	2	0	5	74.5
American elm	138	30	17	0	185	27.1
slippery elm	165	121	24	0	310	16.9
unknown tree	59	6	35	0	99	23.9
Total seedlings	22,378	6,075	3,307	0	31,760	2.6
SE	3.4	7.5	10.8	.0	2.6	

Table 18. Number of saplings on timberland by species and stand-size class, West Virginia, 2000

(In millions of stems)

Species	Stand-size class				All classes	SE
	Saw-timber	Pole-timber	Sapling and seedling	Non-stocked		
fir	0	2	0	0	2	100.0
eastern redcedar	2	2	0	0	5	36.6
Norway spruce	0	0	0	0	0	100.0
white spruce	0	0	0	0	0	100.0
red spruce	44	12	3	0	59	34.6
shortleaf pine	2	0	2	0	5	52.3
Table Mountain pine	0	3	0	0	3	89.1
red pine	0	1	1	0	1	72.7
pitch pine	5	0	2	0	7	36.2
eastern white pine	33	22	2	0	57	18.0
Scotch pine	0	0	1	0	1	100.0
loblolly pine	1	0	2	0	2	54.3
Virginia pine	12	13	12	0	36	20.3
eastern hemlock	67	11	0	0	78	17.8
boxelder	11	3	2	0	16	24.2
black maple	0	0	0	0	1	70.7
striped maple	61	13	7	0	81	13.6
red maple	436	157	77	0	670	4.4
silver maple	0	0	0	0	0	100.0
sugar maple	431	97	33	0	561	4.8
mountain maple	2	0	0	0	3	52.2
buckeye	0	0	0	0	0	100.0
yellow buckeye	30	3	2	0	35	19.1
ailanthus	10	11	3	0	23	29.8
serviceberry	43	29	4	0	77	12.7
pawpaw	41	8	1	0	50	20.5
yellow birch	19	13	1	0	34	19.0
sweet birch	49	28	15	0	93	12.0
river birch	0	0	1	0	2	70.0
American hornbeam	62	15	9	0	85	13.0
hickory	0	0	0	0	0	100.0
bitternut hickory	4	1	4	0	10	35.5
pignut hickory	31	23	3	0	57	11.5
shagbark hickory	11	6	1	0	18	18.0
mockernut hickory	40	25	4	0	68	10.5
American chestnut	7	4	1	0	12	28.5
catalpa	0	1	0	0	1	100.0
hackberry	9	3	1	0	13	28.7
eastern redbud	66	28	7	0	101	10.7
flowering dogwood	121	37	19	0	178	6.7
hawthorn	28	16	26	0	71	16.4
common persimmon	1	0	1	0	2	50.7
American beech	243	53	12	0	308	6.4

Table 18. continued

(In millions of stems)

Species	Stand-size class				All classes	SE
	Saw-timber	Pole-timber	Sapling and seedling	Non-stocked		
ash	1	1	0	0	2	60.4
white ash	57	33	19	0	109	9.0
green ash	1	0	0	0	1	100.0
American holly	2	0	0	0	3	42.0
butternut	1	1	0	0	1	73.7
black walnut	2	4	0	0	7	29.5
yellow-poplar	85	35	31	0	151	10.3
Osage-orange	1	0	0	0	1	100.0
magnolia	9	3	2	0	13	35.0
cucumbertree	10	3	3	0	16	21.5
mountain magnolia	9	3	0	0	12	28.0
apple	5	5	3	0	12	26.8
mulberry	0	0	0	0	0	100.0
white mulberry	0	0	0	0	0	100.0
blackgum	115	59	8	0	182	8.4
eastern hophornbeam	51	17	4	0	71	11.9
sourwood	91	36	9	0	136	8.5
sycamore	10	4	3	0	17	23.1
bigtooth aspen	2	1	0	0	3	46.7
quaking aspen	0	0	1	0	1	100.0
cherry, plum	1	0	0	0	1	71.0
pin cherry	3	2	11	0	16	52.2
black cherry	72	18	23	0	113	13.1
white oak	26	18	5	0	50	11.0
swamp white oak	0	0	0	0	0	100.0
scarlet oak	9	10	8	0	27	20.5
bear oak, scrub oak	2	0	1	0	3	69.1
blackjack oak	0	1	0	0	1	100.0
swamp chestnut oak	0	0	0	0	0	100.0
chestnut oak	35	23	12	0	70	12.3
northern red oak	37	15	10	0	63	11.1
post oak	1	1	0	0	2	50.4
black oak	23	9	6	0	39	15.5
black locust	38	17	41	0	96	11.6
willow	0	0	0	0	0	100.0
black willow	1	0	0	0	1	100.0
sassafras	60	22	38	0	120	11.0
American basswood	35	5	4	0	44	20.5
white basswood	0	0	0	0	0	100.0
American elm	29	17	4	0	50	13.7
slippery elm	23	12	10	0	45	21.0
unknown tree	3	1	5	0	10	38.0
Total saplings	2,774	1,018	523	0	4,316	1.9
SE	2.6	5.3	9.9	100.0	1.9	

Table 19. Number of shrubs on timberland by species and stand-size class, West Virginia, 2000

(In millions of stems)

Species	Stand-size class				All classes	SE
	Saw-timber	Pole-timber	Sapling and seedling	Non-stocked		
leatherleaf	0	0	1	0	1	100.0
alder	1	27	22	23	73	57.1
Hercules club	56	1	12	0	69	38.0
chokeberry	0	25	0	0	25	100.0
azalea	307	3	0	0	311	78.3
barberry	188	30	0	0	218	48.9
buttonbush	8	0	0	0	8	100.0
New Jersey tea	11	0	0	0	11	100.0
sweet pepperbush	21	31	0	0	53	64.6
alternate-leaved dogwood	45	24	0	0	69	32.1
silky dogwood	3	1	0	4	9	62.4
red-osier dogwood	0	2	6	0	8	81.9
American hazelnut	117	45	0	0	163	31.1
autumn olive	57	229	36	7	331	25.9
huckleberry	1,489	1,469	365	87	3,411	17.9
witch-hazel	1,067	332	54	0	1,453	8.7
large-leaf holly	53	0	11	0	64	66.4
winterberry holly	31	92	0	0	123	64.6
fetterbush	3	0	0	0	3	100.0
mountain laurel	1,149	936	204	46	2,335	11.7
common spicebush	2,923	578	193	0	3,694	7.7
bush honeysuckle	465	338	73	5	882	20.8
male-berry, staggerbush	12	0	0	0	12	100.0
mountain-holly	3	4	1	0	9	57.7
ninebark	7	0	0	0	7	100.0
buckthorn	0	2	1	0	3	71.2

Table 19. continued

(In millions of stems)

Species	Stand-size class				All classes	SE
	Saw-timber	Pole-timber	Sapling and seedling	Non-stocked		
rhododendron (evergreen)	669	227	14	0	910	18.5
azalea (deciduous)	306	10	7	0	324	25.6
winged sumac	17	18	48	4	86	34.3
smooth sumac	34	16	158	4	212	46.5
staghorn sumac	55	2	21	0	78	27.7
poison sumac	0	5	0	0	5	100.0
currant, gooseberry	81	0	0	0	81	47.6
rose	2,918	1,364	959	84	5,326	8.3
brier, bramble, dewberry	6,561	1,624	3,491	220	11,895	7.1
American elderberry	23	13	8	0	44	40.5
red-berried elderberry	5	0	0	0	5	100.0
Other shrub willows	1	0	0	0	1	100.0
spirea	201	0	0	0	201	76.3
American bladdernut	61	0	0	0	61	75.2
blueberry	3,322	2,656	1,208	79	7,265	11.4
viburnum	110	80	2	0	192	32.8
maple-leaved viburnum	900	239	75	0	1,213	15.4
hobblebush viburnum	14	5	0	0	19	77.3
wild raisin, withe-rod	10	5	0	0	15	50.4
arrowwood	17	33	0	5	55	55.8
nannyberry	2	0	0	0	2	100.0
blackhaw	189	133	14	1	337	20.4
unknown deciduous shrub	1,243	407	297	2	1,949	11.1
unknown evergreen shrub	53	0	0	0	53	97.1
Total shrubs	24,808	11,009	7,285	574	43,676	3.9
SE	4.6	9.3	13.0	36.9	3.9	

Table 20. Net volume of live trees on timberland by species and diameter class, West Virginia, 1989

(In millions of cubic feet)

Species group	Diameter class (inches at breast height)										All classes	SE
	5.0-6.9	7.0-8.9	9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9	21.0-28.9	29.0+		
Balsam fir	.1	.6	.3	.6	.0	.0	.0	.0	.0	.0	1.7	100.0
Red spruce	2.6	7.4	15.2	19.7	26.7	33.2	22.8	12.8	8.0	.0	148.4	29.3
Red pine	.6	5.4	5.2	3.6	.3	.0	.7	.0	.0	.0	15.8	70.6
Pitch pine	4.6	12.9	21.7	18.9	18.7	9.7	1.9	2.8	.0	.0	91.3	16.1
Eastern white pine	20.9	23.7	24.0	31.4	31.1	27.6	21.7	16.7	34.7	2.9	234.7	15.4
Virginia pine	42.0	105.7	115.1	80.2	43.3	14.7	6.3	2.1	.0	.0	409.3	8.3
Other yellow pines	10.4	8.7	9.1	8.8	6.4	3.9	1.3	.0	.0	.0	48.6	21.5
Eastern hemlock	31.1	33.1	29.4	36.2	34.6	33.4	27.1	33.5	45.2	12.0	315.9	10.6
Other softwoods	1.5	1.6	.9	.1	1.0	.0	.3	.0	.0	.0	5.5	27.8
Total softwoods	113.8	199.3	220.9	199.5	162.1	122.7	82.2	68.0	87.9	14.8	1,271.2	6.0
Red maple	213.1	275.1	281.2	248.8	206.3	162.2	95.4	56.5	91.6	11.8	1,641.9	3.6
Sugar maple	122.8	168.9	190.1	174.5	160.0	114.7	84.9	63.0	109.3	23.9	1,212.0	4.6
Yellow birch	29.0	46.9	49.6	28.1	17.2	11.0	6.5	5.5	22.0	5.9	221.7	12.9
Hickory	139.0	235.5	296.0	266.4	202.7	156.4	89.9	58.6	49.5	3.1	1,497.1	3.3
American beech	57.0	76.6	107.9	123.3	128.0	108.4	114.5	99.0	175.5	45.7	1,035.9	5.5
White ash	38.2	57.0	81.6	68.1	66.5	74.5	43.8	21.6	36.3	4.4	492.0	5.4
Sweetgum	.4	.9	1.7	1.6	1.5	.5	.0	.0	.0	.0	6.6	56.8
Yellow-poplar	114.3	255.8	407.2	477.0	511.2	499.2	396.1	250.7	280.3	35.0	3,226.9	3.5
Blackgum	29.9	29.9	23.5	19.2	28.2	24.8	17.3	14.5	22.3	1.3	210.9	6.1
Aspen	4.5	6.1	8.0	9.6	5.9	5.4	2.8	1.5	.0	.0	43.8	19.3
Black cherry	37.6	63.4	89.1	103.9	97.1	101.3	89.7	52.7	77.6	8.2	720.6	7.2
White oak	103.6	207.2	258.7	271.7	282.8	239.9	163.8	113.1	167.9	45.4	1,854.2	3.5
Northern red oak	51.8	103.1	154.1	193.2	227.3	213.5	198.5	166.6	317.0	85.8	1,710.9	3.7
Other white oaks	116.7	240.8	299.2	301.4	284.9	244.1	172.0	138.2	221.8	44.4	2,063.3	3.6
Other red oaks	64.4	154.2	236.4	251.1	268.3	257.1	179.6	147.0	227.3	40.1	1,825.5	3.5
American basswood	23.6	50.9	59.9	97.6	103.8	99.5	63.4	47.1	50.3	8.1	604.3	6.9
Elm	39.1	42.6	42.7	29.0	29.8	18.2	18.6	8.6	13.7	1.4	243.7	7.3
Other commercial hardwoods	163.7	274.7	302.2	246.8	212.8	168.3	114.9	68.1	71.9	19.3	1,642.8	3.4
Noncommercial hardwoods	129.8	113.3	62.1	36.7	24.2	13.1	5.3	2.4	6.3	.3	393.5	5.1
Total hardwoods	1,478.7	2,402.9	2,951.1	2,947.9	2,858.6	2,511.9	1,857.1	1,314.8	1,940.5	384.1	20,647.6	1.0
Total, all species	1,592.5	2,602.3	3,172.0	3,147.4	3,020.7	2,634.6	1,939.2	1,382.8	2,028.5	398.9	21,918.8	.9
SE	1.6	1.6	1.5	1.5	1.7	1.9	2.4	2.9	2.9	5.5	.9	

Table 21. Net volume of live trees on timberland by species and diameter class, West Virginia, 2000

(In millions of cubic feet)

Species group	Diameter class (inches at breast height)										All classes	SE
	5.0-6.9	7.0-8.9	9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9	21.0-28.9	29.0+		
Atlantic white-cedar	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.2	100.0
White spruce	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	100.0
Red spruce	6.8	11.1	14.1	23.0	17.3	21.6	14.3	14.7	11.7	.0	134.6	26.9
Red pine	1.4	1.2	.9	.0	.0	.0	.0	.0	.0	.0	3.5	61.8
Pitch pine	6.5	7.3	15.5	17.4	17.8	5.3	4.6	3.2	1.8	.0	79.4	15.7
Eastern white pine	19.7	29.7	33.6	29.2	36.9	37.0	27.4	22.0	35.4	17.9	288.8	15.4
Loblolly pine	.9	.6	.0	.4	.0	.9	.0	.0	.0	.0	2.8	43.8
Virginia pine	32.4	75.4	87.8	82.4	60.0	25.1	11.0	3.7	.0	.0	377.7	9.4
Other yellow pines	2.8	6.5	10.9	6.5	2.4	2.6	.0	.0	.0	.0	31.7	29.7
Eastern hemlock	31.5	43.7	47.6	45.7	43.4	37.7	21.8	20.4	46.3	10.7	348.6	12.3
Other softwoods	3.3	3.0	4.6	2.4	.6	.7	.0	.0	.0	.0	14.5	24.2
Total softwoods	105.3	178.4	215.3	207.0	178.4	130.8	79.0	63.9	95.2	28.6	1,281.9	6.4
Red maple	198.7	308.0	362.7	341.7	289.4	221.3	147.8	95.1	95.4	22.7	2,082.8	3.8
Sugar maple	137.7	222.1	237.6	212.9	199.2	158.5	118.0	74.9	151.8	40.6	1,553.4	4.7
Yellow birch	22.3	36.8	54.0	44.0	21.1	12.0	8.2	6.2	16.1	5.5	226.2	12.9
Hickory	117.5	227.0	306.4	281.0	235.1	201.8	104.4	55.6	72.4	.0	1,601.2	4.1
American beech	49.7	83.7	86.2	106.5	112.1	94.2	103.7	65.2	185.6	38.5	925.3	6.5
White ash	38.3	68.1	71.5	77.1	75.1	72.5	52.5	34.6	50.1	13.8	553.7	6.6
Sweetgum	.1	.5	.0	1.0	.0	.0	.0	.0	.0	.0	1.5	70.3
Yellow-poplar	81.6	181.4	291.0	425.5	566.4	520.6	403.1	309.5	530.9	43.9	3,353.8	4.2
Blackgum	30.2	27.9	29.0	20.2	22.2	18.2	16.1	21.2	10.1	.0	195.1	7.7
Aspen	3.7	7.6	11.4	20.7	19.4	16.8	7.6	3.6	3.8	.0	94.6	21.0
Black cherry	33.2	68.6	91.4	92.2	116.2	88.0	100.1	62.7	138.1	16.2	806.7	7.8
White oak	76.6	188.2	288.8	327.4	340.7	263.4	229.8	173.5	226.5	43.8	2,158.7	4.2
Northern red oak	32.2	67.9	120.3	173.2	220.9	227.5	238.8	185.2	483.9	107.2	1,857.1	4.8
Other white oaks	80.5	196.1	270.0	331.8	301.1	254.0	172.0	148.2	234.5	24.3	2,012.6	4.3
Other red oaks	49.7	113.9	192.6	242.7	245.0	255.8	212.4	92.4	217.8	45.3	1,667.7	4.7
American basswood	17.1	44.6	75.1	97.4	101.7	113.4	94.6	57.2	98.7	22.1	721.9	9.2
Elm	33.1	45.6	40.4	27.6	33.8	21.0	14.3	14.7	6.4	.0	236.8	8.3
Other commercial hardwoods	134.1	221.4	273.6	258.2	232.8	183.9	142.6	66.0	101.2	43.2	1,657.0	4.3
Noncommercial hardwoods	104.1	104.8	81.5	52.4	32.3	17.0	10.0	3.3	8.3	.0	413.7	6.1
Total hardwoods	1,240.4	2,214.1	2,883.6	3,133.4	3,164.6	2,740.0	2,175.9	1,469.2	2,631.5	467.2	22,119.8	1.3
Total, all species	1,345.7	2,392.6	3,098.9	3,340.3	3,342.9	2,870.8	2,255.0	1,533.1	2,726.7	495.8	23,401.7	1.3
SE	1.7	1.7	1.8	1.9	2.2	2.7	3.3	4.5	4.3	11.0	1.3	

Table 22. Net volume of growing-stock trees on timberland by species and diameter class, West Virginia, 1989

(In millions of cubic feet)

Species group	Diameter class (inches at breast height)										All classes	SE
	5.0-6.9	7.0-8.9	9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9	21.0-28.9	29.0+		
Balsam fir	.1	.6	.3	.6	.0	.0	.0	.0	.0	.0	1.7	100.0
Red spruce	2.6	7.4	15.0	19.4	26.7	32.7	22.8	12.7	7.7	.0	146.9	29.5
Red pine	.6	5.3	5.1	3.6	.3	.0	.7	.0	.0	.0	15.6	71.0
Pitch pine	4.6	12.9	21.4	18.5	18.5	9.7	1.9	2.8	.0	.0	90.3	16.3
Eastern white pine	20.8	23.6	23.7	31.4	30.4	27.6	21.7	16.7	34.7	2.9	233.6	15.3
Virginia pine	41.7	105.4	114.2	78.9	42.5	14.3	6.3	2.1	.0	.0	405.5	8.4
Other yellow pines	10.3	8.5	8.8	8.8	6.3	3.9	1.3	.0	.0	.0	47.9	21.5
Eastern hemlock	30.8	33.1	28.0	35.5	34.4	33.4	26.4	32.4	45.2	12.0	311.3	10.6
Other softwoods	1.5	1.6	.5	.0	1.0	.0	.3	.0	.0	.0	4.9	27.9
Total softwoods	112.9	198.4	217.1	196.6	160.1	121.7	81.4	66.7	87.7	14.8	1,257.7	6.0
Red maple	211.4	271.8	278.1	236.9	197.8	154.2	92.1	52.1	80.9	7.5	1,582.8	3.7
Sugar maple	121.6	167.9	188.2	168.3	158.0	110.0	83.5	59.4	101.0	15.2	1,173.1	4.6
Yellow birch	28.7	46.3	49.1	27.1	15.8	9.7	5.8	5.0	17.8	4.1	209.5	13.0
Hickory	137.6	234.8	295.1	260.0	200.2	153.7	88.0	57.7	47.8	3.1	1,477.9	3.3
American beech	56.0	75.2	105.5	114.9	117.8	100.7	104.0	86.1	148.4	27.2	935.7	5.8
White ash	37.2	56.4	80.9	65.6	65.7	73.0	42.8	20.5	35.4	3.5	481.1	5.5
Sweetgum	.3	.9	1.7	1.6	1.5	.5	.0	.0	.0	.0	6.5	56.7
Yellow-poplar	113.9	255.3	405.9	474.3	509.6	497.2	392.9	249.8	277.7	33.7	3,210.4	3.6
Blackgum	29.6	29.4	22.9	18.6	26.3	24.0	16.2	13.9	20.1	1.1	202.0	6.2
Aspen	4.5	6.1	7.8	9.6	5.9	5.1	2.8	1.5	.0	.0	43.3	19.3
Black cherry	37.3	63.1	88.5	99.7	94.2	99.6	87.2	50.9	74.7	7.0	702.1	7.2
White oak	102.7	206.4	257.9	266.8	280.9	237.4	160.5	111.5	160.3	43.3	1,827.8	3.5
Northern red oak	51.1	102.3	153.2	190.7	226.1	210.4	196.9	164.5	313.7	80.0	1,689.0	3.7
Other white oaks	116.0	239.6	297.3	295.5	277.1	239.0	166.6	132.6	209.2	38.6	2,011.6	3.6
Other red oaks	64.0	153.7	235.5	248.1	265.3	253.9	175.9	145.4	220.1	37.7	1,799.4	3.6
American basswood	23.5	50.4	59.8	96.5	102.7	98.1	62.0	46.0	47.8	6.9	593.7	6.9
Elm	37.9	41.8	42.4	27.3	28.5	16.8	17.4	7.9	13.7	.6	234.2	7.4
Other hardwoods	152.6	267.6	295.7	227.8	199.4	158.2	106.2	61.8	62.4	17.7	1,549.4	3.5
Total hardwoods	1,325.8	2,269.0	2,865.6	2,829.5	2,772.8	2,441.5	1,800.7	1,266.7	1,831.1	327.1	19,729.7	1.0
Total, all species	1,438.7	2,467.4	3,082.7	3,026.1	2,933.0	2,563.2	1,882.1	1,333.4	1,918.9	341.9	20,987.4	.9
SE	1.7	1.6	1.5	1.6	1.7	2.0	2.5	3.0	2.9	6.1	.9	

Table 23. Net volume of growing-stock trees on timberland by species and diameter class, West Virginia, 2000

(In millions of cubic feet)

Species group	Diameter class (inches at breast height)										All classes	SE
	5.0-6.9	7.0-8.9	9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9	21.0-28.9	29.0+		
White spruce	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	100.0
Red spruce	6.8	11.1	14.1	23.0	17.1	21.6	14.3	14.7	11.7	.0	134.3	27.0
Red pine	1.4	1.2	.9	.0	.0	.0	.0	.0	.0	.0	3.5	61.8
Pitch pine	6.5	7.3	13.4	17.0	17.5	5.3	4.6	3.2	1.8	.0	76.5	15.8
Eastern white pine	19.5	29.7	32.1	29.0	36.6	37.0	27.4	22.0	31.4	17.9	282.7	15.7
Loblolly pine	.9	.6	.0	.4	.0	.9	.0	.0	.0	.0	2.8	43.8
Virginia pine	31.5	74.6	81.3	78.5	58.9	25.1	9.1	3.7	.0	.0	362.7	9.5
Other yellow pines	2.8	6.5	10.0	6.5	2.4	2.6	.0	.0	.0	.0	30.8	30.4
Eastern hemlock	31.2	43.2	37.5	43.1	40.4	36.0	21.8	19.0	46.3	10.7	329.2	12.7
Other softwoods	3.1	2.9	2.5	1.3	.0	.3	.0	.0	.0	.0	10.1	28.5
Total softwoods	103.8	177.0	191.8	198.8	172.9	128.7	77.2	62.6	91.3	28.6	1,232.7	6.6
Red maple	195.5	304.5	360.6	322.0	277.3	213.7	140.1	91.7	85.2	17.0	2,007.6	3.9
Sugar maple	136.2	219.2	235.8	199.6	189.3	154.4	113.5	68.9	143.6	28.8	1,489.5	4.8
Yellow birch	22.2	36.6	53.7	39.8	18.0	11.7	8.2	6.2	14.5	3.7	214.7	13.0
Hickory	116.6	226.4	305.9	268.3	225.8	199.4	101.0	54.7	68.9	.0	1,566.9	4.1
American beech	48.5	82.9	84.6	93.0	104.5	86.3	95.9	56.5	173.4	36.6	862.2	6.7
White ash	37.4	67.2	71.0	72.3	71.6	70.2	49.6	33.2	45.8	13.8	532.1	6.7
Sweetgum	.1	.5	.0	1.0	.0	.0	.0	.0	.0	.0	1.5	70.3
Yellow-poplar	80.8	179.9	290.2	419.5	564.6	519.4	402.6	308.7	521.1	43.9	3,330.6	4.2
Blackgum	29.8	27.8	28.6	18.3	21.9	18.2	16.1	21.2	8.8	.0	190.8	7.8
Aspen	3.7	7.6	11.4	20.4	19.4	16.8	7.6	3.6	3.8	.0	94.3	21.0
Black cherry	32.1	67.6	90.5	80.6	105.7	81.7	95.0	62.2	133.3	16.2	765.0	8.1
White oak	75.6	186.7	287.7	321.3	338.4	261.4	227.1	172.4	215.1	36.9	2,122.6	4.2
Northern red oak	31.9	67.0	120.0	170.3	216.4	225.7	237.7	182.6	477.3	104.2	1,833.0	4.8
Other white oaks	79.2	195.4	269.0	317.2	293.3	248.8	166.3	139.5	221.4	19.7	1,949.8	4.4
Other red oaks	49.1	112.7	191.1	235.5	243.2	253.6	211.5	90.7	207.2	45.3	1,640.0	4.7
American basswood	16.4	43.5	74.9	95.9	100.8	113.4	93.4	57.2	97.0	22.0	714.6	9.3
Elm	31.9	45.0	40.4	24.1	32.7	19.3	13.9	14.3	6.4	.0	228.0	8.6
Other hardwoods	127.0	217.3	268.8	237.2	219.5	175.2	134.7	61.8	94.6	41.2	1,577.4	4.4
Total hardwoods	1,114.0	2,087.9	2,784.5	2,936.4	3,042.4	2,669.1	2,114.2	1,425.5	2,517.3	429.3	21,120.7	1.4
Total, all species	1,217.8	2,264.9	2,976.4	3,135.2	3,215.3	2,797.9	2,191.4	1,488.0	2,608.6	457.9	22,353.4	1.3
SE	1.8	1.7	1.8	2.0	2.2	2.7	3.3	4.6	4.4	11.5	1.3	

Table 24. Net volume of growing-stock trees on timberland by species and forest-type group, West Virginia, 1989

(In millions of cubic feet)

Species group	Forest-type group									Total	SE
	White/ red pine	Spruce/ fir	Loblolly/ shortleaf	Oak/ pine	Oak/ hickory	Oak/gum/ cypress	Elm/ash/ red maple	Northern hardwoods	Aspen/ birch		
Balsam fir	.0	1.7	.0	.0	.0	.0	.0	.0	.0	1.7	100.0
Red spruce	6.9	72.8	.0	.0	2.1	.0	.0	65.1	.0	146.9	29.5
Red pine	13.2	.0	.0	1.0	1.4	.0	.0	.0	.0	15.6	71.0
Pitch pine	.0	.0	21.1	20.8	46.9	.0	.0	1.5	.0	90.3	16.3
Eastern white pine	65.9	.0	8.9	30.1	116.0	.0	.6	12.1	.0	233.6	15.3
Virginia pine	2.0	.0	167.4	118.5	112.4	.0	.5	4.7	.0	405.5	8.4
Other yellow pines	2.8	.0	21.9	6.8	16.4	.0	.0	.0	.0	47.9	21.5
Eastern hemlock	65.7	.3	.5	2.4	105.4	.0	.4	136.5	.0	311.3	10.6
Other softwoods	.0	.0	.0	1.6	3.4	.0	.0	.0	.0	4.9	27.9
Total softwoods	156.5	74.8	219.8	181.2	403.9	.0	1.5	219.9	.0	1,257.7	6.0
Red maple	12.0	.8	3.9	18.5	1,113.8	.0	10.0	423.1	.6	1,582.8	3.7
Sugar maple	3.6	.0	1.7	4.0	498.4	.0	14.5	651.0	.0	1,173.1	4.6
Yellow birch	3.4	7.1	.0	.0	21.9	.0	.0	177.1	.0	209.5	13.0
Hickory	4.1	.0	11.0	21.1	1,299.8	.0	9.3	131.2	1.4	1,477.9	3.3
American beech	2.2	.0	.3	.0	483.8	.0	2.1	447.3	.0	935.7	5.8
White ash	.0	.0	4.4	12.2	289.0	.0	22.4	153.1	.0	481.1	5.5
Sweetgum	.0	.0	.2	.0	6.3	.0	.0	.0	.0	6.5	56.7
Yellow-poplar	12.2	.0	14.5	48.4	2,638.3	.0	43.8	452.2	1.0	3,210.4	3.6
Blackgum	2.3	.0	1.2	4.6	179.1	.0	.1	14.8	.0	202.0	6.2
Aspen	.0	.0	.4	.5	29.5	.0	.4	7.6	4.8	43.3	19.3
Black cherry	1.7	.0	3.9	4.4	243.8	.0	25.2	422.8	.3	702.1	7.2
White oak	11.1	.0	14.7	53.4	1,704.6	.0	6.8	37.1	.0	1,827.8	3.5
Northern red oak	7.8	.0	3.3	20.6	1,480.0	.0	7.0	170.3	.0	1,689.0	3.7
Other white oaks	1.8	.0	10.7	33.2	1,936.1	.0	1.0	28.9	.0	2,011.6	3.6
Other red oaks	1.3	.0	12.1	51.0	1,713.6	.0	1.8	19.6	.0	1,799.4	3.6
American basswood	2.4	.0	.0	.0	247.1	.0	4.9	339.3	.0	593.7	6.9
Elm	.0	.0	.6	2.1	113.8	.0	81.1	36.6	.0	234.2	7.4
Other hardwoods	9.3	.0	3.2	8.6	1,005.2	.0	87.3	435.7	.0	1,549.4	3.5
Total hardwoods	75.2	7.9	86.2	282.6	15,004.1	.0	317.6	3,947.7	8.2	19,729.7	1.0
Total, all species	231.8	82.8	306.0	463.8	15,408.1	.0	319.1	4,167.6	8.2	20,987.4	.9
SE	24.7	53.3	16.1	14.0	1.6	.0	15.2	5.0	79.9	.9	

Table 25. Net volume of growing-stock trees on timberland by species and forest-type group, West Virginia, 2000

(In millions of cubic feet)

Species group	Forest-type group									Total	SE
	White/ red pine	Spruce/ fir	Loblolly/ shortleaf	Oak/ pine	Oak/ hickory	Oak/gum/ cypress	Elm/ash/ red maple	Northern hardwoods	Aspen/ birch		
White spruce	.0	.0	.0	.0	.1	.0	.0	.0	.0	.1	100.0
Red spruce	2.4	53.1	.0	.0	.3	.0	.0	78.5	.0	134.3	27.0
Red pine	2.4	.0	.0	.0	1.1	.0	.0	.0	.0	3.5	61.8
Pitch pine	.7	.0	18.4	11.1	45.4	.0	.0	.9	.0	76.5	15.8
Eastern white pine	110.1	.0	11.5	29.6	118.9	.0	.6	11.9	.0	282.7	15.7
Loblolly pine	.0	.0	1.1	.1	1.6	.0	.0	.0	.0	2.8	43.8
Virginia pine	1.0	.0	111.6	139.1	99.3	.0	1.7	10.0	.0	362.7	9.5
Other yellow pines	1.5	.0	10.9	5.3	13.2	.0	.0	.0	.0	30.8	30.4
Eastern hemlock	99.0	.2	.1	.1	93.3	.0	1.6	134.9	.0	329.2	12.7
Other softwoods	.6	.0	.6	3.2	5.4	.0	.0	.1	.0	10.1	28.5
Total softwoods	217.8	53.3	154.3	188.5	378.5	.0	3.9	236.3	.0	1,232.7	6.6
Red maple	21.6	1.3	4.7	16.8	1,356.8	.0	29.1	576.6	.7	2,007.6	3.9
Sugar maple	3.2	.0	3.3	5.2	576.0	.0	14.7	887.1	.0	1,489.5	4.8
Yellow birch	6.5	6.8	.0	.0	14.5	.0	.0	187.0	.0	214.7	13.0
Hickory	9.0	.0	2.4	18.7	1,390.8	.0	9.1	136.9	.0	1,566.9	4.1
American beech	2.7	.0	.0	3.6	465.2	.0	4.0	386.8	.0	862.2	6.7
White ash	2.2	.0	1.1	11.7	290.3	.0	17.1	209.6	.0	532.1	6.7
Sweetgum	.0	.0	.0	.0	1.5	.0	.0	.0	.0	1.5	70.3
Yellow-poplar	7.1	.0	4.0	23.2	2,822.9	.0	54.3	418.8	.3	3,330.6	4.2
Blackgum	6.2	.0	1.2	2.9	163.6	.0	.6	16.3	.0	190.8	7.8
Aspen	.2	.0	.0	2.5	70.3	.0	.0	16.5	4.7	94.3	21.0
Black cherry	5.8	2.2	4.8	3.8	222.8	.0	27.0	497.7	.9	765.0	8.1
White oak	15.8	.0	3.1	33.5	2,011.5	.0	4.1	54.6	.0	2,122.6	4.2
Northern red oak	6.6	.0	.2	12.6	1,656.5	.0	6.1	151.1	.0	1,833.0	4.8
Other white oaks	5.2	.0	6.6	20.3	1,864.7	.0	3.1	49.8	.0	1,949.8	4.4
Other red oaks	4.8	.0	4.6	27.3	1,583.2	.0	1.2	18.9	.0	1,640.0	4.7
American basswood	1.8	.0	.0	.0	225.4	.0	5.8	481.6	.0	714.6	9.3
Elm	.1	.0	1.3	3.1	107.5	.0	61.3	54.0	.6	228.0	8.6
Other hardwoods	12.3	.0	1.1	10.8	964.0	.0	144.8	443.8	.6	1,577.4	4.4
Total hardwoods	111.0	10.3	38.3	196.1	15,787.6	.0	382.4	4,587.1	7.8	21,120.7	1.4
Total, all species	328.8	63.6	192.7	384.7	16,166.1	.0	386.3	4,823.4	7.8	22,353.4	1.3
SE	22.2	49.9	20.4	14.2	2.0	.0	15.9	5.0	80.8	1.3	

Table 26. Net volume of growing-stock trees on timberland by species and stand-size class, West Virginia, 1989

(In millions of cubic feet)

Species group	Stand-size class				All classes	SE
	Saw-timber	Pole-timber	Sapling and seedling	Non-stocked		
Balsam fir	.0	1.7	.0	.0	1.7	100.0
Red spruce	103.2	36.3	7.4	.0	146.9	29.5
Red pine	4.0	10.8	.8	.0	15.6	71.0
Pitch pine	44.2	45.7	.4	.0	90.3	16.3
Eastern white pine	153.1	74.6	4.7	1.1	233.6	15.3
Virginia pine	217.8	176.1	11.3	.3	405.5	8.4
Other yellow pines	20.3	26.6	1.1	.0	47.9	21.5
Eastern hemlock	242.6	65.4	3.3	.0	311.3	10.6
Other softwoods	2.7	1.9	.2	.0	4.9	27.9
Total softwoods	788.0	439.0	29.2	1.4	1,257.7	6.0
Red maple	1,092.6	472.8	17.4	.0	1,582.8	3.7
Sugar maple	939.2	225.8	8.1	.0	1,173.1	4.6
Yellow birch	137.5	71.4	.6	.0	209.5	13.0
Hickory	981.5	473.7	22.8	.0	1,477.9	3.3
American beech	808.0	124.6	3.2	.0	935.7	5.8
White ash	316.8	155.2	9.1	.0	481.1	5.5
Sweetgum	2.9	3.6	.0	.0	6.5	56.7
Yellow-poplar	2,129.9	1,021.3	58.9	.3	3,210.4	3.6
Blackgum	152.2	48.6	1.2	.0	202.0	6.2
Aspen	16.6	25.4	1.2	.0	43.3	19.3
Black cherry	444.5	245.3	12.3	.0	702.1	7.2
White oak	1,262.9	549.2	15.7	.0	1,827.8	3.5
Northern red oak	1,341.6	339.0	8.4	.0	1,689.0	3.7
Other white oaks	1,430.8	573.4	7.5	.0	2,011.6	3.6
Other red oaks	1,238.0	552.9	8.6	.0	1,799.4	3.6
American basswood	519.0	71.0	3.6	.0	593.7	6.9
Elm	121.0	107.4	5.8	.0	234.2	7.4
Other hardwoods	1,042.0	478.3	29.1	.0	1,549.4	3.5
Total hardwoods	13,977.2	5,538.8	213.4	.3	19,729.7	1.0
Total, all species	14,765.2	5,977.9	242.6	1.7	20,987.4	.9
SE	1.9	3.3	10.5	70.1	.9	

Table 27. Net volume of growing-stock trees on timberland by species and stand-size class, West Virginia, 2000

(In millions of cubic feet)

Species group	Stand-size class				All classes	SE
	Saw-timber	Pole-timber	Sapling and seedling	Non-stocked		
White spruce	.0	.1	.0	.0	.1	100.0
Red spruce	116.0	18.0	.3	.0	134.3	27.0
Red pine	2.8	.7	.0	.0	3.5	61.8
Pitch pine	47.9	23.5	5.1	.0	76.5	15.8
Eastern white pine	238.3	42.2	2.3	.0	282.7	15.7
Loblolly pine	2.2	.3	.3	.0	2.8	43.8
Virginia pine	253.9	103.5	5.2	.0	362.7	9.5
Other yellow pines	14.3	15.7	.9	.0	30.8	30.4
Eastern hemlock	307.0	20.7	1.5	.0	329.2	12.7
Other softwoods	5.3	4.4	.3	.0	10.1	28.5
Total softwoods	987.7	229.0	15.9	.0	1,232.7	6.6
Red maple	1,614.7	367.2	24.5	1.2	2,007.6	3.9
Sugar maple	1,302.2	174.9	11.7	.7	1,489.5	4.8
Yellow birch	165.5	48.8	.4	.0	214.7	13.0
Hickory	1,268.6	281.6	16.8	.0	1,566.9	4.1
American beech	787.2	66.7	7.7	.6	862.2	6.7
White ash	422.2	100.3	9.6	.0	532.1	6.7
Sweetgum	1.2	.4	.0	.0	1.5	70.3
Yellow-poplar	2,785.1	489.7	54.0	1.8	3,330.6	4.2
Blackgum	161.1	25.0	4.4	.3	190.8	7.8
Aspen	65.4	26.7	2.2	.0	94.3	21.0
Black cherry	572.2	175.6	17.1	.0	765.0	8.1
White oak	1,769.3	332.7	20.6	.0	2,122.6	4.2
Northern red oak	1,663.1	162.3	7.6	.0	1,833.0	4.8
Other white oaks	1,594.1	342.0	13.7	.0	1,949.8	4.4
Other red oaks	1,293.5	330.2	16.3	.0	1,640.0	4.7
American basswood	670.3	39.1	5.0	.2	714.6	9.3
Elm	174.6	51.0	2.4	.0	228.0	8.6
Other hardwoods	1,249.6	302.7	25.0	.1	1,577.4	4.4
Total hardwoods	17,559.8	3,317.0	238.9	5.0	21,120.7	1.4
Total, all species	18,547.6	3,546.0	254.8	5.0	22,353.4	1.3
SE	1.9	4.7	11.7	65.4	1.3	

Table 28. Net volume of growing-stock trees on timberland by forest type and stand-size class, West Virginia, 2000

(In millions of cubic feet)

Forest type	Stand-size class				All classes	SE
	Saw-timber	Pole-timber	Sapling and seedling	Non-stocked		
White pine	121.6	3.9	.9	.0	126.4	35.0
White pine/hemlock	38.3	.0	.0	.0	38.3	72.2
Hemlock	159.7	4.4	.0	.0	164.1	31.2
White/red pine group	319.6	8.3	.9	.0	328.8	22.2
Red spruce	63.6	.0	.0	.0	63.6	49.9
Spruce/fir group	63.6	.0	.0	.0	63.6	49.9
Virginia pine	116.0	34.2	2.6	.0	152.9	23.5
Eastern redcedar	1.2	.3	.0	.0	1.5	73.9
Pitch pine	24.2	2.2	2.8	.0	29.2	46.0
Table mountain pine	.0	9.1	.0	.0	9.1	100.0
Loblolly/shortleaf group	141.4	45.8	5.5	.0	192.7	20.4
Wh. pine/no.red oak/wh. ash	27.7	.0	.0	.0	27.7	73.4
Eastern redcedar/hardwood	.0	3.9	.0	.0	3.9	71.0
Virginia pine/oak	210.0	106.4	1.2	.0	317.6	15.5
Loblolly pine/hardwood	.0	.0	.1	.0	.1	100.0
Other oak/pine	35.1	.2	.0	.0	35.3	39.6
Oak/pine group	272.8	110.5	1.3	.0	384.7	14.2
Post, black, or bear oak	120.8	2.6	.1	.0	123.6	35.1
Chestnut oak	818.2	171.6	2.5	.0	992.3	10.8
White oak/red oak/hickory	1,787.8	331.4	14.1	.0	2,133.3	7.8
White oak	649.1	132.9	.0	.0	782.0	11.9
Northern red oak	470.3	10.5	1.7	.0	482.5	18.7
Y-poplar/wh. oak/no.red oak	685.0	71.1	7.7	.0	763.8	16.7
Black locust	42.8	31.2	7.5	.2	81.6	30.3
Black walnut	1.7	6.9	.0	.0	8.6	57.5
Yellow-poplar	520.3	93.5	7.6	3.2	624.6	16.2

Table 28. continued

(In millions of cubic feet)

Forest type	Stand-size class				All classes	SE
	Saw-timber	Pole-timber	Sapling and seedling	Non-stocked		
Hawthorn/reverting field	.0	.0	2.9	.0	2.9	45.1
Scarlet oak	41.8	32.3	3.7	.0	77.8	33.7
Sassafras/persimmon	.0	12.6	4.3	.0	16.9	46.1
Red maple/central hardwood	207.6	56.5	9.8	.0	274.0	23.6
Mixed central hardwoods	8,035.2	1,654.1	112.7	.3	9,802.3	3.1
Oak/hickory group	13,380.6	2,607.2	174.6	3.7	16,166.1	2.0
Black ash/Amer. elm/red maple	119.3	21.2	8.3	.0	148.9	26.7
Red maple(lowland)	.0	.0	.0	.5	.5	100.0
Red maple(upland)	.0	18.4	3.0	.7	22.1	60.8
River birch/sycamore	104.1	11.6	2.8	.0	118.4	27.5
Willow	1.9	.0	.2	.0	2.1	90.1
Sycamore/pecan/American elm	76.0	4.4	.0	.0	80.4	35.7
American elm/green ash	13.5	.4	.0	.0	13.9	97.4
Elm/ash/red maple group	314.8	55.9	14.3	1.3	386.3	15.9
Sugar maple/beech/yellow birch	2,267.6	303.0	23.8	.0	2,594.3	7.0
Black cherry	163.8	58.4	4.6	.0	226.8	27.2
Red maple/northern hardwoods	374.7	93.0	7.2	.0	474.9	18.6
Pin cherry/reverting field	.0	.0	8.7	.0	8.7	53.1
Mixed northern hardwoods	1,248.7	256.1	13.9	.0	1,518.6	10.2
Northern hardwoods group	4,054.7	710.5	58.2	.0	4,823.4	5.0
Aspen	.0	7.8	.0	.0	7.8	80.8
Aspen/birch group	.0	7.8	.0	.0	7.8	80.8
All forest types	18,547.6	3,546.0	254.8	5.0	22,353.4	1.3
SE	1.9	4.7	11.7	65.4	1.3	

Table 29. Net volume of sawtimber trees on timberland by species and diameter class, West Virginia, 1989

(In millions of board feet)

Species group	Diameter class (inches at breast height)								All classes	SE
	9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9	21.0-28.9	29.0+		
Balsam fir	1.2	2.7	.0	.0	.0	.0	.0	.0	3.9	100.0
Red spruce	56.2	86.2	129.7	169.4	120.7	74.4	46.8	.0	683.4	29.4
Red pine	17.7	15.0	1.4	.0	3.1	.0	.0	.0	37.1	68.0
Pitch pine	69.2	69.1	73.2	40.8	8.1	12.7	.0	.0	273.1	16.8
Eastern white pine	81.7	130.9	134.4	132.8	110.2	87.4	189.3	15.9	882.6	15.7
Virginia pine	375.7	297.9	171.5	60.5	26.4	9.7	.0	.0	941.8	9.0
Other yellow pines	28.5	32.6	24.7	16.5	5.4	.0	.0	.0	107.6	22.8
Eastern hemlock	89.3	136.7	142.2	149.6	122.7	158.4	225.0	62.7	1,086.7	11.4
Other softwoods	1.3	.0	3.6	.0	1.4	.0	.0	.0	6.3	50.6
Total softwoods	720.8	771.1	680.9	569.6	397.8	342.5	461.1	78.6	4,022.4	7.2
Red maple	.0	901.1	835.7	678.6	425.5	230.9	385.7	38.9	3,496.3	5.2
Sugar maple	.0	649.7	674.1	481.6	366.1	266.3	466.9	78.1	2,982.8	6.1
Yellow birch	.0	108.7	65.3	42.4	24.8	20.4	80.2	19.9	361.6	17.2
Hickory	.0	986.2	858.5	694.2	413.0	282.6	245.2	16.5	3,496.1	4.4
American beech	.0	454.3	498.7	445.1	480.4	409.6	744.8	146.5	3,179.3	6.4
White ash	.0	269.8	287.8	337.2	194.5	95.0	170.2	17.0	1,371.5	6.8
Sweetgum	.0	6.3	6.2	2.0	.0	.0	.0	.0	14.5	53.1
Yellow-poplar	.0	1,889.6	2,303.4	2,355.7	1,958.0	1,278.8	1,475.6	166.3	11,427.3	3.9
Blackgum	.0	69.8	107.7	102.6	73.2	63.8	96.5	5.4	519.0	8.2
Aspen	.0	39.8	26.1	24.4	13.1	7.2	.0	.0	110.6	22.2
Black cherry	.0	383.8	403.5	454.0	414.1	257.6	390.5	41.1	2,344.6	8.9
White oak	.0	1,030.3	1,210.8	1,053.2	736.6	527.9	770.1	219.1	5,548.0	4.0
Northern red oak	.0	724.4	931.7	900.8	902.2	764.3	1,510.6	406.2	6,140.1	4.1
Other white oaks	.0	1,050.1	1,078.0	954.4	667.0	567.3	922.1	144.7	5,383.5	4.2
Other red oaks	.0	941.0	1,092.8	1,088.1	803.6	671.8	1,051.0	188.8	5,837.2	4.0
American basswood	.0	376.9	453.3	452.5	304.2	229.8	241.7	40.8	2,099.3	7.7
Elm	.0	104.3	121.4	73.2	79.0	36.9	65.3	3.0	483.0	10.4
Other hardwoods	.0	885.2	852.1	697.6	485.9	286.5	298.1	89.4	3,594.9	4.5
Total hardwoods	.0	10,871.2	11,807.1	10,837.4	8,341.2	5,996.7	8,914.5	1,621.5	58,389.8	1.4
Total, all species	720.8	11,642.3	12,487.9	11,407.0	8,739.1	6,339.3	9,375.6	1,700.1	62,412.1	1.3
SE	7.6	1.6	1.7	2.0	2.5	3.0	3.0	6.2	1.3	

Table 30. Net volume of sawtimber trees on timberland by species and diameter class, West Virginia, 2000

(In millions of board feet)

Species group	Diameter class (inches at breast height)								All classes	SE
	9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9	21.0-28.9	29.0+		
Red spruce	51.8	102.1	84.3	113.6	80.2	88.6	67.1	.0	587.7	28.6
Red pine	3.6	.0	.0	.0	.0	.0	.0	.0	3.6	73.5
Pitch pine	43.1	68.3	71.6	22.7	19.7	16.1	9.0	.0	250.5	17.2
Eastern white pine	112.0	122.0	162.5	175.7	133.5	114.3	172.3	95.0	1,087.3	17.6
Loblolly pine	.0	1.7	.0	3.4	.0	.0	.0	.0	5.1	74.8
Virginia pine	272.2	299.8	244.1	109.8	40.6	17.4	.0	.0	983.9	10.6
Other yellow pines	34.3	26.4	10.0	11.8	.0	.0	.0	.0	82.5	27.0
Eastern hemlock	116.9	161.3	165.1	153.8	103.3	89.1	228.6	45.1	1,063.3	15.3
Other softwoods	7.8	3.9	.0	1.6	.0	.0	.0	.0	13.3	39.9
Total softwoods	641.6	785.4	737.6	592.5	377.3	325.6	477.0	140.2	4,077.2	8.0
Red maple	.0	1,233.2	1,181.3	959.9	644.4	409.8	392.8	87.4	4,908.6	5.6
Sugar maple	.0	775.5	798.1	686.6	508.1	306.5	676.6	144.6	3,896.0	6.7
Yellow birch	.0	158.9	69.9	52.3	35.1	28.0	69.1	15.6	428.9	18.1
Hickory	.0	1,021.6	955.5	905.3	480.1	265.2	350.8	.0	3,978.6	5.5
American beech	.0	378.8	453.3	386.3	456.0	266.3	844.9	205.2	2,990.7	8.2
White ash	.0	290.4	308.0	311.0	215.9	155.4	207.9	63.8	1,552.4	8.7
Sweetgum	.0	3.6	.0	.0	.0	.0	.0	.0	3.6	100.0
Yellow-poplar	.0	1,630.8	2,457.6	2,436.8	1,971.7	1,556.7	2,717.2	216.8	12,987.6	4.8
Blackgum	.0	67.5	93.1	79.1	78.2	99.6	39.0	.0	456.4	12.7
Aspen	.0	90.0	95.6	81.8	39.5	19.3	21.5	.0	347.5	24.1
Black cherry	.0	309.3	457.6	374.0	456.5	313.0	684.5	101.4	2,696.2	10.2
White oak	.0	1,259.4	1,474.6	1,166.8	1,038.9	809.9	1,015.0	173.2	6,937.9	4.9
Northern red oak	.0	651.1	916.9	984.6	1,107.3	860.9	2,347.6	543.4	7,411.8	5.5
Other white oaks	.0	1,162.1	1,149.9	1,006.8	689.3	596.7	991.4	88.1	5,684.2	5.1
Other red oaks	.0	898.2	1,014.9	1,086.5	963.6	408.1	994.2	206.2	5,571.8	5.5
American basswood	.0	376.8	445.9	520.8	462.8	285.3	489.6	113.0	2,694.2	11.0
Elm	.0	93.4	120.1	83.0	57.5	61.7	35.4	.0	451.1	14.0
Other hardwoods	.0	931.4	940.3	785.4	628.3	315.3	481.4	215.7	4,297.8	6.1
Total hardwoods	.0	11,331.9	12,932.6	11,906.8	9,833.2	6,757.5	12,358.8	2,174.4	67,295.2	1.9
Total, all species	641.6	12,117.3	13,670.2	12,499.3	10,210.5	7,083.1	12,835.9	2,314.5	71,372.4	1.8
SE	8.6	2.1	2.3	2.8	3.4	4.8	4.5	11.8	1.8	

Table 31. Net volume of sawtimber trees on timberland by species, size class, and tree grade, West Virginia, 2000

(In millions of board feet)

Species group	>15" Diameter at breast height						All size classes						
	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	All grades	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	All grades	SE
Red spruce	318.6	.0	.0	.0	30.9	349.6	547.1	.0	.0	.0	40.6	587.7	28.6
Red pine	.0	.0	.0	.0	.0	.0	.0	.0	3.6	.0	.0	3.6	73.5
Pitch pine	11.6	48.0	4.9	.0	3.0	67.5	52.1	109.3	79.9	.0	9.2	250.5	17.2
Eastern white pine	222.8	183.6	122.3	67.5	94.7	690.9	273.0	298.8	273.9	133.3	108.3	1,087.3	17.6
Loblolly pine	.0	3.4	.0	.0	.0	3.4	1.7	3.4	.0	.0	.0	5.1	74.8
Virginia pine	10.9	34.5	99.4	.0	23.0	167.8	77.9	178.1	672.9	.0	54.8	983.9	10.6
Other yellow pines	.0	4.5	3.1	.0	4.2	11.8	17.4	17.0	43.9	.0	4.2	82.5	27.0
Eastern hemlock	422.0	.0	.0	.0	197.9	619.9	738.9	.0	.0	.0	324.4	1,063.3	15.3
Other softwoods	.0	.0	.0	.0	1.6	1.6	6.4	.0	.0	.0	6.9	13.3	39.9
Total softwoods	986.0	274.0	229.8	67.5	355.3	1,912.6	1,714.6	606.6	1,074.2	133.3	548.4	4,077.2	8.0
Red maple	478.8	659.9	513.0	200.2	642.2	2,494.2	478.8	1,072.6	1,918.0	605.6	833.6	4,908.6	5.6
Sugar maple	551.2	547.7	537.0	210.2	476.4	2,322.4	551.2	912.2	1,350.8	474.9	606.9	3,896.0	6.7
Yellow birch	32.5	40.2	20.5	28.3	78.5	200.0	32.5	56.6	172.2	71.7	95.8	428.9	18.1
Hickory	557.1	705.6	335.6	139.0	264.2	2,001.5	557.1	1,282.1	1,405.1	383.4	350.8	3,978.6	5.5
American beech	77.3	212.9	479.0	607.1	782.5	2,158.6	77.3	249.2	810.8	958.5	895.0	2,990.7	8.2
White ash	436.5	292.7	90.2	31.6	103.1	954.0	436.5	516.2	407.1	47.5	145.2	1,552.4	8.7
Sweetgum	.0	.0	.0	.0	.0	.0	.0	.0	3.6	.0	.0	3.6	100.0
Yellow-poplar	4,217.8	2,066.9	1,198.3	697.0	719.3	8,899.2	4,217.8	3,477.4	2,985.4	1,474.9	832.0	12,987.6	4.8
Blackgum	89.9	83.6	60.9	14.1	47.4	295.8	89.9	118.8	141.9	33.3	72.5	456.4	12.7
Aspen	.0	29.0	88.7	44.3	.0	162.0	.0	59.4	185.8	98.9	3.4	347.5	24.1
Black cherry	851.2	416.2	159.7	48.5	453.8	1,929.4	851.2	686.8	554.7	85.3	518.3	2,696.2	10.2
White oak	1,581.3	1,272.8	718.7	195.0	436.1	4,203.9	1,581.3	2,091.6	2,210.6	557.4	496.9	6,937.9	4.9
Northern red oak	3,091.9	1,360.9	649.5	216.4	525.0	5,843.8	3,091.9	1,909.2	1,467.4	370.2	573.1	7,411.8	5.5
Other white oaks	1,303.2	1,042.0	532.2	61.7	433.2	3,372.2	1,303.2	1,841.1	1,901.6	123.2	515.1	5,684.2	5.1
Other red oaks	1,262.4	957.7	607.5	402.6	428.4	3,658.6	1,262.4	1,383.4	1,570.5	835.4	520.0	5,571.8	5.5
American basswood	854.7	410.3	185.2	16.2	405.1	1,871.5	854.7	759.0	620.6	32.5	427.4	2,694.2	11.0
Elm	65.0	40.7	56.7	11.1	64.1	237.6	65.0	77.7	171.7	54.1	82.7	451.1	14.0
Other hardwoods	897.2	579.8	313.4	140.7	494.9	2,426.0	897.2	1,032.4	1,324.5	357.2	686.4	4,297.8	6.1
Total hardwoods	16,348.1	10,718.8	6,546.0	3,063.9	6,354.0	43,030.7	16,348.1	17,525.8	19,202.3	6,564.1	7,655.0	67,295.2	1.9
Total, all species	17,334.0	10,992.8	6,775.8	3,131.3	6,709.3	44,943.3	18,062.6	18,132.4	20,276.5	6,697.4	8,203.4	71,372.4	1.8
SE	3.9	3.6	4.6	6.6	5.1	2.5	3.8	2.8	2.1	4.1	4.4	1.8	

Table 32. Average annual net change of growing-stock volume on timberland by species and component of change, West Virginia, 2000

(In thousands of cubic feet)

Species group	Component of change								Net change
	Ingrowth	Accretion	Gross growth	Mortality	Cull decrement	Cull increment	Net growth	Removals	
Balsam fir	0	0	0	0	0	0	0	-276	-276
Red spruce	217	1,793	2,010	-256	1,283	0	3,037	-1,059	1,978
Red pine	51	385	436	-113	0	0	323	0	323
Pitch pine	68	504	572	-1,569	0	0	-997	-638	-1,635
Eastern white pine	1,307	8,376	9,683	-516	0	-126	9,041	-540	8,501
Virginia pine	1,311	11,371	12,682	-15,152	0	-479	-2,949	-4,099	-7,048
Other yellow pines	0	650	650	-2,084	0	0	-1,435	0	-1,435
Eastern hemlock	2,319	6,655	8,975	-1,507	0	-1,653	5,814	-4,876	938
Other softwoods	89	369	458	0	0	0	458	0	458
Total softwoods	5,361	30,105	35,466	-21,198	1,283	-2,258	13,293	-11,489	1,804
Red maple	16,615	55,427	72,042	-7,830	3,821	-3,821	64,212	-11,942	52,270
Sugar maple	10,137	29,815	39,952	-5,784	4,415	-2,521	36,061	-10,124	25,938
Yellow birch	537	4,084	4,622	-2,417	3,448	-650	5,003	-2,228	2,776
Hickory	3,252	24,132	27,385	-10,648	1,303	-2,499	15,540	-9,382	6,158
American beech	2,180	15,359	17,539	-12,277	2,270	-2,771	4,760	-6,524	-1,764
White ash	3,460	12,364	15,823	-1,259	1,640	-741	15,464	-3,102	12,361
Yellow-poplar	9,646	99,493	109,139	-7,393	2,031	-398	103,379	-38,860	64,519
Blackgum	652	1,660	2,313	-788	166	-851	840	-441	398
Aspen	287	2,987	3,274	-936	161	0	2,499	0	2,499
Black cherry	4,657	25,093	29,750	-3,080	3,421	-1,967	28,125	-14,153	13,971
White oak	2,070	46,434	48,505	-4,807	2,509	-2,006	44,201	-31,529	12,672
Northern red oak	2,921	35,124	38,045	-19,071	119	-1,003	18,090	-31,341	-13,250
Other white oaks	2,659	34,071	36,730	-15,304	2,385	-4,034	19,777	-25,099	-5,322
Other red oaks	2,436	39,179	41,616	-14,036	266	-1,985	25,861	-32,841	-6,980
American basswood	2,264	8,798	11,063	-5,002	156	-2,703	3,513	-2,839	674
Elm	2,328	3,927	6,255	-7,468	682	-267	-798	-1,960	-2,758
Other hardwoods	10,728	41,354	52,081	-20,437	6,947	-7,974	30,617	-14,022	16,595
Total hardwoods	76,831	479,302	556,134	-138,540	35,741	-36,192	417,143	-236,387	180,756
Total, all species	82,193	509,407	591,600	-159,738	37,025	-38,449	430,437	-247,877	182,560

Table 33. Average annual net change of sawtimber volume on timberland by species and component of change, West Virginia, 2000

(In thousands of board feet)

Species group	Component of change								Net change
	Ingrowth	Accretion	Gross growth	Mortality	Cull decrement	Cull increment	Net growth	Removals	
Balsam fir	0	0	0	0	0	0	0	-1,032	-1,032
Red spruce	0	11,974	11,974	-911	6,635	0	17,698	-4,867	12,831
Red pine	808	407	1,214	0	0	0	1,214	0	1,214
Pitch pine	0	3,102	3,102	-4,231	0	0	-1,129	-2,535	-3,665
Eastern white pine	9,121	33,048	42,169	0	0	0	42,169	0	42,169
Virginia pine	25,154	27,230	52,384	-36,162	0	0	16,221	-15,089	1,133
Other yellow pines	1,724	202	1,926	-8,019	0	0	-6,093	0	-6,093
Eastern hemlock	13,407	21,531	34,938	-5,609	0	-3,133	26,196	-22,272	3,924
Other softwoods	1,291	0	1,291	0	0	0	1,291	0	1,291
Total softwoods	51,506	97,493	148,999	-54,932	6,635	-3,133	97,569	-45,795	51,774
Red maple	150,205	84,586	234,791	-15,649	11,381	-11,478	219,045	-38,555	180,490
Sugar maple	88,848	35,518	124,366	-16,895	22,172	-3,287	126,356	-37,306	89,051
Yellow birch	9,323	3,012	12,336	-1,622	13,408	-2,547	21,575	-3,083	18,491
Hickory	52,399	31,547	83,946	-27,409	2,389	-2,791	56,136	-27,753	28,383
American beech	37,224	37,602	74,826	-43,757	8,244	-6,913	32,401	-17,318	15,083
White ash	28,485	33,021	61,505	0	2,806	-2,274	62,038	-12,622	49,416
Yellow-poplar	135,602	357,451	493,053	-4,630	6,697	0	495,120	-169,448	325,672
Blackgum	1,557	5,055	6,612	0	0	-3,877	2,735	-1,289	1,446
Aspen	3,775	11,755	15,530	0	0	0	15,530	0	15,530
Black cherry	43,181	75,371	118,552	-8,166	11,054	-4,662	116,778	-62,601	54,177
White oak	96,310	112,029	208,339	-9,253	8,666	-3,487	204,265	-133,187	71,078
Northern red oak	44,648	126,867	171,516	-76,190	0	-2,300	93,026	-138,641	-45,616
Other white oaks	74,352	77,463	151,815	-49,577	11,821	-14,291	99,767	-90,806	8,961
Other red oaks	72,364	102,766	175,130	-45,832	0	-5,024	124,275	-133,695	-9,421
American basswood	9,572	32,113	41,685	-21,165	0	-11,981	8,539	-12,137	-3,599
Elm	11,406	6,316	17,722	-13,675	716	0	4,764	-4,901	-137
Other hardwoods	62,543	116,029	178,573	-30,587	24,752	-16,576	156,162	-36,939	119,222
Total hardwoods	921,794	1,248,504	2,170,298	-364,407	124,108	-91,487	1,838,512	-920,282	918,229
Total, all species	973,300	1,345,996	2,319,297	-419,340	130,744	-94,620	1,936,080	-966,077	970,003

UNIT TABLES

Table 34. Area of timberland by forest type, forest-type group, and stand-size class, Northeastern Unit, West Virginia, 1989

(In thousands of acres)

Forest type	Stand-size class				All classes	SE
	Saw-timber	Pole-timber	Sapling and seedling	Non-stocked		
Red pine	.0	.0	12.6	.0	12.6	100.0
White pine	11.5	2.9	3.5	.0	18.0	52.1
White pine/hemlock	10.7	.0	.0	.0	10.7	73.2
Hemlock	14.6	.0	.0	.0	14.6	56.4
Scotch pine	.0	3.6	.0	.0	3.6	100.0
White/red pine group	36.8	6.6	16.2	.0	59.5	32.7
Red spruce	16.7	9.7	.0	.0	26.4	55.0
Red spruce/balsam fir	.0	3.9	.0	.0	3.9	100.0
Spruce/fir group	16.7	13.6	.0	.0	30.4	49.6
Shortleaf pine	4.1	6.1	.0	.0	10.2	72.1
Virginia pine	8.3	43.4	4.6	.0	56.3	29.2
Pitch pine	12.0	4.6	.0	.0	16.6	58.5
Table mountain pine	3.9	4.6	.0	.0	8.5	70.9
Loblolly/shortleaf group	28.2	58.7	4.6	.0	91.6	23.1
Eastern redcedar/hardwood	2.0	.0	.0	.0	2.0	100.0
Virginia pine/oak	42.2	26.5	18.1	.0	86.8	24.7
Other oak/pine	8.8	26.6	.0	.0	35.4	38.2
Oak/pine group	53.0	53.1	18.1	.0	124.2	20.0
Post, black, or bear oak	5.8	4.0	.0	.0	9.8	72.0
Chestnut oak	134.3	99.5	.0	.0	233.7	14.2
White oak/red oak/hickory	156.2	134.9	8.6	.0	299.7	11.8
White oak	83.7	41.8	.0	.0	125.5	19.5
Northern red oak	60.0	.0	.0	.0	60.0	30.6
Y-poplar/wh. oak/no.red oak	46.0	8.3	.0	.0	54.3	30.8
Black locust	13.4	19.3	18.4	.0	51.2	27.8
Black walnut	10.8	.0	.0	.0	10.8	71.1

Table 34. continued

(In thousands of acres)

Forest type	Stand-size class				All classes	SE
	Saw-timber	Pole-timber	Sapling and seedling	Non-stocked		
Yellow-poplar	61.1	21.6	.0	.0	82.7	23.2
Hawthorn/reverting field	.0	.0	13.7	.0	13.7	58.4
Scarlet oak	4.8	4.7	.0	.0	9.5	70.7
Sassafras/persimmon	1.4	11.0	15.4	.0	27.8	43.0
Red maple/central hardwood	17.6	24.9	6.0	.0	48.5	32.6
Mixed central hardwoods	1,139.5	597.7	110.5	.0	1,847.7	4.2
Oak/hickory group	1,734.7	967.6	172.6	.0	2,874.8	2.7
Black ash/Amer. elm/red maple	19.1	20.6	5.7	.0	45.3	32.2
Red maple(upland)	.0	.0	7.7	6.2	13.9	71.1
River birch/sycamore	23.5	3.5	.0	.0	27.1	42.2
Willow	.0	.0	4.0	.0	4.0	100.0
American elm/green ash	.0	.0	6.2	.0	6.2	100.0
Elm/ash/red maple group	42.6	24.1	23.6	6.2	96.6	22.3
Sugar maple/beech/yellow birch	462.8	169.3	26.2	.0	658.3	8.4
Black cherry	42.4	29.9	26.9	.0	99.2	21.8
Red maple/northern hardwoods	71.6	39.9	20.7	.0	132.2	19.2
Pin cherry/reverting field	.0	8.6	11.1	.0	19.6	51.5
Mixed northern hardwoods	154.6	72.1	21.6	.0	248.3	14.6
Northern hardwoods group	731.4	319.8	106.5	.0	1,157.7	5.8
Aspen	.0	3.9	6.4	.0	10.4	72.7
Aspen/birch group	.0	3.9	6.4	.0	10.4	72.7
All forest types	2,643.5	1,447.4	348.0	6.2	4,445.1	.9
SE	2.7	4.8	10.7	100.0	.9	

Table 35. Area of timberland by forest type, forest-type group, and stand-size class, Northeastern Unit, West Virginia, 2000

(In thousands of acres)

Forest type	Stand-size class				All classes	SE
	Saw-timber	Pole-timber	Sapling and seedling	Non-stocked		
White pine	31.7	.0	3.6	.0	35.3	35.5
White pine/hemlock	10.5	.0	.0	.0	10.5	70.7
Hemlock	44.0	3.7	.0	.0	47.7	34.5
White/red pine group	86.2	3.7	3.6	.0	93.4	23.6
Red spruce	23.6	.0	.0	.0	23.6	48.6
Spruce/fir group	23.6	.0	.0	.0	23.6	48.6
Virginia pine	24.1	21.5	14.2	.0	59.8	28.3
Eastern redcedar	1.1	1.3	.0	.0	2.4	70.9
Pitch pine	9.1	5.3	6.9	.0	21.3	51.7
Table mountain pine	.0	6.8	.0	1.1	7.9	87.0
Loblolly/shortleaf group	34.3	34.9	21.1	1.1	91.5	23.0
Wh. pine/no.red oak/wh. ash	5.1	.0	.0	.0	5.1	100.0
Eastern redcedar/hardwood	.0	3.7	.0	.0	3.7	100.0
Virginia pine/oak	42.8	48.6	.0	.0	91.4	23.6
Loblolly pine/hardwood	.0	.0	4.0	.0	4.0	100.0
Other oak/pine	18.1	.3	.0	.0	18.5	52.7
Oak/pine group	66.1	52.6	4.0	.0	122.7	19.9
Post, black, or bear oak	12.5	.0	.0	.0	12.5	54.1
Chestnut oak	198.4	75.4	4.3	.0	278.1	14.1
White oak/red oak/hickory	262.9	68.5	19.6	.0	351.1	12.5
White oak	83.6	14.5	.0	.0	98.1	23.7
Northern red oak	113.6	4.5	6.8	.0	124.9	20.9
Y-poplar/wh. oak/no.red oak	60.8	15.5	.0	.0	76.3	28.1
Black locust	19.2	17.9	33.8	6.6	77.5	24.2
Black walnut	1.6	3.0	.0	.0	4.6	56.3
Yellow-poplar	34.9	8.9	14.4	.0	58.2	31.2
Hawthorn/reverting field	.0	1.2	16.2	5.7	23.1	41.0
Scarlet oak	3.1	15.2	7.0	.0	25.3	49.1
Sassafras/persimmon	.0	7.4	.0	.0	7.4	100.0
Red maple/central hardwood	37.7	15.9	32.5	.0	86.1	25.4
Mixed central hardwoods	1,048.8	392.4	72.3	4.9	1,518.4	5.1
Oak/hickory group	1,876.9	640.5	207.0	17.3	2,741.6	3.0

Table 35. continued

(In thousands of acres)

Forest type	Stand-size class				All classes	SE
	Saw-timber	Pole-timber	Sapling and seedling	Non-stocked		
Black ash/Amer. elm/red maple	1.1	12.7	11.7	.0	25.5	48.5
Red maple(lowland)	.0	.0	.0	3.1	3.1	100.0
Red maple(upland)	.0	.0	11.5	7.7	19.3	44.3
River birch/sycamore	17.9	.0	.0	.0	17.9	54.0
Sycamore/pecan/American elm	10.8	7.4	.0	.0	18.2	58.7
American elm/green ash	6.5	1.5	.0	.0	8.0	83.3
Elm/ash/red maple group	36.3	21.6	23.3	10.8	92.0	23.8
Sugar maple/beech/yellow birch	566.6	155.0	5.9	.0	727.5	8.1
Black cherry	29.4	31.0	15.4	1.3	77.1	25.4
Red maple/northern hardwoods	121.0	35.2	.0	.0	156.2	18.8
Pin cherry/reverting field	.0	.0	23.2	1.9	25.1	51.4
Mixed northern hardwoods	243.8	50.4	16.4	.0	310.6	13.3
Northern hardwoods group	960.8	271.6	60.9	3.1	1,296.5	5.4
Aspen	.0	9.2	.0	.0	9.2	72.1
Aspen/birch group	.0	9.2	.0	.0	9.2	72.1
All forest types	3,084.2	1,034.0	319.9	32.3	4,470.4	1.1
SE	2.5	6.6	12.3	29.3	1.1	

Table 36. Number of live trees (1.0+ inches d.b.h.) on timberland by species and diameter class, Northeastern Unit, West Virginia, 2000

(In thousands of trees)

Species group	Diameter class (inches at breast height)						
	1.0-2.9	3.0-4.9	5.0-6.9	7.0-8.9	9.0-10.9	11.0-12.9	13.0-14.9
Red spruce	49,654	8,859	2,414	1,473	1,028	1,144	630
Red pine	0	516	167	33	33	0	0
Pitch pine	464	2,391	1,865	803	828	650	496
Eastern white pine	22,687	6,496	3,759	2,601	1,562	682	844
Loblolly pine	467	0	114	63	0	32	0
Virginia pine	10,614	8,366	7,139	6,154	3,360	995	378
Other yellow pines	0	2,894	1,108	963	719	314	85
Eastern hemlock	19,645	11,717	7,562	5,303	2,804	2,152	1,267
Other softwoods	2,130	1,604	726	343	124	67	68
Total softwoods	105,662	42,844	24,855	17,738	10,459	6,036	3,768
Red maple	144,301	62,865	33,269	22,127	15,411	9,881	6,089
Sugar maple	133,065	49,226	22,133	15,801	9,477	6,100	3,709
Yellow birch	16,812	9,788	6,651	4,925	4,502	2,246	919
Hickory	28,557	21,881	15,315	9,456	8,134	3,555	2,261
American beech	110,899	29,683	13,077	7,975	4,064	3,078	1,917
White ash	24,994	10,092	4,673	3,123	2,187	1,129	928
Yellow-poplar	30,817	11,732	7,253	5,740	5,755	4,261	5,349
Blackgum	54,045	19,702	6,497	2,395	1,361	315	285
Aspen	0	0	407	407	213	195	0
Black cherry	46,861	6,907	6,681	5,543	4,350	3,003	2,570
White oak	8,120	10,463	7,831	8,152	7,399	5,362	4,099
Northern red oak	12,376	4,380	4,861	5,059	4,505	4,274	4,605
Other white oaks	13,613	12,905	14,440	16,246	11,568	8,796	5,591
Other red oaks	17,596	8,290	6,783	6,704	5,562	4,836	3,275
American basswood	5,024	6,754	2,690	2,071	2,528	1,954	1,382
Elm	15,050	9,349	3,024	1,467	775	341	139
Other commercial hardwoods	99,867	40,111	20,246	14,697	10,297	6,125	4,368
Noncommercial hardwoods	230,180	52,639	18,878	8,038	3,525	1,638	712
Total hardwoods	992,176	366,768	194,711	139,928	101,613	67,090	48,199
Total, all species	1,097,838	409,612	219,566	157,667	112,072	73,126	51,967
SE	4.0	4.3	2.6	2.6	2.7	2.9	3.4

Table 36. continued

(In thousands of trees)

Species group	Diameter class (inches at breast height)							
	15.0-16.9	17.0-18.9	19.0-20.9	21.0-28.9	29.0+	Total 5.0+	All classes	SE
Red spruce	624	328	243	146	0	8,031	66,544	31.4
Red pine	0	0	0	0	0	233	750	75.6
Pitch pine	78	110	85	32	0	4,947	7,802	37.7
Eastern white pine	570	393	201	217	108	10,938	40,121	23.0
Loblolly pine	36	0	0	0	0	246	713	76.8
Virginia pine	113	41	0	0	0	18,180	37,160	20.5
Other yellow pines	114	0	0	0	0	3,303	6,197	66.3
Eastern hemlock	590	394	218	533	34	20,857	52,219	20.9
Other softwoods	0	0	0	0	0	1,328	5,063	43.5
Total softwoods	2,125	1,266	746	927	142	68,063	216,569	12.2
Red maple	3,493	2,040	1,017	680	66	94,075	301,241	6.3
Sugar maple	1,923	1,663	769	1,289	285	63,149	245,440	6.9
Yellow birch	387	131	41	238	78	20,117	46,717	16.0
Hickory	1,688	609	399	284	0	41,703	92,141	8.3
American beech	1,265	1,049	384	665	67	33,542	174,124	9.6
White ash	614	454	302	313	0	13,722	48,809	12.0
Yellow-poplar	4,086	2,030	1,289	1,663	83	37,510	80,059	14.7
Blackgum	233	78	162	75	0	11,400	85,147	14.5
Aspen	159	0	0	0	0	1,381	1,381	38.0
Black cherry	1,535	1,411	808	1,159	81	27,141	80,909	14.8
White oak	2,490	1,523	757	834	140	38,586	57,169	8.7
Northern red oak	2,876	2,389	1,892	2,853	376	33,691	50,446	8.4
Other white oaks	3,507	2,283	1,232	1,459	27	65,150	91,668	8.6
Other red oaks	2,046	1,061	200	630	52	31,151	57,037	13.3
American basswood	1,132	617	506	481	74	13,437	25,215	17.4
Elm	117	81	98	33	0	6,077	30,476	29.2
Other commercial hardwoods	2,447	1,471	323	718	137	60,830	200,808	6.6
Noncommercial hardwoods	276	159	0	0	0	33,227	316,046	6.6
Total hardwoods	30,275	19,050	10,181	13,375	1,469	625,892	1,984,836	2.5
Total, all species	32,400	20,317	10,927	14,303	1,611	693,955	2,201,405	2.5
SE	4.0	4.9	7.0	6.1	16.2	1.7	2.5	

Table 37. Net volume of growing-stock trees on timberland by species and diameter class, Northeastern Unit, West Virginia, 1989

(In millions of cubic feet)

Species group	Diameter class (inches at breast height)										All classes	SE
	5.0-6.9	7.0-8.9	9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9	21.0-28.9	29.0+		
Balsam fir	.1	.6	.3	.6	.0	.0	.0	.0	.0	.0	1.7	100.0
Red spruce	2.5	7.4	15.0	19.0	26.3	32.2	22.8	12.7	7.7	.0	145.6	29.8
Red pine	.0	.8	.0	.4	.0	.0	.7	.0	.0	.0	1.8	71.5
Pitch pine	2.4	9.0	14.1	12.1	13.3	4.8	.7	1.3	.0	.0	57.7	21.9
Eastern white pine	9.2	8.6	11.3	13.2	12.3	11.9	11.7	8.7	14.1	.7	101.6	22.0
Virginia pine	17.4	33.7	27.7	15.8	6.5	2.6	1.9	.0	.0	.0	105.6	14.6
Other yellow pines	9.1	7.6	6.7	5.5	3.9	2.3	.8	.0	.0	.0	36.0	26.9
Eastern hemlock	17.4	19.9	15.6	21.3	17.7	21.1	15.5	21.5	18.4	7.7	176.1	14.6
Other softwoods	.7	.5	.3	.0	.1	.0	.0	.0	.0	.0	1.7	43.6
Total softwoods	58.8	88.1	91.0	87.9	80.1	74.9	54.1	44.2	40.3	8.4	627.8	9.1
Red maple	89.5	133.2	129.3	128.1	119.3	85.2	48.0	32.9	44.9	2.5	812.7	5.7
Sugar maple	46.4	69.1	84.3	77.1	74.3	44.1	43.9	24.0	47.7	6.4	517.2	8.0
Yellow birch	22.2	35.9	37.2	21.9	11.6	7.8	4.4	3.7	16.4	3.5	164.7	15.3
Hickory	35.2	59.9	91.4	77.3	59.2	41.8	19.3	15.2	13.8	.7	413.8	6.6
American beech	26.4	33.4	45.3	55.7	45.6	44.6	40.5	27.0	35.6	4.5	358.8	10.1
White ash	12.1	20.2	28.5	30.3	27.6	24.5	13.5	5.5	10.2	.0	172.5	9.3
Sweetgum	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0	.3	100.0
Yellow-poplar	24.8	57.6	92.2	130.2	160.0	166.8	144.6	86.6	99.5	10.8	973.1	7.6
Blackgum	12.6	11.7	8.4	5.8	9.5	4.3	5.0	3.7	6.7	1.1	68.8	11.3
Aspen	2.8	2.8	.7	3.0	.3	3.0	.3	.0	.0	.0	12.9	27.2
Black cherry	19.0	37.4	51.0	66.6	64.4	72.0	68.7	39.7	59.3	4.7	482.7	9.7
White oak	24.8	62.7	67.5	79.5	86.1	67.9	49.9	31.5	43.4	14.5	527.8	7.3
Northern red oak	27.0	46.8	70.9	96.5	110.0	101.8	97.3	75.0	141.8	32.2	799.2	6.3
Other white oaks	49.6	103.1	137.6	135.5	112.0	108.3	61.9	50.1	73.0	9.2	840.3	5.9
Other red oaks	19.0	46.2	68.2	61.8	69.6	53.4	33.2	29.3	49.6	6.8	437.1	7.4
American basswood	7.5	15.8	21.0	31.0	39.6	43.0	20.2	20.8	21.2	1.7	221.9	12.3
Elm	9.8	9.9	9.3	7.9	7.0	4.1	4.6	1.3	6.5	.0	60.4	16.1
Other hardwoods	59.0	114.0	122.8	84.6	85.9	69.9	46.1	27.4	24.9	7.3	641.9	6.5
Total hardwoods	487.7	859.8	1,065.5	1,092.9	1,082.3	942.5	701.5	473.7	694.5	106.1	7,506.4	1.8
Total, all species	546.5	947.8	1,156.5	1,180.8	1,162.4	1,017.5	755.6	517.9	734.8	114.5	8,134.2	1.6
SE	2.9	2.8	2.6	2.5	2.9	3.4	4.4	5.1	5.0	9.6	1.6	

Table 38. Net volume of growing-stock trees on timberland by species and diameter class, Northeastern Unit, West Virginia, 2000

(In millions of cubic feet)

Species group	Diameter class (inches at breast height)										All classes	SE
	5.0-6.9	7.0-8.9	9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9	21.0-28.9	29.0+		
Red spruce	6.6	10.8	14.1	23.0	17.1	21.6	14.3	14.7	11.7	.0	133.9	27.0
Red pine	.6	.2	.3	.0	.0	.0	.0	.0	.0	.0	1.1	100.0
Pitch pine	4.3	4.2	6.1	8.7	9.8	2.1	3.8	3.2	1.8	.0	44.1	21.8
Eastern white pine	9.5	15.4	17.7	12.6	22.5	20.8	18.2	12.4	12.4	13.5	154.8	23.8
Loblolly pine	.2	.5	.0	.4	.0	.9	.0	.0	.0	.0	2.0	52.9
Virginia pine	17.5	32.3	29.1	13.8	6.6	3.2	1.9	.0	.0	.0	104.4	16.8
Other yellow pines	2.5	5.4	5.4	4.5	1.7	2.6	.0	.0	.0	.0	22.2	40.4
Eastern hemlock	17.9	28.4	21.0	31.5	28.4	19.0	15.0	9.7	38.1	5.2	214.2	17.1
Other softwoods	1.2	.9	.3	.5	.0	.0	.0	.0	.0	.0	2.9	40.3
Total softwoods	60.3	98.1	94.2	95.1	86.0	70.2	53.2	39.9	64.0	18.7	679.6	9.9
Red maple	78.7	136.5	177.6	175.6	150.7	115.3	87.2	53.7	41.8	7.7	1,024.8	5.9
Sugar maple	53.3	99.0	107.6	99.8	93.8	69.2	65.5	39.8	89.3	20.8	738.2	7.7
Yellow birch	16.7	31.7	48.3	33.6	14.4	10.8	5.9	1.9	14.5	3.7	181.5	14.3
Hickory	38.8	63.5	107.1	70.3	65.5	63.4	29.6	25.9	25.6	.0	489.7	8.1
American beech	27.2	45.7	44.4	43.5	45.5	34.2	34.5	23.8	46.7	11.1	356.6	10.4
White ash	12.3	20.3	25.0	19.8	24.5	25.5	19.2	18.0	23.0	.0	187.5	11.7
Yellow-poplar	19.8	44.3	85.4	95.8	176.8	191.6	127.5	93.9	171.1	14.0	1,020.2	8.9
Blackgum	13.0	12.7	14.0	4.0	6.9	7.3	3.2	8.6	2.2	.0	71.8	13.2
Aspen	1.0	2.8	2.8	3.7	.0	6.1	.0	.0	.0	.0	16.4	36.0
Black cherry	18.2	36.1	51.5	48.2	60.4	52.3	69.0	49.9	96.3	9.5	491.4	11.1
White oak	21.1	52.0	84.7	91.8	102.5	84.2	61.1	40.2	63.6	16.2	617.4	8.0
Northern red oak	12.3	28.6	47.9	71.4	110.8	95.2	103.9	96.2	211.3	48.9	826.6	7.7
Other white oaks	33.8	91.3	114.7	125.4	114.5	94.5	68.2	46.9	76.0	2.8	768.1	7.3
Other red oaks	17.8	42.1	61.1	82.5	79.8	66.7	42.2	12.1	38.6	7.4	450.4	8.7
American basswood	5.1	12.8	32.9	41.3	43.4	47.5	32.9	29.2	41.1	15.4	301.5	15.5
Elm	6.9	8.3	7.8	4.3	2.6	3.6	3.3	4.3	.9	.0	42.0	20.1
Other hardwoods	46.6	82.3	108.4	88.5	98.8	68.0	56.1	17.6	44.0	26.1	636.3	7.8
Total hardwoods	422.6	810.1	1,121.0	1,099.5	1,191.0	1,035.4	809.3	562.0	986.0	183.5	8,220.4	2.4
Total, all species	482.9	908.2	1,215.2	1,194.6	1,277.0	1,105.6	862.4	602.0	1,050.0	202.2	8,900.1	2.3
SE	3.0	2.9	2.9	3.3	3.8	4.5	5.4	7.9	7.0	18.3	2.3	

Table 39. Net volume of growing-stock trees on timberland by forest type and stand-size class, Northeastern Unit, West Virginia, 2000

(In millions of cubic feet)

Forest type	Stand-size class				All classes	SE
	Saw-timber	Pole-timber	Sapling and seedling	Non-stocked		
White pine	74.6	.0	.9	.0	75.5	46.8
White pine/hemlock	38.3	.0	.0	.0	38.3	72.2
Hemlock	102.2	4.4	.0	.0	106.6	38.8
White/red pine group	215.1	4.4	.9	.0	220.4	27.7
Red spruce	63.6	.0	.0	.0	63.6	49.9
Spruce/fir group	63.6	.0	.0	.0	63.6	49.9
Virginia pine	29.9	18.9	2.2	.0	50.9	39.8
Eastern redcedar	.2	.3	.0	.0	.4	72.7
Pitch pine	15.2	2.2	2.8	.0	20.2	56.2
Table mountain pine	.0	9.1	.0	.0	9.1	100.0
Loblolly/shortleaf group	45.2	30.5	5.0	.0	80.7	30.7
Wh. pine/no.red oak/wh. ash	10.0	.0	.0	.0	10.0	100.0
Eastern redcedar/hardwood	.0	1.8	.0	.0	1.8	100.0
Virginia pine/oak	44.7	44.7	.0	.0	89.4	26.7
Loblolly pine/hardwood	.0	.0	.1	.0	.1	100.0
Other oak/pine	28.7	.0	.0	.0	28.7	46.1
Oak/pine group	83.3	46.4	.1	.0	129.9	22.2
Post, black, or bear oak	27.4	.0	.0	.0	27.4	55.1
Chestnut oak	394.2	107.0	.0	.0	501.2	15.3
White oak/red oak/hickory	607.1	113.7	12.0	.0	732.8	13.9
White oak	153.1	26.6	.0	.0	179.7	25.4
Northern red oak	280.9	5.4	1.7	.0	288.0	24.4
Y-poplar/wh. oak/no.red oak	260.3	16.6	.0	.0	276.9	31.6
Black locust	20.0	14.4	2.1	.2	36.7	44.7
Black walnut	1.7	2.7	.0	.0	4.4	59.1
Yellow-poplar	145.9	21.5	1.6	.0	169.0	36.4
Hawthorn/reverting field	.0	.0	1.0	.0	1.0	84.5
Scarlet oak	6.4	21.3	3.7	.0	31.4	50.2
Sassafras/persimmon	.0	4.0	.0	.0	4.0	100.0
Red maple/central hardwood	88.7	15.0	5.2	.0	108.9	35.5
Mixed central hardwoods	2,457.8	513.7	18.5	.3	2,990.3	6.3
Oak/hickory group	4,443.5	861.8	45.8	.5	5,351.6	4.0

Table 39. continued

(In millions of cubic feet)

Forest type	Stand-size class				All classes	SE
	Saw-timber	Pole-timber	Sapling and seedling	Non-stocked		
Black ash/Amer. elm/red maple	2.8	11.9	5.4	.0	20.1	52.5
Red maple(lowland)	.0	.0	.0	.5	.5	100.0
Red maple(upland)	.0	.0	3.0	.6	3.6	65.1
River birch/sycamore	29.6	.0	.0	.0	29.6	59.6
Sycamore/pecan/American elm	26.5	4.4	.0	.0	30.9	62.8
American elm/green ash	13.5	.4	.0	.0	13.9	97.4
Elm/ash/red maple group	72.4	16.7	8.4	1.1	98.6	31.3
Sugar maple/beech/yellow birch	1,405.8	226.9	.5	.0	1,633.2	9.1
Black cherry	98.9	33.2	2.4	.0	134.5	39.0
Red maple/northern hardwoods	355.3	55.3	.0	.0	410.6	20.8
Pin cherry/reverting field	.0	.0	6.0	.0	6.0	70.7
Mixed northern hardwoods	683.2	73.3	6.6	.0	763.2	15.5
Northern hardwoods group	2,543.2	388.7	15.5	.0	2,947.4	6.4
Aspen	.0	7.8	.0	.0	7.8	80.8
Aspen/birch group	.0	7.8	.0	.0	7.8	80.8
All forest types	7,466.5	1,356.2	75.7	1.6	8,900.1	2.3
SE	3.2	7.8	18.1	46.5	2.3	

Table 40. Net volume of sawtimber trees on timberland by species and diameter class, Northeastern Unit, West Virginia, 1989

(In millions of board feet)

Species group	Diameter class (inches at breast height)								All classes	SE
	9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9	21.0-28.9	29.0+		
Balsam fir	1.2	2.7	.0	.0	.0	.0	.0	.0	3.9	100.0
Red spruce	56.2	84.5	127.8	166.6	120.7	74.4	46.8	.0	677.0	29.7
Red pine	.0	1.5	.0	.0	3.1	.0	.0	.0	4.5	100.0
Pitch pine	45.4	44.7	52.3	20.1	3.0	5.6	.0	.0	171.1	22.6
Eastern white pine	38.9	54.9	54.4	56.9	59.1	44.8	76.1	3.8	388.9	22.8
Virginia pine	89.6	58.2	25.5	10.7	7.9	.0	.0	.0	191.9	17.1
Other yellow pines	21.3	20.4	15.1	9.8	3.5	.0	.0	.0	70.1	29.9
Eastern hemlock	49.1	81.5	73.0	94.0	72.2	106.5	91.0	40.9	608.1	16.1
Other softwoods	.8	.0	.5	.0	.0	.0	.0	.0	1.3	74.1
Total softwoods	302.6	348.5	348.6	358.1	269.3	231.2	214.0	44.6	2,116.9	11.4
Red maple	.0	486.5	503.4	374.4	221.8	145.8	212.6	13.1	1,957.5	7.9
Sugar maple	.0	295.9	316.6	192.3	192.6	106.8	219.8	32.7	1,356.7	10.3
Yellow birch	.0	87.7	47.4	34.1	19.0	15.2	73.9	17.1	294.3	20.4
Hickory	.0	292.6	253.1	188.0	90.0	74.2	71.2	3.8	972.9	8.0
American beech	.0	219.2	191.7	197.4	186.2	127.8	177.7	24.2	1,124.1	11.2
White ash	.0	125.3	120.4	113.7	61.3	25.9	48.9	.0	495.5	10.9
Sweetgum	.0	.0	1.4	.0	.0	.0	.0	.0	1.4	100.0
Yellow-poplar	.0	518.8	719.5	789.3	721.9	441.7	526.5	53.8	3,771.5	8.2
Blackgum	.0	21.8	38.6	18.0	22.6	17.3	32.3	5.4	155.9	15.5
Aspen	.0	12.4	1.3	14.0	1.2	.0	.0	.0	28.9	37.6
Black cherry	.0	257.0	276.7	328.2	326.2	200.8	310.5	27.3	1,726.8	11.4
White oak	.0	304.0	365.9	298.6	226.9	147.2	208.8	73.5	1,624.7	8.2
Northern red oak	.0	364.8	450.3	433.2	446.9	348.6	684.3	161.3	2,889.3	7.0
Other white oaks	.0	478.3	431.7	430.4	247.2	214.5	320.9	34.3	2,157.4	6.8
Other red oaks	.0	231.9	283.0	225.3	150.8	133.8	235.7	34.2	1,294.6	9.0
American basswood	.0	120.9	174.3	195.9	99.1	103.2	105.6	10.8	809.8	13.5
Elm	.0	29.9	29.7	17.9	20.9	6.3	30.9	.0	135.6	25.2
Other hardwoods	.0	330.3	364.8	307.3	209.1	125.3	117.7	37.8	1,492.2	8.3
Total hardwoods	.0	4,177.0	4,569.9	4,158.0	3,243.5	2,234.3	3,377.4	529.1	22,289.2	2.5
Total, all species	302.6	4,525.5	4,918.5	4,516.1	3,512.8	2,465.5	3,591.4	573.7	24,406.1	2.3
SE	11.0	2.6	2.9	3.5	4.5	5.2	5.1	9.8	2.3	

Table 41. Net volume of sawtimber trees on timberland by species and diameter class, Northeastern Unit, West Virginia, 2000

(In millions of board feet)

Species group	Diameter class (inches at breast height)								All classes	SE
	9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9	21.0-28.9	29.0+		
Red spruce	51.8	102.1	84.3	113.6	80.2	88.6	67.1	.0	587.7	28.6
Red pine	1.3	.0	.0	.0	.0	.0	.0	.0	1.3	100.0
Pitch pine	20.4	35.3	40.0	9.5	16.6	16.1	9.0	.0	147.0	24.3
Eastern white pine	64.1	54.1	101.7	95.7	89.7	63.9	65.4	80.2	614.8	26.6
Loblolly pine	.0	1.7	.0	3.4	.0	.0	.0	.0	5.1	74.8
Virginia pine	98.3	53.7	28.4	13.3	8.2	.0	.0	.0	201.9	21.2
Other yellow pines	18.5	18.5	7.3	11.8	.0	.0	.0	.0	56.0	36.4
Eastern hemlock	65.4	120.0	119.1	83.1	71.4	43.3	187.3	27.2	716.8	20.2
Other softwoods	.9	1.5	.0	.0	.0	.0	.0	.0	2.4	100.0
Total softwoods	320.8	386.9	380.8	330.4	266.1	212.0	328.8	107.4	2,333.1	12.2
Red maple	.0	683.0	650.2	520.4	404.4	243.3	191.5	39.1	2,732.0	8.1
Sugar maple	.0	386.3	400.2	311.0	297.8	173.9	420.7	112.7	2,102.6	10.3
Yellow birch	.0	133.3	54.5	47.7	25.1	9.0	69.1	15.6	354.3	20.2
Hickory	.0	265.6	278.4	288.2	137.7	132.8	133.1	.0	1,235.7	11.2
American beech	.0	183.8	199.8	152.4	158.0	106.9	221.9	76.1	1,098.9	12.7
White ash	.0	79.8	110.1	120.9	80.5	89.9	105.6	.0	586.7	15.0
Yellow-poplar	.0	383.6	778.5	904.0	629.5	476.7	872.7	67.8	4,112.8	9.9
Blackgum	.0	14.3	28.6	34.8	17.0	43.1	10.8	.0	148.4	24.6
Aspen	.0	16.2	.0	30.1	.0	.0	.0	.0	46.3	42.4
Black cherry	.0	187.0	257.3	240.8	334.8	250.2	495.5	61.8	1,827.4	13.5
White oak	.0	359.1	443.1	377.9	280.3	195.7	312.9	82.2	2,051.0	9.0
Northern red oak	.0	275.0	473.2	416.7	493.3	461.3	1,021.3	276.8	3,417.5	8.6
Other white oaks	.0	462.4	451.0	384.7	283.9	200.1	342.8	11.1	2,135.9	8.5
Other red oaks	.0	319.1	336.6	284.1	195.7	52.3	184.6	20.0	1,392.4	9.8
American basswood	.0	161.3	198.3	221.9	165.0	148.8	206.4	86.4	1,188.1	17.8
Elm	.0	15.8	8.3	18.3	14.1	21.4	6.2	.0	84.1	32.6
Other hardwoods	.0	357.0	425.5	306.0	265.9	88.7	235.8	133.7	1,812.7	10.6
Total hardwoods	.0	4,282.6	5,093.4	4,659.6	3,783.0	2,694.2	4,830.7	983.3	26,327.0	3.3
Total, all species	320.8	4,669.5	5,474.2	4,990.1	4,049.1	2,906.2	5,159.5	1,090.8	28,660.0	3.1
SE	13.0	3.4	3.8	4.6	5.5	8.2	7.2	18.5	3.1	

Table 42. Net volume of sawtimber trees on timberland by species, size class, and tree grade, Northeastern Unit, West Virginia, 2000

(In millions of board feet)

Species group	>15" Diameter at breast height						All size classes						
	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	All grades	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	All grades	SE
Red spruce	318.6	.0	.0	.0	30.9	349.6	547.1	.0	.0	.0	40.6	587.7	28.6
Red pine	.0	.0	.0	.0	.0	.0	.0	.0	1.3	.0	.0	1.3	100.0
Pitch pine	6.3	40.0	4.9	.0	.0	51.2	17.0	66.5	60.6	.0	2.8	147.0	24.3
Eastern white pine	79.4	151.3	57.4	14.4	92.5	394.9	98.9	251.5	133.5	24.8	106.1	614.8	26.6
Loblolly pine	.0	3.4	.0	.0	.0	3.4	1.7	3.4	.0	.0	.0	5.1	74.8
Virginia pine	.0	4.5	17.1	.0	.0	21.5	15.0	32.4	153.4	.0	1.1	201.9	21.2
Other yellow pines	.0	4.5	3.1	.0	4.2	11.8	6.0	10.3	35.6	.0	4.2	56.0	36.4
Eastern hemlock	282.4	.0	.0	.0	129.9	412.3	486.1	.0	.0	.0	230.8	716.8	20.2
Other softwoods	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	2.4	2.4	100.0
Total softwoods	686.7	203.6	82.5	14.4	257.5	1,244.7	1,171.8	364.1	384.4	24.8	388.0	2,333.1	12.2
Red maple	285.0	400.6	351.2	129.6	232.3	1,398.7	285.0	598.6	1,131.7	369.3	347.4	2,732.0	8.1
Sugar maple	337.5	238.2	358.2	140.0	242.1	1,316.1	337.5	405.7	789.0	278.9	291.4	2,102.6	10.3
Yellow birch	25.6	30.3	20.5	19.2	70.9	166.5	25.6	42.0	138.8	62.7	85.1	354.3	20.2
Hickory	162.0	314.0	115.1	58.7	41.9	691.8	162.0	466.1	393.5	151.7	62.5	1,235.7	11.2
American beech	28.7	96.1	161.9	188.2	240.5	715.3	28.7	117.3	314.6	342.4	295.9	1,098.9	12.7
White ash	204.8	136.7	48.6	.0	6.9	396.9	204.8	219.4	146.7	4.5	11.4	586.7	15.0
Yellow-poplar	1,542.4	686.6	400.6	199.9	121.2	2,950.7	1,542.4	1,143.7	819.5	441.0	166.1	4,112.8	9.9
Blackgum	35.4	58.2	.0	9.1	2.9	105.6	35.4	68.8	22.0	11.3	10.9	148.4	24.6
Aspen	.0	18.5	6.1	5.5	.0	30.1	.0	18.5	13.0	14.8	.0	46.3	42.4
Black cherry	635.2	293.4	114.8	17.5	322.2	1,383.1	635.2	460.8	338.0	36.3	357.1	1,827.4	13.5
White oak	499.4	395.9	148.5	44.4	160.6	1,248.8	499.4	633.7	574.6	156.8	186.4	2,051.0	9.0
Northern red oak	1,356.1	695.6	277.2	84.7	255.7	2,669.4	1,356.1	984.7	653.4	149.0	274.4	3,417.5	8.6
Other white oaks	500.7	346.7	238.1	40.8	96.3	1,222.6	500.7	678.9	762.8	67.3	126.2	2,135.9	8.5
Other red oaks	163.0	263.4	98.8	148.4	63.0	736.7	163.0	376.7	458.5	323.8	70.3	1,392.4	9.8
American basswood	346.9	156.4	105.9	.0	219.3	828.5	346.9	308.9	290.4	8.5	233.4	1,188.1	17.8
Elm	30.8	8.9	6.2	.0	14.1	60.0	30.8	11.4	23.9	2.4	15.6	84.1	32.6
Other hardwoods	434.5	191.8	103.8	88.7	211.4	1,030.2	434.5	387.2	514.9	214.9	261.2	1,812.7	10.6
Total hardwoods	6,588.1	4,331.2	2,555.5	1,174.8	2,301.2	16,950.9	6,588.1	6,922.6	7,385.4	2,635.6	2,795.3	26,327.0	3.3
Total, all species	7,274.8	4,534.8	2,638.0	1,189.2	2,558.8	18,195.6	7,759.9	7,286.6	7,769.8	2,660.4	3,183.3	28,660.0	3.1
SE	6.4	6.0	7.5	10.2	8.8	4.2	6.2	4.7	3.6	6.4	7.5	3.1	

Table 43. Average annual net change of growing-stock volume on timberland by species and component of change, Northeastern Unit, West Virginia, 2000

(In thousands of cubic feet)

Species group	Component of change								Net change
	Ingrowth	Accretion	Gross growth	Mortality	Cull decrement	Cull increment	Net growth	Removals	
Balsam fir	0	0	0	0	0	0	0	-276	-276
Red spruce	217	1,793	2,010	-256	1,283	0	3,037	-1,059	1,978
Red pine	51	280	331	-113	0	0	218	0	218
Pitch pine	0	14	14	-634	0	0	-620	-638	-1,259
Eastern white pine	603	4,163	4,766	-76	0	-126	4,564	-540	4,024
Virginia pine	788	4,129	4,918	-3,523	0	-344	1,051	-639	412
Other yellow pines	0	545	545	-809	0	0	-264	0	-264
Eastern hemlock	658	3,098	3,756	-1,236	0	-1,023	1,497	-2,027	-530
Other softwoods	39	9	48	0	0	0	48	0	48
Total softwoods	2,357	14,031	16,389	-6,647	1,283	-1,492	9,533	-5,180	4,353
Red maple	4,822	32,156	36,978	-2,403	2,656	-3,553	33,677	-7,392	26,285
Sugar maple	2,915	11,332	14,247	-3,243	2,364	-1,223	12,145	-4,455	7,690
Yellow birch	312	3,851	4,163	-2,148	3,448	-650	4,813	-2,228	2,585
Hickory	594	6,777	7,371	-3,361	0	0	4,009	0	4,009
American beech	923	7,625	8,548	-8,165	269	-1,801	-1,149	-1,256	-2,405
White ash	735	5,233	5,968	-819	77	-741	4,485	-1,210	3,275
Yellow-poplar	1,841	32,714	34,556	-1,623	1,035	-83	33,884	-9,020	24,864
Blackgum	191	858	1,049	0	0	0	1,049	0	1,049
Aspen	287	776	1,064	-534	161	0	690	0	690
Black cherry	3,012	15,782	18,794	-2,782	3,075	-1,218	17,869	-11,678	6,191
White oak	326	12,036	12,362	-2,107	1,689	-1,428	10,516	-10,139	377
Northern red oak	805	16,419	17,225	-13,595	46	-676	3,000	-21,561	-18,561
Other white oaks	551	13,490	14,041	-11,696	378	-3,328	-604	-10,223	-10,828
Other red oaks	466	8,569	9,035	-5,015	0	-118	3,902	-10,890	-6,988
American basswood	657	2,656	3,313	-3,317	0	0	-4	-1,229	-1,233
Elm	70	560	630	-1,575	0	-64	-1,009	-145	-1,154
Other hardwoods	3,850	17,450	21,300	-4,668	6,252	-2,794	20,090	-5,772	14,318
Total hardwoods	22,357	188,286	210,643	-67,050	21,451	-17,679	147,364	-97,198	50,166
Total, all species	24,714	202,318	227,032	-73,698	22,734	-19,172	156,897	-102,378	54,519

Table 44. Average annual net change of sawtimber volume on timberland by species and component of change, Northeastern Unit, West Virginia, 2000

(In thousands of board feet)

Species group	Component of change								Net change
	Ingrowth	Accretion	Gross growth	Mortality	Cull decrement	Cull increment	Net growth	Removals	
Balsam fir	0	0	0	0	0	0	0	-1,032	-1,032
Red spruce	0	11,974	11,974	-911	6,635	0	17,698	-4,867	12,831
Red pine	808	0	808	0	0	0	808	0	808
Pitch pine	0	502	502	-2,066	0	0	-1,564	-2,535	-4,099
Eastern white pine	3,750	17,917	21,667	0	0	0	21,667	0	21,667
Virginia pine	9,636	6,643	16,279	-8,062	0	0	8,217	-2,485	5,732
Other yellow pines	1,724	0	1,724	-2,845	0	0	-1,121	0	-1,121
Eastern hemlock	5,672	8,024	13,696	-4,793	0	-1,595	7,307	-8,376	-1,069
Total softwoods	21,590	45,059	66,649	-18,678	6,635	-1,595	53,011	-19,295	33,716
Red maple	68,689	64,590	133,279	-3,319	7,594	-11,478	126,075	-24,797	101,278
Sugar maple	35,742	10,414	46,156	-10,073	11,326	0	47,409	-19,217	28,191
Yellow birch	6,434	3,012	9,446	-1,622	13,408	-2,547	18,685	-3,083	15,602
Hickory	10,323	10,477	20,800	-7,196	0	0	13,604	0	13,604
American beech	22,755	17,692	40,447	-27,635	0	-5,065	7,747	-4,577	3,170
White ash	10,531	13,117	23,648	0	0	-2,274	21,374	-5,663	15,711
Yellow-poplar	33,043	128,067	161,109	0	5,207	0	166,317	-41,169	125,148
Blackgum	0	1,461	1,461	0	0	0	1,461	0	1,461
Aspen	0	1,259	1,259	0	0	0	1,259	0	1,259
Black cherry	24,164	54,740	78,904	-8,166	11,054	-4,662	77,130	-56,969	20,161
White oak	22,137	30,917	53,055	-3,905	6,557	-3,487	52,220	-44,873	7,347
Northern red oak	24,936	63,643	88,579	-59,977	0	-2,300	26,302	-96,910	-70,608
Other white oaks	27,430	27,056	54,487	-43,078	1,151	-11,679	880	-35,653	-34,773
Other red oaks	16,343	19,147	35,490	-19,061	0	0	16,430	-45,719	-29,289
American basswood	0	15,300	15,300	-14,544	0	0	755	-5,561	-4,805
Elm	0	0	0	-2,095	0	0	-2,095	0	-2,095
Other hardwoods	29,909	57,799	87,708	-8,716	22,537	-4,123	97,406	-15,738	81,669
Total hardwoods	332,436	518,692	851,128	-209,387	78,835	-47,615	672,961	-399,931	273,030
Total, all species	354,026	563,751	917,777	-228,065	85,470	-49,210	725,972	-419,225	306,746

Table 45. Area of timberland by forest type, forest-type group, and stand-size class, Southern Unit, West Virginia, 1989

(In thousands of acres)

Forest type	Stand-size class				All classes	SE
	Saw-timber	Pole-timber	Sapling and seedling	Non-stocked		
Red pine	.0	3.7	.0	.0	3.7	100.0
White pine	9.2	7.4	.0	2.9	19.5	46.9
Hemlock	18.7	.0	.0	.0	18.7	50.7
White/red pine group	27.9	11.1	.0	2.9	41.9	32.7
Virginia pine	18.5	10.0	4.7	.0	33.1	40.7
Loblolly/shortleaf group	18.5	10.0	4.7	.0	33.1	40.7
Wh. pine/no.red oak/wh. ash	9.0	.0	.0	.0	9.0	100.0
Eastern redcedar/hardwood	.0	.0	4.5	.0	4.5	100.0
Shortleaf pine/oak	3.3	.0	.0	.0	3.3	100.0
Virginia pine/oak	15.9	19.1	.0	.0	35.0	36.9
Other oak/pine	4.8	6.1	.0	.0	10.9	71.3
Oak/pine group	32.9	25.2	4.5	.0	62.5	29.3
Post, black, or bear oak	4.4	.0	.0	.0	4.4	100.0
Chestnut oak	123.7	53.0	.0	2.6	179.3	16.0
White oak/red oak/hickory	187.5	69.3	13.5	.0	270.4	12.8
White oak	44.2	36.6	2.9	.0	83.7	24.4
Northern red oak	19.2	4.5	.0	.0	23.7	44.7
Y-poplar/wh. oak/no.red oak	74.9	32.6	.0	.0	107.5	21.3
Black locust	.0	10.1	10.9	.0	21.1	42.2
Sweetgum/yellow-poplar	.0	4.7	.0	.0	4.7	100.0
Yellow-poplar	50.3	67.3	5.0	2.6	125.2	19.5
Hawthorn/reverting field	.0	.0	12.4	.0	12.4	59.5
Scarlet oak	11.2	10.5	.0	.0	21.7	52.6
Sassafras/persimmon	4.0	8.1	3.0	.0	15.2	50.7
Red maple/central hardwood	9.3	10.9	4.5	.0	24.7	44.8
Mixed central hardwoods	1,511.2	838.1	120.6	.0	2,469.9	2.8
Oak/hickory group	2,040.0	1,145.7	172.9	5.1	3,363.7	1.8
Black ash/Amer. elm/red maple	.0	17.4	.0	.0	17.4	58.1
River birch/sycamore	15.3	.0	.0	.0	15.3	60.8
American elm/green ash	.0	.0	3.7	.0	3.7	100.0
Elm/ash/red maple group	15.3	17.4	3.7	.0	36.4	39.1
Sugar maple/beech/yellow birch	296.2	49.1	10.7	.0	356.1	11.3
Black cherry	.0	9.6	4.8	.0	14.4	56.9
Red maple/northern hardwoods	6.1	.0	2.7	.0	8.8	75.7
Pin cherry/reverting field	.0	.0	4.0	.0	4.0	100.0
Mixed northern hardwoods	160.1	33.0	21.9	.0	215.1	15.0
Northern hardwoods group	462.5	91.8	44.2	.0	598.5	8.4
All forest types	2,597.1	1,301.2	229.9	8.0	4,136.2	.7
SE	2.6	5.0	12.7	57.8	.7	

Table 46. Area of timberland by forest type, forest-type group, and stand-size class, Southern Unit, West Virginia, 2000

(In thousands of acres)

Forest type	Stand-size class				All classes	SE
	Saw-timber	Pole-timber	Sapling and seedling	Non-stocked		
White pine	13.8	5.6	.0	3.3	22.7	46.1
Hemlock	22.4	.0	.0	.0	22.4	50.1
White/red pine group	36.1	5.6	.0	3.3	45.1	34.0
Virginia pine	19.4	7.5	.0	.0	26.9	42.3
Pitch pine	5.7	.0	3.0	.0	8.7	73.8
Loblolly/shortleaf group	25.1	7.5	3.0	.0	35.6	36.5
Wh. pine/no.red oak/wh. ash	6.5	.0	.0	.0	6.5	100.0
Eastern redcedar/hardwood	.0	2.8	.0	.0	2.8	100.0
Virginia pine/oak	9.7	25.0	3.7	.0	38.4	35.2
Other oak/pine	.0	.7	.0	.0	.7	100.0
Oak/pine group	16.2	28.5	3.7	.0	48.4	31.0
Post, black, or bear oak	21.5	.0	.0	.0	21.5	50.9
Chestnut oak	153.8	34.5	9.9	.0	198.1	16.2
White oak/red oak/hickory	206.6	67.5	10.5	.0	284.6	13.4
White oak	52.2	21.8	.0	.0	74.0	24.9
Northern red oak	59.6	2.9	.0	.0	62.5	28.6
Y-poplar/wh. oak/no.red oak	111.9	27.2	7.6	.0	146.7	19.4
Black locust	8.0	11.0	18.9	3.5	41.4	31.5
Yellow-poplar	74.5	29.8	11.9	8.2	124.4	19.0
Hawthorn/reverting field	.0	.0	10.4	8.2	18.5	55.5
Scarlet oak	7.6	7.6	.0	.0	15.3	48.9

Table 46. continued

(In thousands of acres)

Forest type	Stand-size class				All classes	SE
	Saw-timber	Pole-timber	Sapling and seedling	Non-stocked		
Sassafras/persimmon	.0	.0	13.4	.0	13.4	64.0
Red maple/central hardwood	26.6	10.0	12.5	1.3	50.4	30.5
Mixed central hardwoods	1,410.4	517.3	151.2	.0	2,078.9	3.6
Oak/hickory group	2,132.8	729.5	246.2	21.2	3,129.7	2.2
Black ash/Amer. elm/red maple	3.1	.0	1.2	4.7	8.9	61.5
Red maple(upland)	.0	1.5	2.7	1.2	5.5	50.4
River birch/sycamore	13.6	4.5	7.5	.0	25.7	43.7
Willow	1.6	.0	5.4	.0	7.0	80.3
Sycamore/pecan/American elm	6.3	.0	.0	.0	6.3	100.0
Elm/ash/red maple group	24.7	6.1	16.8	5.8	53.4	29.2
Sugar maple/beech/yellow birch	233.8	33.2	40.8	.0	307.7	12.8
Black cherry	.0	5.6	13.1	.0	18.8	48.6
Red maple/northern hardwoods	5.7	11.4	5.1	.0	22.2	48.3
Pin cherry/reverting field	.0	.0	22.6	2.0	24.6	45.1
Mixed northern hardwoods	196.1	93.5	28.5	3.9	322.0	12.5
Northern hardwoods group	435.5	143.7	110.1	5.9	695.2	8.1
All forest types	2,670.4	921.0	380.0	36.2	4,007.5	1.0
SE	2.7	6.6	10.9	35.3	1.0	

Table 47. Number of live trees (1.0+ inches d.b.h.) on timberland by species and diameter class, Southern Unit, West Virginia, 2000

(In thousands of trees)

Species group	Diameter class (inches at breast height)						
	1.0-2.9	3.0-4.9	5.0-6.9	7.0-8.9	9.0-10.9	11.0-12.9	13.0-14.9
White spruce	0	280	22	0	0	0	0
Red spruce	0	0	102	34	0	0	0
Red pine	844	0	347	126	42	0	0
Pitch pine	0	1,423	762	406	517	247	192
Eastern white pine	18,098	5,034	2,983	1,628	1,258	757	505
Virginia pine	883	883	1,695	1,968	1,564	1,155	592
Other yellow pines	862	476	77	149	211	34	0
Eastern hemlock	31,580	13,822	5,604	2,635	2,021	929	691
Other softwoods	422	1,654	684	436	273	68	0
Total softwoods	52,689	23,572	12,277	7,383	5,887	3,191	1,981
Red maple	215,575	62,697	29,879	16,239	9,190	4,905	2,765
Sugar maple	168,671	35,665	14,162	9,426	4,915	2,721	2,216
Yellow birch	5,530	1,752	1,840	767	383	317	174
Hickory	33,530	10,982	13,158	10,138	6,500	4,122	3,117
American beech	87,639	20,454	6,950	4,274	2,289	2,305	1,731
White ash	27,358	5,890	3,305	2,315	1,629	1,188	1,235
Sweetgum	0	0	38	67	0	38	0
Yellow-poplar	59,824	20,240	14,680	11,610	9,470	9,151	6,741
Blackgum	52,803	8,164	3,155	1,442	847	561	291
Aspen	560	0	71	38	38	0	0
Black cherry	24,133	4,441	3,108	2,388	1,580	824	602
White oak	8,998	6,680	10,556	10,966	8,081	5,872	3,586
Northern red oak	19,895	9,076	5,473	3,878	4,352	3,668	2,550
Other white oaks	21,445	13,643	13,187	11,721	9,882	7,917	4,695
Other red oaks	12,754	7,335	6,988	7,184	6,851	5,275	3,997
American basswood	24,948	4,208	3,197	3,371	2,338	1,684	1,425
Elm	16,303	5,814	2,563	1,174	688	146	212
Other commercial hardwoods	162,222	50,462	24,485	16,146	10,173	6,864	3,448
Noncommercial hardwoods	308,917	58,039	19,911	9,031	3,752	1,290	466
Total hardwoods	1,251,106	325,542	176,709	122,177	82,959	58,847	39,252
Total, all species	1,303,795	349,114	188,986	129,561	88,846	62,038	41,233
SE	3.6	4.5	2.5	2.7	2.9	3.2	3.5

Table 47. continued

(In thousands of trees)

Species group	Diameter class (inches at breast height)							
	15.0-16.9	17.0-18.9	19.0-20.9	21.0-28.9	29.0+	Total 5.0+	All classes	SE
White spruce	0	0	0	0	0	22	302	100.0
Red spruce	0	0	0	0	0	135	135	60.6
Red pine	0	0	0	0	0	516	1,360	85.9
Pitch pine	67	34	0	0	0	2,226	3,649	48.3
Eastern white pine	294	234	181	281	39	8,161	31,293	20.0
Virginia pine	74	0	34	0	0	7,082	8,847	27.5
Other yellow pines	0	0	0	0	0	471	1,809	59.5
Eastern hemlock	610	134	149	115	33	12,922	58,325	19.7
Other softwoods	0	0	0	0	0	1,462	3,538	52.5
Total softwoods	1,046	403	363	395	72	32,998	109,259	12.8
Red maple	1,684	922	428	472	76	66,559	344,831	5.5
Sugar maple	1,519	585	428	323	75	36,371	240,707	7.1
Yellow birch	38	72	76	0	34	3,701	10,983	25.7
Hickory	2,099	725	286	331	0	40,476	84,987	7.5
American beech	1,035	639	613	1,233	258	21,326	129,419	8.6
White ash	350	328	38	107	39	10,535	43,783	13.6
Sweetgum	0	0	0	0	0	144	144	62.7
Yellow-poplar	4,515	3,015	1,746	2,101	109	63,139	143,203	7.5
Blackgum	400	222	254	146	0	7,318	68,285	11.3
Aspen	0	0	0	0	0	148	708	80.8
Black cherry	406	226	169	99	0	9,403	37,977	16.7
White oak	2,399	1,809	865	1,015	34	45,184	60,862	8.3
Northern red oak	2,172	1,881	1,027	2,167	152	27,320	56,291	9.4
Other white oaks	2,658	1,635	1,165	1,883	107	54,851	89,939	8.8
Other red oaks	2,790	2,432	881	977	38	37,412	57,501	10.5
American basswood	1,510	779	360	590	38	15,291	44,447	19.7
Elm	114	76	37	0	0	5,012	27,130	18.0
Other commercial hardwoods	1,827	1,020	529	283	43	64,820	277,504	6.1
Noncommercial hardwoods	313	112	34	145	0	35,055	402,011	5.9
Total hardwoods	25,829	16,478	8,936	11,874	1,003	544,066	2,120,714	2.5
Total, all species	26,875	16,881	9,299	12,269	1,075	577,064	2,229,973	2.5
SE	4.3	5.6	6.9	6.2	18.8	1.7	2.5	

Table 48. Net volume of growing-stock trees on timberland by species and diameter class, Southern Unit, West Virginia, 1989

(In millions of cubic feet)

Species group	Diameter class (inches at breast height)										All classes	SE
	5.0-6.9	7.0-8.9	9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9	21.0-28.9	29.0+		
Red spruce	.1	.0	.0	.4	.4	.5	.0	.0	.0	.0	1.4	93.7
Red pine	.6	4.5	5.1	2.9	.3	.0	.0	.0	.0	.0	13.4	81.8
Pitch pine	1.8	2.7	3.4	4.6	3.4	2.7	.3	1.0	.0	.0	19.9	32.0
Eastern white pine	10.2	12.1	10.4	17.9	17.7	14.6	7.5	6.8	14.9	2.2	114.3	23.7
Virginia pine	6.9	19.6	24.9	17.4	8.5	2.2	.5	.6	.0	.0	80.7	23.1
Other yellow pines	.8	.8	.4	.8	.3	.6	.0	.0	.0	.0	3.6	43.0
Eastern hemlock	12.7	12.9	11.7	13.4	15.5	11.8	10.5	10.3	24.8	4.3	127.9	15.7
Other softwoods	.7	1.1	.0	.0	.0	.0	.0	.0	.0	.0	1.9	41.8
Total softwoods	33.8	53.8	55.8	57.4	46.1	32.5	18.9	18.7	39.8	6.4	363.1	11.2
Red maple	74.5	86.8	96.5	71.3	53.6	47.6	33.4	13.9	27.6	5.0	510.3	5.7
Sugar maple	41.4	47.2	52.6	48.5	48.4	40.2	23.0	22.4	33.9	5.4	362.9	7.5
Yellow birch	6.4	10.4	11.9	5.2	4.2	1.9	1.4	1.3	1.4	.6	44.6	22.5
Hickory	43.2	77.0	86.1	104.1	92.0	72.9	53.4	32.7	26.2	2.3	590.1	5.4
American beech	21.5	29.1	36.7	41.8	48.4	38.8	43.7	38.4	65.7	20.1	384.1	8.9
White ash	6.1	11.3	21.3	17.1	15.2	27.2	14.1	6.0	9.9	.0	128.2	12.4
Sweetgum	.3	.7	1.7	1.6	.4	.5	.0	.0	.0	.0	5.2	70.0
Yellow-poplar	55.4	124.5	196.5	212.6	229.5	224.1	169.3	108.0	109.3	15.5	1,444.7	4.9
Blackgum	7.4	9.7	8.0	8.7	13.3	13.1	10.5	8.4	11.4	.0	90.6	9.7
Aspen	.0	.3	1.1	.0	1.0	.0	.0	.8	.0	.0	3.2	50.1
Black cherry	6.7	10.3	15.6	14.9	11.8	12.0	11.7	4.5	7.6	.8	95.9	14.8
White oak	37.4	68.4	85.3	68.7	73.9	67.9	40.8	33.4	45.9	7.9	529.7	6.5
Northern red oak	16.3	36.3	57.5	59.2	73.4	70.8	59.7	54.0	109.3	21.4	557.8	5.0
Other white oaks	51.4	105.4	104.3	98.9	109.8	79.3	67.9	61.8	99.4	24.2	802.4	5.7
Other red oaks	29.2	66.8	102.3	99.5	108.8	108.9	76.0	64.6	100.0	14.4	770.7	5.4
American basswood	12.7	26.8	30.7	49.1	47.2	43.7	35.9	21.3	22.7	5.1	295.3	9.7
Elm	5.1	7.3	5.8	1.4	.8	1.9	1.5	1.7	.4	.0	25.9	19.7
Other hardwoods	62.8	103.1	118.2	92.5	73.3	64.6	42.5	23.5	19.5	6.0	606.1	4.6
Total hardwoods	477.8	821.5	1,032.2	995.0	1,005.2	915.4	685.0	496.5	690.5	128.6	7,247.7	1.6
Total, all species	511.6	875.3	1,088.1	1,052.4	1,051.4	947.8	703.8	515.1	730.3	135.1	7,610.7	1.5
SE	2.7	2.5	2.6	2.6	2.7	3.2	3.8	4.8	4.8	9.4	1.5	

Table 49. Net volume of growing-stock trees on timberland by species and diameter class, Southern Unit, West Virginia, 2000

(In millions of cubic feet)

Species group	Diameter class (inches at breast height)										All classes	SE
	5.0-6.9	7.0-8.9	9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9	21.0-28.9	29.0+		
White spruce	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	100.0
Red spruce	.2	.2	.0	.0	.0	.0	.0	.0	.0	.0	.5	60.7
Red pine	.8	1.0	.6	.0	.0	.0	.0	.0	.0	.0	2.4	77.6
Pitch pine	1.9	2.4	4.1	3.9	3.6	2.0	.8	.0	.0	.0	18.8	32.9
Eastern white pine	7.9	10.4	13.1	12.9	13.1	10.5	9.2	9.6	15.8	4.5	107.1	22.3
Virginia pine	4.5	12.5	13.4	16.2	12.1	2.2	.0	1.4	.0	.0	62.4	24.0
Other yellow pines	.1	.9	1.9	.7	.0	.0	.0	.0	.0	.0	3.6	45.5
Eastern hemlock	12.8	14.2	16.1	11.5	12.1	17.0	6.8	8.0	8.2	5.4	112.2	17.6
Other softwoods	1.6	1.6	1.4	.5	.0	.0	.0	.0	.0	.0	5.1	48.4
Total softwoods	30.0	43.1	50.7	45.8	41.0	31.8	16.8	18.9	24.0	9.9	312.0	11.6
Red maple	73.6	97.8	108.0	81.6	71.4	57.6	37.8	23.8	29.3	5.8	586.6	6.5
Sugar maple	35.9	57.6	55.3	45.9	57.4	51.7	25.6	17.9	25.2	8.0	380.4	8.0
Yellow birch	5.5	5.0	5.4	4.6	3.6	.9	2.4	4.3	.0	.0	31.5	32.1
Hickory	33.4	69.3	82.6	79.7	87.2	84.1	35.0	15.7	23.0	.0	510.0	6.7
American beech	13.6	25.9	25.3	35.4	36.6	33.6	26.4	27.1	84.5	19.5	328.1	10.7
White ash	8.8	14.1	18.5	21.7	30.1	13.0	13.9	2.0	9.7	6.9	138.7	13.2
Sweetgum	.1	.3	.0	1.0	.0	.0	.0	.0	.0	.0	1.4	78.5
Yellow-poplar	39.8	86.3	135.5	207.5	231.9	209.8	174.9	129.3	199.9	13.1	1,428.1	5.9
Blackgum	6.7	7.5	7.2	8.2	6.7	10.1	9.6	11.0	6.6	.0	73.6	13.3
Aspen	.1	.2	.6	.0	.0	.0	.0	.0	.0	.0	1.0	100.0
Black cherry	7.0	15.6	18.1	12.4	14.0	13.7	10.4	8.2	7.5	.0	106.8	16.1
White oak	29.1	70.0	92.0	102.8	86.1	78.3	77.7	45.3	71.0	5.4	657.7	7.3
Northern red oak	13.9	22.4	50.2	65.2	64.1	74.7	79.3	54.4	182.9	14.7	621.7	7.9
Other white oaks	32.0	70.9	106.4	124.8	104.0	77.0	58.1	49.6	107.2	14.4	744.4	6.6
Other red oaks	18.7	47.0	76.3	90.4	99.1	88.1	105.9	49.5	65.2	3.8	644.0	7.4
American basswood	8.9	25.1	32.3	38.8	47.2	60.5	41.4	24.5	50.4	6.7	335.7	13.2
Elm	5.6	6.4	7.6	1.8	3.4	3.7	2.9	2.5	.0	.0	33.9	19.7
Other hardwoods	54.6	92.4	103.2	101.1	78.0	55.2	42.9	20.8	18.9	5.7	573.0	5.9
Total hardwoods	387.3	713.7	924.3	1,023.0	1,020.9	911.8	744.3	486.0	881.1	104.0	7,196.5	2.3
Total, all species	417.3	756.8	975.1	1,068.8	1,061.8	943.6	761.2	504.9	905.1	114.0	7,508.5	2.2
SE	2.9	3.0	3.2	3.5	3.8	4.7	5.8	7.6	6.8	21.2	2.2	

Table 50. Net volume of growing-stock trees on timberland by forest type and stand-size class, Southern Unit, West Virginia, 2000

(In millions of cubic feet)

Forest type	Stand-size class				All classes	SE
	Saw-timber	Pole-timber	Sapling and seedling	Non-stocked		
White pine	42.3	3.9	.0	.0	46.2	56.4
Hemlock	57.5	.0	.0	.0	57.5	52.6
White/red pine group	99.8	3.9	.0	.0	103.7	38.5
Virginia pine	37.4	7.5	.0	.0	44.9	46.1
Pitch pine	6.9	.0	.0	.0	6.9	100.0
Loblolly/shortleaf group	44.2	7.5	.0	.0	51.7	42.0
Wh. pine/no.red oak/wh. ash	17.7	.0	.0	.0	17.7	100.0
Eastern redcedar/hardwood	.0	2.1	.0	.0	2.1	100.0
Virginia pine/oak	21.4	26.1	.1	.0	47.5	39.9
Other oak/pine	.0	.2	.0	.0	.2	100.0
Oak/pine group	39.1	28.4	.1	.0	67.6	37.7
Post, black, or bear oak	52.6	.0	.0	.0	52.6	53.9
Chestnut oak	295.6	51.2	2.5	.0	349.3	17.4
White oak/red oak/hickory	473.7	89.4	.5	.0	563.6	15.6
White oak	131.8	32.9	.0	.0	164.7	26.3
Northern red oak	166.1	5.1	.0	.0	171.2	32.1
Y-poplar/wh. oak/no.red oak	295.3	47.7	7.7	.0	350.8	21.7
Black locust	19.6	8.4	3.2	.0	31.2	56.3
Yellow-poplar	243.8	49.0	6.0	.0	298.9	22.0
Hawthorn/reverting field	.0	.0	1.2	.0	1.2	76.8
Scarlet oak	9.4	11.0	.0	.0	20.5	56.7
Sassafras/persimmon	.0	.0	3.9	.0	3.9	81.5
Red maple/central hardwood	71.2	7.7	3.6	.0	82.5	43.8
Mixed central hardwoods	3,073.4	743.8	78.5	.0	3,895.6	4.5
Oak/hickory group	4,832.4	1,046.3	107.1	.0	5,985.8	3.1
Black ash/Amer. elm/red maple	5.3	.0	.5	.0	5.8	91.3
Red maple(upland)	.0	2.6	.0	.2	2.8	93.9
River birch/sycamore	19.3	3.7	2.8	.0	25.7	58.2
Willow	1.9	.0	.2	.0	2.1	90.1
Sycamore/pecan/American elm	10.3	.0	.0	.0	10.3	100.0
Elm/ash/red maple group	36.7	6.3	3.5	.2	46.7	42.2
Sugar maple/beech/yellow birch	507.3	48.0	18.3	.0	573.6	14.8
Black cherry	.0	12.2	1.9	.0	14.0	87.2
Red maple/northern hardwoods	9.3	14.5	.0	.0	23.8	60.0
Pin cherry/reverting field	.0	.0	2.7	.0	2.7	68.5
Mixed northern hardwoods	483.9	148.3	6.6	.0	638.7	14.9
Northern hardwoods group	1,000.6	222.9	29.4	.0	1,252.9	10.0
All forest types	6,052.8	1,315.4	140.1	.2	7,508.5	2.2
SE	3.3	7.4	17.8	83.9	2.2	

Table 51. Net volume of sawtimber trees on timberland by species, size class, and tree grade, Southern Unit, West Virginia, 2000

(In millions of board feet)

Species group	>15" Diameter at breast height						All size classes						
	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	All grades	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	All grades	SE
Red pine	.0	.0	.0	.0	.0	.0	.0	.0	2.3	.0	.0	2.3	100.0
Pitch pine	5.2	3.8	.0	.0	3.0	12.1	15.3	19.4	15.0	.0	6.4	56.1	35.5
Eastern white pine	134.8	22.2	37.7	53.1	.0	247.7	160.3	32.3	99.8	108.5	.0	400.9	23.4
Virginia pine	.0	5.1	11.3	.0	.0	16.4	9.8	38.4	122.0	.0	8.7	178.9	26.4
Other yellow pines	.0	.0	.0	.0	.0	.0	.0	4.0	5.0	.0	.0	9.0	53.4
Eastern hemlock	133.8	.0	.0	.0	68.0	201.8	247.0	.0	.0	.0	92.7	339.7	21.5
Other softwoods	.0	.0	.0	.0	.0	.0	5.4	.0	.0	.0	1.3	6.7	61.6
Total softwoods	273.8	31.0	49.0	53.1	71.0	478.0	437.7	94.2	244.1	108.5	109.1	993.5	13.4
Red maple	112.3	181.5	115.9	28.6	275.6	713.8	112.3	300.2	498.3	95.6	328.8	1,335.1	9.7
Sugar maple	113.5	227.5	71.9	35.2	139.5	587.6	113.5	355.5	264.7	85.2	188.7	1,007.6	11.2
Yellow birch	6.9	10.0	.0	9.0	7.6	33.5	6.9	14.6	26.4	9.0	10.7	67.7	43.6
Hickory	250.3	237.7	129.5	39.6	90.5	747.6	250.3	484.5	477.5	87.0	126.0	1,425.2	8.9
American beech	48.6	34.3	195.3	238.2	393.6	909.9	48.6	49.4	323.1	350.7	438.2	1,209.9	12.8
White ash	107.5	40.0	19.6	19.7	27.2	214.0	107.5	136.8	117.1	28.8	44.1	434.4	16.8
Sweetgum	.0	.0	.0	.0	.0	.0	.0	.0	3.6	.0	.0	3.6	100.0
Yellow-poplar	1,681.2	938.7	411.3	222.8	350.1	3,604.1	1,681.2	1,514.4	1,292.5	504.9	402.1	5,395.2	6.8
Blackgum	30.7	25.4	57.9	5.0	44.5	163.4	30.7	34.1	92.9	10.3	53.3	221.3	18.2
Black cherry	91.7	52.6	11.2	4.8	41.9	202.3	91.7	92.5	66.7	4.8	53.8	309.5	21.2
White oak	399.7	392.6	318.3	70.4	64.9	1,246.0	399.7	617.8	783.4	136.6	87.9	2,025.4	8.7
Northern red oak	1,065.9	359.4	253.3	37.7	214.5	1,930.9	1,065.9	518.9	559.5	72.7	236.2	2,453.3	9.0
Other white oaks	428.7	451.3	193.2	4.9	221.1	1,299.3	428.7	719.0	728.7	27.4	261.1	2,165.0	8.0
Other red oaks	495.7	367.6	292.7	107.3	149.7	1,413.0	495.7	539.0	680.9	237.9	214.0	2,167.5	8.6
American basswood	412.2	240.4	69.7	.0	158.7	880.9	412.2	399.7	259.4	2.1	166.9	1,240.2	15.9
Elm	.0	12.4	18.7	.0	5.0	36.1	.0	18.5	27.0	2.4	8.7	56.6	38.8
Other hardwoods	203.2	186.6	111.4	11.5	170.5	683.2	203.2	359.2	525.7	60.0	271.1	1,419.1	8.8
Total hardwoods	5,448.1	3,758.0	2,269.9	834.8	2,354.9	14,665.6	5,448.1	6,154.3	6,727.4	1,715.5	2,891.4	22,936.6	3.1
Total, all species	5,721.9	3,789.0	2,318.9	887.9	2,425.9	15,143.6	5,885.8	6,248.5	6,971.5	1,824.0	3,000.5	23,930.2	3.0
SE	6.5	6.0	7.2	11.2	8.0	4.1	6.3	4.5	3.4	7.3	6.7	3.0	

Table 52. Net volume of sawtimber trees on timberland by species and diameter class, Southern Unit, West Virginia, 1989

(In millions of board feet)

Species group	Diameter class (inches at breast height)								All classes	SE
	9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9	21.0-28.9	29.0+		
Red spruce	.0	1.6	1.9	2.8	.0	.0	.0	.0	6.4	100.0
Red pine	17.7	12.0	1.4	.0	.0	.0	.0	.0	31.0	79.8
Pitch pine	11.1	17.3	13.3	11.3	1.3	4.5	.0	.0	58.8	33.8
Eastern white pine	35.5	74.8	78.4	70.6	38.3	36.6	81.3	12.2	427.8	24.2
Virginia pine	82.4	65.8	34.5	9.3	2.2	2.5	.0	.0	196.7	25.1
Other yellow pines	1.2	2.9	1.2	2.7	.0	.0	.0	.0	7.9	48.1
Eastern hemlock	37.8	52.2	64.4	53.1	48.7	49.4	124.6	21.8	452.1	16.4
Total softwoods	185.7	226.7	195.1	149.9	90.4	93.0	205.9	34.0	1,180.7	12.0
Red maple	.0	271.7	227.7	209.8	154.7	61.2	132.9	25.8	1,083.8	7.7
Sugar maple	.0	188.3	207.8	176.6	100.9	100.8	157.4	27.8	959.6	10.0
Yellow birch	.0	21.1	17.9	8.2	5.8	5.2	6.3	2.8	67.3	25.3
Hickory	.0	395.2	394.6	330.5	251.5	160.7	134.8	12.6	1,679.8	6.9
American beech	.0	165.5	206.3	171.6	202.6	183.0	329.7	108.2	1,366.9	9.7
White ash	.0	70.4	67.5	126.1	64.4	27.2	47.9	.0	403.5	15.0
Sweetgum	.0	6.3	1.5	2.0	.0	.0	.0	.0	9.8	73.4
Yellow-poplar	.0	847.2	1,041.0	1,061.9	845.2	554.6	582.9	75.4	5,008.2	5.6
Blackgum	.0	32.8	54.4	56.3	47.5	38.5	54.9	.0	284.4	11.3
Aspen	.0	.0	4.2	.0	.0	3.6	.0	.0	7.7	60.0
Black cherry	.0	57.6	50.3	54.7	56.2	23.1	40.4	5.1	287.5	16.7
White oak	.0	265.8	319.1	302.5	188.0	158.0	220.3	40.7	1,494.5	7.6
Northern red oak	.0	226.1	304.0	304.1	273.4	251.0	525.0	107.8	1,991.4	5.7
Other white oaks	.0	352.7	430.3	316.6	272.3	264.4	439.0	90.7	2,166.1	6.9
Other red oaks	.0	379.2	449.3	467.7	348.8	299.5	477.2	71.6	2,493.4	5.9
American basswood	.0	192.2	209.1	204.1	176.0	107.3	116.3	30.0	1,035.0	10.8
Elm	.0	5.2	3.6	8.4	7.0	7.9	2.1	.0	34.2	28.9
Other hardwoods	.0	360.6	315.8	285.7	195.1	109.9	93.3	30.0	1,390.5	6.2
Total hardwoods	.0	3,838.1	4,304.3	4,086.7	3,189.3	2,355.9	3,360.4	628.7	21,763.5	2.2
Total, all species	185.7	4,064.8	4,499.4	4,236.6	3,279.8	2,448.9	3,566.3	662.7	22,944.2	2.1
SE	16.7	2.7	2.7	3.2	3.8	4.9	4.8	9.6	2.1	

Table 53. Net volume of sawtimber trees on timberland by species and diameter class, Southern Unit, West Virginia, 2000

(In millions of board feet)

Species group	Diameter class (inches at breast height)								All classes	SE
	9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9	21.0-28.9	29.0+		
Red pine	2.3	.0	.0	.0	.0	.0	.0	.0	2.3	100.0
Pitch pine	14.0	15.8	14.2	9.1	3.0	.0	.0	.0	56.1	35.5
Eastern white pine	43.9	52.7	56.5	52.1	43.8	50.5	86.5	14.9	400.9	23.4
Virginia pine	47.6	62.6	52.3	10.3	.0	6.1	.0	.0	178.9	26.4
Other yellow pines	6.3	2.7	.0	.0	.0	.0	.0	.0	9.0	53.4
Eastern hemlock	50.6	41.3	46.0	70.7	31.9	39.9	41.4	17.9	339.7	21.5
Other softwoods	5.4	1.3	.0	.0	.0	.0	.0	.0	6.7	61.6
Total softwoods	170.2	176.4	168.9	142.2	78.8	96.4	127.8	32.7	993.5	13.4
Red maple	.0	319.5	301.9	263.5	169.9	101.4	147.0	31.9	1,335.1	9.7
Sugar maple	.0	177.7	242.3	230.4	115.5	82.3	127.4	31.9	1,007.6	11.2
Yellow birch	.0	18.7	15.5	4.6	10.0	19.0	.0	.0	67.7	43.6
Hickory	.0	309.2	368.3	383.3	171.1	74.1	119.1	.0	1,425.2	8.9
American beech	.0	139.8	160.2	151.2	124.9	131.6	397.5	104.7	1,209.9	12.8
White ash	.0	87.9	132.6	56.1	64.5	10.6	43.8	38.9	434.4	16.8
Sweetgum	.0	3.6	.0	.0	.0	.0	.0	.0	3.6	100.0
Yellow-poplar	.0	786.8	1,004.3	974.1	858.7	661.3	1,049.7	60.2	5,395.2	6.8
Blackgum	.0	29.7	28.1	41.3	44.1	49.8	28.2	.0	221.3	18.2
Black cherry	.0	45.9	61.3	63.5	52.7	43.2	42.9	.0	309.5	21.2
White oak	.0	406.9	372.5	342.3	350.2	202.6	326.5	24.4	2,025.4	8.7
Northern red oak	.0	249.5	272.9	330.4	366.1	259.7	897.0	77.8	2,453.3	9.0
Other white oaks	.0	456.3	409.4	306.4	237.1	207.6	478.4	69.7	2,165.0	8.0
Other red oaks	.0	343.2	411.3	373.7	473.2	226.2	317.8	22.1	2,167.5	8.6
American basswood	.0	154.3	205.0	274.0	205.2	118.2	257.0	26.6	1,240.2	15.9
Elm	.0	7.0	13.5	14.0	12.4	9.7	.0	.0	56.6	38.8
Other hardwoods	.0	401.2	334.7	249.1	206.0	105.7	94.1	28.3	1,419.1	8.8
Total hardwoods	.0	3,937.3	4,333.8	4,057.8	3,461.6	2,303.1	4,326.4	516.7	22,936.6	3.1
Total, all species	170.2	4,113.7	4,502.7	4,200.0	3,540.4	2,399.5	4,454.2	549.4	23,930.2	3.0
SE	14.7	3.6	3.9	4.7	6.0	7.9	7.0	22.6	3.0	

Table 54. Average annual net change of growing-stock volume on timberland by species and component of change, Southern Unit, West Virginia, 2000

(In thousands of cubic feet)

Species group	Component of change								Net change
	Ingrowth	Accretion	Gross growth	Mortality	Cull decrement	Cull increment	Net growth	Removals	
Red pine	0	105	105	0	0	0	105	0	105
Pitch pine	68	37	105	-169	0	0	-63	0	-63
Eastern white pine	449	4,078	4,527	-440	0	0	4,087	0	4,087
Virginia pine	0	2,211	2,211	-4,052	0	0	-1,841	-1,900	-3,741
Eastern hemlock	1,661	3,263	4,925	-271	0	-631	4,023	-2,849	1,174
Other softwoods	49	361	410	0	0	0	410	0	410
Total softwoods	2,227	10,056	12,283	-4,933	0	-631	6,720	-4,749	1,971
Red maple	8,850	14,166	23,016	-2,118	942	-212	21,628	-4,065	17,563
Sugar maple	3,622	8,833	12,455	-2,147	0	-218	10,090	-5,076	5,014
Yellow birch	226	233	459	-269	0	0	190	0	190
Hickory	996	7,032	8,028	-2,608	689	-1,015	5,095	-8,340	-3,245
American beech	1,098	4,631	5,729	-1,415	1,991	-147	6,157	-3,281	2,876
White ash	353	3,597	3,950	-314	156	0	3,792	-962	2,830
Yellow-poplar	4,442	43,549	47,991	-2,701	521	-253	45,557	-19,422	26,135
Blackgum	142	543	685	-672	134	-851	-704	-441	-1,145
Black cherry	571	3,140	3,712	-63	0	0	3,649	-488	3,160
White oak	410	12,832	13,242	-653	0	0	12,589	-6,825	5,763
Northern red oak	1,830	11,259	13,088	-4,803	73	-54	8,304	-5,132	3,172
Other white oaks	1,468	16,193	17,661	-1,745	1,913	-706	17,123	-11,393	5,730
Other red oaks	866	17,798	18,665	-5,236	0	-494	12,935	-13,401	-466
American basswood	843	5,413	6,256	-1,685	0	-1,663	2,908	-1,610	1,298
Elm	618	197	816	-319	0	0	497	0	497
Other hardwoods	3,520	14,424	17,943	-10,101	512	-2,483	5,871	-7,689	-1,818
Total hardwoods	29,857	163,841	193,697	-36,851	6,931	-8,096	155,681	-88,127	67,554
Total, all species	32,084	173,896	205,980	-41,783	6,931	-8,727	162,401	-92,876	69,525

Table 55. Average annual net change of sawtimber volume on timberland by species and component of change, Southern Unit, West Virginia, 2000

(In thousands of board feet)

Species group	Component of change								Net change
	Ingrowth	Accretion	Gross growth	Mortality	Cull decrement	Cull increment	Net growth	Removals	
Red pine	0	407	407	0	0	0	407	0	407
Pitch pine	0	110	110	0	0	0	110	0	110
Eastern white pine	5,371	15,131	20,502	0	0	0	20,502	0	20,502
Virginia pine	3,119	8,518	11,637	-8,879	0	0	2,758	-5,437	-2,680
Eastern hemlock	7,735	12,205	19,941	-816	0	-1,538	17,587	-13,896	3,692
Other softwoods	1,291	0	1,291	0	0	0	1,291	0	1,291
Total softwoods	17,517	36,372	53,888	-9,695	0	-1,538	42,656	-19,333	23,323
Red maple	57,247	15,657	72,904	-4,169	3,787	0	72,522	-13,758	58,764
Sugar maple	28,483	13,533	42,016	-6,822	0	0	35,194	-18,088	17,106
Yellow birch	2,889	0	2,889	0	0	0	2,889	0	2,889
Hickory	10,495	13,711	24,205	-2,966	2,389	0	23,629	-24,131	-502
American beech	11,486	8,011	19,496	-4,481	8,244	0	23,260	-9,259	14,001
White ash	8,612	16,599	25,211	0	0	0	25,211	-3,622	21,589
Yellow-poplar	63,609	151,751	215,360	0	1,490	0	216,850	-79,101	137,749
Blackgum	1,557	2,684	4,241	0	0	-3,877	364	-1,289	-925
Black cherry	1,497	5,898	7,395	0	0	0	7,395	-1,629	5,766
White oak	29,923	21,631	51,554	0	0	0	51,554	-29,752	21,801
Northern red oak	12,959	40,026	52,984	-16,213	0	0	36,771	-21,992	14,779
Other white oaks	25,905	45,159	71,064	-3,332	10,670	-2,611	75,790	-43,715	32,075
Other red oaks	29,561	43,250	72,811	-15,729	0	0	57,083	-55,593	1,490
American basswood	6,818	17,310	24,129	-6,621	0	-7,292	10,215	-6,576	3,639
Elm	0	1,072	1,072	0	0	0	1,072	0	1,072
Other hardwoods	20,357	32,591	52,947	-17,688	2,215	-2,077	35,397	-19,905	15,492
Total hardwoods	311,397	428,883	740,280	-78,021	28,795	-15,858	675,197	-328,410	346,787
Total, all species	328,914	465,254	794,169	-87,715	28,795	-17,395	717,853	-347,743	370,110

Table 56. Area of timberland by forest type, forest-type group, and stand-size class, Northwestern Unit, West Virginia, 1989

(In thousands of acres)

Forest type	Stand-size class				All classes	SE
	Saw-timber	Pole-timber	Sapling and seedling	Non-stocked		
White pine/hemlock	4.6	.0	.0	.0	4.6	100.0
White/red pine group	4.6	.0	.0	.0	4.6	100.0
Virginia pine	45.3	50.3	6.5	5.3	107.4	22.1
Loblolly/shortleaf group	45.3	50.3	6.5	5.3	107.4	22.1
Wh. pine/no.red oak/wh. ash	.0	8.6	.0	.0	8.6	100.0
Virginia pine/oak	71.3	52.1	12.8	.0	136.3	18.1
Other oak/pine	4.9	4.2	.0	.0	9.1	71.0
Oak/pine group	76.2	64.8	12.8	.0	153.9	17.5
Post, black, or bear oak	4.9	4.5	.0	.0	9.4	70.8
Chestnut oak	59.6	19.1	4.9	.0	83.6	23.9
White oak/red oak/hickory	199.7	200.3	6.7	.0	406.7	10.2
White oak	108.4	55.6	6.6	.0	170.6	16.9
Northern red oak	4.5	3.0	11.7	.0	19.2	52.7
Y-poplar/wh. oak/no.red oak	28.1	23.5	.0	.0	51.6	31.2
Black locust	17.0	31.3	14.2	.0	62.5	28.2
Black walnut	.0	3.5	.0	.0	3.5	100.0
Yellow-poplar	9.8	61.1	9.4	.0	80.2	24.7
Hawthorn/reverting field	.0	3.2	.0	.0	3.2	100.0
Scarlet oak	9.2	11.2	.0	.0	20.3	50.4
Sassafras/persimmon	.0	4.2	10.4	.0	14.5	58.0
Red maple/central hardwood	.0	18.4	6.7	.0	25.0	45.4
Mixed central hardwoods	973.8	591.9	107.6	.0	1,673.4	3.8
Oak/hickory group	1,415.0	1,030.8	178.0	.0	2,623.8	2.1
Black ash/Amer. elm/red maple	38.5	27.7	14.9	.0	81.1	23.3
Red maple(upland)	1.8	.0	.0	.0	1.8	100.0
River birch/sycamore	4.9	10.1	.0	.0	15.0	57.8
Sycamore/pecan/American elm	13.8	5.2	.0	.0	18.9	50.1
American elm/green ash	3.5	.0	.0	.0	3.5	100.0
Elm/ash/red maple group	62.4	43.0	14.9	.0	120.3	18.7
Sugar maple/beech/yellow birch	152.9	33.5	4.5	.0	190.9	14.7
Black cherry	.0	22.9	4.5	.0	27.4	45.1
Red maple/northern hardwoods	6.7	4.2	.0	.0	10.9	72.4
Pin cherry/reverting field	.0	.0	12.4	.0	12.4	59.0
Mixed northern hardwoods	27.3	30.4	10.0	.0	67.7	27.1
Northern hardwoods group	186.9	91.0	31.4	.0	309.3	11.4
Aspen	.0	4.5	.0	.0	4.5	100.0
Aspen/birch group	.0	4.5	.0	.0	4.5	100.0
All forest types	1,790.4	1,284.4	243.6	5.3	3,323.8	1.0
SE	3.5	4.9	14.1	100.0	1.0	

Table 57. Area of timberland by forest type, forest-type group, and stand-size class, Northwestern Unit, West Virginia, 2000

(In thousands of acres)

Forest type	Stand-size class				All classes	SE
	Saw-timber	Pole-timber	Sapling and seedling	Non-stocked		
White pine	4.1	.0	.0	.0	4.1	100.0
White/red pine group	4.1	.0	.0	.0	4.1	100.0
Virginia pine	32.9	11.9	3.1	.0	47.9	30.4
Eastern redcedar	1.3	.0	.0	.0	1.3	100.0
Pitch pine	1.1	.0	1.8	.0	2.8	73.0
Loblolly/shortleaf group	35.2	11.9	4.9	.0	52.1	28.4
Shortleaf pine/oak	.0	.0	6.6	.0	6.6	100.0
Virginia pine/oak	91.6	28.0	13.3	.0	132.8	19.9
Other oak/pine	4.3	.0	2.1	.0	6.5	57.7
Oak/pine group	95.9	28.0	22.0	.0	145.9	18.9
Post, black, or bear oak	9.3	3.8	5.9	.0	19.0	43.6
Chestnut oak	47.7	10.6	.0	.0	58.3	28.0
White oak/red oak/hickory	325.9	103.5	1.2	.0	430.5	10.8
White oak	167.2	40.8	.0	.0	207.9	15.2
Northern red oak	19.2	.0	.0	.0	19.2	49.2
Y-poplar/Wh. oak/no.red oak	48.8	6.5	.0	.0	55.2	33.6
Black locust	2.6	15.7	14.5	7.7	40.5	34.9
Black walnut	.0	6.4	.0	.0	6.4	100.0
Yellow-poplar	46.1	19.8	.0	5.2	71.2	27.0
Hawthorn/reverting field	.0	.0	13.4	1.3	14.7	46.6
Scarlet oak	11.1	.0	.0	.0	11.1	63.1
Sassafras/persimmon	.0	13.4	6.8	1.5	21.6	47.2
Red maple/central hardwood	15.5	18.0	3.7	.0	37.2	35.6
Mixed central hardwoods	1,189.8	301.7	62.1	.0	1,553.6	4.5
Oak/hickory group	1,883.2	540.1	107.6	15.7	2,546.5	2.5
Black ash/Amer. elm/red maple	60.5	13.3	10.8	.0	84.6	24.1
Red maple(upland)	.0	5.7	.0	.0	5.7	76.9
River birch/sycamore	36.8	11.0	.0	.0	47.9	32.9
Sycamore/pecan/American elm	30.3	.0	.0	.0	30.3	44.6
Elm/ash/red maple group	127.6	30.1	10.8	.0	168.5	17.3
Sugar maple/beech/yellow birch	203.9	19.6	8.7	.0	232.1	14.9
Black cherry	30.0	11.0	2.8	.0	43.8	31.1
Red maple/northern hardwoods	3.1	16.2	12.6	.0	31.8	42.0
Pin cherry/reverting field	.0	.0	6.0	.0	6.0	84.4
Mixed northern hardwoods	59.3	24.3	4.6	.0	88.2	24.4
Northern hardwoods group	296.3	71.1	34.5	.0	401.9	10.7
All forest types	2,442.3	681.2	179.8	15.7	3,319.0	1.2
SE	2.6	8.1	15.4	60.3	1.2	

Table 58. Number of live trees (1.0+ inches d.b.h.) on timberland by species and diameter class, Northwestern Unit, West Virginia, 2000

(In thousands of trees)

Species group	Diameter class (inches at breast height)						
	1.0-2.9	3.0-4.9	5.0-6.9	7.0-8.9	9.0-10.9	11.0-12.9	13.0-14.9
Atlantic white-cedar	0	0	0	0	36	0	0
Pitch pine	1,288	1,700	73	107	250	227	163
Eastern white pine	1,453	2,852	843	727	116	197	43
Loblolly pine	742	985	278	42	0	0	0
Virginia pine	10,685	5,048	3,803	4,701	3,862	3,193	1,836
Other yellow pines	4,215	0	48	36	193	72	32
Eastern hemlock	931	0	210	156	40	0	0
Other softwoods	502	879	186	40	158	68	0
Total softwoods	19,818	11,464	5,442	5,811	4,656	3,757	2,074
Red maple	148,956	35,709	18,503	11,456	6,625	3,777	2,304
Sugar maple	129,719	44,215	18,339	10,143	6,254	3,361	1,687
Yellow birch	525	0	0	0	0	81	0
Hickory	36,461	21,819	16,813	13,359	9,086	6,465	2,849
American beech	47,263	12,290	4,218	2,472	1,591	948	923
White ash	31,558	8,840	6,305	5,093	2,453	2,022	765
Sweetgum	0	0	0	36	0	0	0
Yellow-poplar	18,854	9,772	7,040	6,698	4,975	5,373	4,873
Blackgum	35,487	11,425	4,866	1,495	644	436	378
Aspen	2,917	0	598	532	517	715	579
Black cherry	21,926	8,951	2,931	2,475	1,905	1,279	1,260
White oak	8,534	7,357	9,901	10,082	9,516	7,217	5,935
Northern red oak	12,570	4,891	2,293	2,389	1,818	1,950	1,620
Other white oaks	5,514	3,402	5,062	5,433	4,302	4,217	3,278
Other red oaks	15,793	5,961	4,653	3,761	4,406	3,620	2,729
American basswood	3,324	0	826	730	778	690	322
Elm	33,542	15,084	8,795	5,676	2,816	1,374	1,256
Other commercial hardwoods	99,350	29,097	12,006	7,783	6,090	3,773	2,079
Noncommercial hardwoods	209,404	43,576	15,132	6,446	2,742	1,095	643
Total hardwoods	861,696	262,390	138,282	96,060	66,518	48,393	33,480
Total, all species	881,514	273,854	143,724	101,871	71,174	52,151	35,554
SE	3.7	5.0	2.8	2.7	3.1	3.2	3.6

Table 58. continued

(In thousands of trees)

Species group	Diameter class (inches at breast height)							
	15.0-16.9	17.0-18.9	19.0-20.9	21.0-28.9	29.0+	Total 5.0+	All classes	SE
Atlantic white-cedar	0	0	0	0	0	36	36	100.0
Pitch pine	35	0	0	0	0	856	3,844	43.2
Eastern white pine	181	0	0	43	0	2,150	6,455	37.4
Loblolly pine	0	0	0	0	0	321	2,048	58.4
Virginia pine	731	251	43	0	0	18,421	34,154	16.9
Other yellow pines	0	0	0	0	0	382	4,597	51.8
Eastern hemlock	0	0	27	0	0	433	1,365	71.0
Other softwoods	73	0	0	0	0	525	1,907	44.2
Total softwoods	1,021	251	70	43	0	23,125	54,407	13.0
Red maple	1,274	336	313	201	27	44,817	229,482	7.4
Sugar maple	979	465	270	408	48	41,954	215,888	7.6
Yellow birch	0	0	0	0	0	81	605	87.7
Hickory	1,381	815	208	264	0	51,240	109,520	7.4
American beech	633	788	118	562	42	12,296	71,849	11.4
White ash	978	418	251	207	40	18,533	58,931	10.8
Sweetgum	0	0	0	0	0	36	36	100.0
Yellow-poplar	2,679	1,777	1,234	1,576	115	36,340	64,965	9.0
Blackgum	31	85	31	0	0	7,967	54,879	11.5
Aspen	272	126	46	46	0	3,431	6,347	25.9
Black cherry	407	339	85	402	27	11,111	41,987	18.1
White oak	2,974	1,974	1,507	1,249	201	50,557	66,448	7.3
Northern red oak	1,585	1,197	581	1,085	273	14,791	32,253	12.9
Other white oaks	2,550	1,026	845	696	73	27,484	36,401	10.3
Other red oaks	2,929	1,440	631	1,500	263	25,932	47,687	10.1
American basswood	181	354	69	60	0	4,010	7,334	24.5
Elm	501	318	169	66	0	20,971	69,597	10.1
Other commercial hardwoods	1,797	1,069	485	523	117	35,722	164,169	6.3
Noncommercial hardwoods	186	69	92	27	0	26,434	279,414	6.7
Total hardwoods	21,339	12,597	6,935	8,874	1,229	433,707	1,557,793	2.5
Total, all species	22,360	12,848	7,005	8,917	1,229	456,832	1,612,200	2.5
SE	4.6	5.7	7.6	8.6	18.7	1.7	2.5	

Table 59. Net volume of growing-stock trees on timberland by species and diameter class, Northwestern Unit, West Virginia, 1989

(In millions of cubic feet)

Species group	Diameter class (inches at breast height)										All classes	SE
	5.0-6.9	7.0-8.9	9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9	21.0-28.9	29.0+		
Red pine	.0	.0	.0	.4	.0	.0	.0	.0	.0	.0	.4	100.0
Pitch pine	.4	1.1	3.9	1.8	1.8	2.2	.9	.5	.0	.0	12.6	31.0
Eastern white pine	1.5	3.0	2.1	.3	.4	1.1	2.5	1.2	5.7	.0	17.7	38.9
Virginia pine	17.3	52.1	61.6	45.6	27.5	9.6	3.9	1.6	.0	.0	219.2	10.9
Other yellow pines	.5	.1	1.8	2.4	2.1	.9	.5	.0	.0	.0	8.3	37.8
Eastern hemlock	.7	.3	.8	.8	1.2	.5	.4	.5	2.0	.0	7.2	68.6
Other softwoods	.0	.0	.2	.0	.8	.0	.3	.0	.0	.0	1.4	62.5
Total softwoods	20.3	56.6	70.3	51.3	33.9	14.3	8.5	3.9	7.7	.0	266.8	10.1
Red maple	47.4	51.8	52.3	37.6	24.9	21.4	10.7	5.4	8.4	.0	259.8	7.9
Sugar maple	33.8	51.5	51.4	42.7	35.3	25.8	16.5	13.0	19.4	3.4	292.9	7.5
Yellow birch	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	100.0
Hickory	59.2	97.8	117.6	78.6	49.0	39.0	15.3	9.8	7.8	.0	474.0	5.2
American beech	8.1	12.7	23.5	17.4	23.7	17.3	19.8	20.6	47.1	2.6	192.8	11.3
White ash	19.0	24.9	31.1	18.3	22.8	21.2	15.1	9.1	15.4	3.5	180.4	7.5
Sweetgum	.0	.2	.0	.0	.8	.0	.0	.0	.0	.0	1.0	57.6
Yellow-poplar	33.7	73.3	117.2	131.5	120.1	106.3	79.0	55.2	68.9	7.5	792.6	6.2
Blackgum	9.6	8.0	6.6	4.0	3.6	6.6	.7	1.8	1.9	.0	42.7	10.8
Aspen	1.7	3.0	6.0	6.6	4.6	2.1	2.5	.7	.0	.0	27.2	27.2
Black cherry	11.6	15.5	22.0	18.2	18.0	15.6	6.7	6.8	7.7	1.5	123.4	11.6
White oak	40.6	75.3	105.1	118.6	121.0	101.5	69.8	46.7	71.0	20.9	770.3	5.1
Northern red oak	7.8	19.3	24.9	35.0	42.7	37.9	39.9	35.5	62.6	26.5	332.0	7.2
Other white oaks	15.0	31.1	55.4	61.2	55.3	51.4	36.8	20.7	36.8	5.3	368.9	7.7
Other red oaks	15.8	40.6	64.9	86.8	86.9	91.6	66.6	51.5	70.5	16.5	591.6	6.2
American basswood	3.2	7.8	8.1	16.4	15.8	11.4	5.9	3.9	3.9	.0	76.5	14.3
Elm	23.0	24.6	27.2	18.1	20.6	10.8	11.2	4.9	6.8	.6	147.8	9.0
Other hardwoods	30.8	50.5	54.6	50.7	40.2	23.7	17.7	10.8	18.0	4.4	301.4	7.0
Total hardwoods	360.4	587.7	767.9	741.6	685.3	583.6	414.2	296.5	446.1	92.4	4,975.7	1.8
Total, all species	380.7	644.3	838.2	792.9	719.2	597.9	422.7	300.4	453.8	92.4	5,242.4	1.7
SE	3.2	3.1	2.9	2.9	3.2	3.8	4.7	5.7	5.4	13.4	1.7	

Table 60. Net volume of growing-stock trees on timberland by species and diameter class, Northwestern Unit, West Virginia, 2000

(In millions of cubic feet)

Species group	Diameter class (inches at breast height)										All classes	SE
	5.0-6.9	7.0-8.9	9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9	21.0-28.9	29.0+		
Pitch pine	.3	.7	3.2	4.3	4.0	1.1	.0	.0	.0	.0	13.7	29.3
Eastern white pine	2.2	3.9	1.2	3.6	1.0	5.6	.0	.0	3.2	.0	20.8	33.6
Loblolly pine	.6	.2	.0	.0	.0	.0	.0	.0	.0	.0	.8	77.6
Virginia pine	9.5	29.8	38.8	48.4	40.2	19.7	7.2	2.3	.0	.0	195.9	13.2
Other yellow pines	.2	.2	2.7	1.3	.7	.0	.0	.0	.0	.0	5.0	43.4
Eastern hemlock	.4	.6	.3	.0	.0	.0	.0	1.4	.0	.0	2.7	61.0
Other softwoods	.3	.3	.7	.4	.0	.3	.0	.0	.0	.0	2.0	42.3
Total softwoods	13.5	35.8	46.9	58.0	45.9	26.7	7.2	3.7	3.2	.0	241.0	11.5
Red maple	43.1	70.2	75.1	64.9	55.2	40.7	15.1	14.2	14.1	3.5	396.2	8.1
Sugar maple	47.0	62.7	73.0	53.9	38.1	33.6	22.4	11.3	29.0	.0	370.9	8.1
Yellow birch	.0	.0	.0	1.6	.0	.0	.0	.0	.0	.0	1.6	100.0
Hickory	44.3	93.5	116.3	118.2	73.2	51.9	36.3	13.1	20.3	.0	567.2	6.5
American beech	7.8	11.3	14.9	14.1	22.4	18.5	34.9	5.6	42.2	6.0	177.6	15.0
White ash	16.4	32.7	27.6	30.7	16.9	31.7	16.5	13.2	13.1	6.9	205.9	10.3
Sweetgum	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.2	100.0
Yellow-poplar	21.2	49.3	69.4	116.1	156.0	118.0	100.1	85.5	150.2	16.7	882.3	7.5
Blackgum	10.1	7.6	7.4	6.1	8.4	.9	3.4	1.6	.0	.0	45.5	13.0
Aspen	2.5	4.6	8.0	16.7	19.4	10.7	7.6	3.6	3.8	.0	76.9	24.5
Black cherry	6.9	15.9	20.9	20.1	31.3	15.8	15.6	4.2	29.4	6.7	166.8	13.6
White oak	25.4	64.7	111.1	126.7	149.7	98.9	88.3	86.9	80.5	15.3	847.5	6.6
Northern red oak	5.7	16.0	21.9	33.7	41.5	55.8	54.4	32.0	83.1	40.6	384.8	9.2
Other white oaks	13.4	33.3	47.9	66.9	74.7	77.3	40.0	43.0	38.2	2.5	437.3	9.1
Other red oaks	12.5	23.6	53.7	62.7	64.3	98.8	63.4	29.1	103.4	34.1	545.6	8.5
American basswood	2.4	5.6	9.8	15.8	10.2	5.4	19.1	3.5	5.6	.0	77.5	20.5
Elm	19.4	30.3	25.1	18.0	26.6	12.0	7.7	7.5	5.5	.0	152.1	10.7
Other hardwoods	25.8	42.7	57.2	47.6	42.6	52.0	35.7	23.4	31.7	9.5	368.1	9.2
Total hardwoods	304.1	564.1	739.2	813.8	830.6	722.0	560.6	377.5	650.2	141.8	5,703.8	2.5
Total, all species	317.6	599.9	786.1	871.8	876.5	748.7	567.8	381.2	653.4	141.8	5,944.8	2.3
SE	3.3	3.0	3.4	3.7	3.8	4.9	6.1	8.3	9.8	20.0	2.3	

Table 61. Net volume of growing-stock trees on timberland by forest type and stand-size class, Northwestern Unit, West Virginia, 2000

(In millions of cubic feet)

Forest type	Stand-size class				All classes	SE
	Saw-timber	Pole-timber	Sapling and seedling	Non-stocked		
White pine	4.6	.0	.0	.0	4.6	100.0
White/red pine group	4.6	.0	.0	.0	4.6	100.0
Virginia pine	48.7	7.8	.5	.0	57.0	37.2
Eastern redcedar	1.1	.0	.0	.0	1.1	100.0
Pitch pine	2.1	.0	.0	.0	2.1	100.0
Loblolly/shortleaf group	51.9	7.8	.5	.0	60.2	35.4
Virginia pine/oak	144.0	35.6	1.1	.0	180.7	21.4
Other oak/pine	6.5	.0	.0	.0	6.5	72.2
Oak/pine group	150.4	35.6	1.1	.0	187.2	20.8
Post, black, or bear oak	40.8	2.6	.1	.0	43.6	67.1
Chestnut oak	128.4	13.4	.0	.0	141.8	31.4
White oak/red oak/hickory	707.0	128.3	1.7	.0	836.9	11.7
White oak	364.2	73.4	.0	.0	437.6	15.7
Northern red oak	23.3	.0	.0	.0	23.3	54.6
Y-poplar/wh. oak/no.red oak	129.4	6.8	.0	.0	136.2	38.7
Black locust	3.3	8.4	2.1	.0	13.8	43.2
Black walnut	.0	4.2	.0	.0	4.2	100.0
Yellow-poplar	130.5	23.0	.0	3.2	156.7	29.3
Hawthorn/reverting field	.0	.0	.7	.0	.7	56.1
Scarlet oak	26.0	.0	.0	.0	26.0	67.4
Sassafras/persimmon	.0	8.6	.4	.0	9.1	65.3
Red maple/central hardwood	47.8	33.8	.9	.0	82.5	45.3
Mixed central hardwoods	2,504.1	396.6	15.7	.0	2,916.4	5.4
Oak/hickory group	4,104.7	699.1	21.7	3.2	4,828.7	3.3
Black ash/Amer. elm/red maple	111.2	9.3	2.4	.0	122.9	30.9
Red maple(upland)	.0	15.7	.0	.0	15.7	82.5
River birch/sycamore	55.2	7.9	.0	.0	63.1	36.2
Sycamore/pecan/American elm	39.2	.0	.0	.0	39.2	47.2
Elm/ash/red maple group	205.6	33.0	2.4	.0	241.0	20.4
Sugar maple/beech/yellow birch	354.5	28.1	5.0	.0	387.5	16.7
Black cherry	64.9	13.0	.4	.0	78.3	38.7
Red maple/northern hardwoods	10.1	23.2	7.2	.0	40.5	42.3
Mixed northern hardwoods	81.5	34.5	.7	.0	116.7	26.0
Northern hardwoods group	511.0	98.8	13.3	.0	623.0	12.4
All forest types	5,028.3	874.4	39.0	3.2	5,944.8	2.3
SE	3.3	9.4	22.6	100.0	2.3	

Table 62. Net volume of sawtimber trees on timberland by species, size class, and tree grade, Northwestern Unit, West Virginia, 2000

(In millions of board feet)

Species group	>15" Diameter at breast height						All size classes						
	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	All grades	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	All grades	SE
Pitch pine	.0	4.2	.0	.0	.0	4.2	19.8	23.4	4.3	.0	.0	47.5	29.4
Eastern white pine	8.7	10.2	27.3	.0	2.1	48.3	13.9	15.0	40.7	.0	2.1	71.7	42.7
Virginia pine	10.9	25.0	71.0	.0	23.0	129.9	53.1	107.3	397.5	.0	45.1	603.1	13.7
Other yellow pines	.0	.0	.0	.0	.0	.0	11.4	2.7	3.3	.0	.0	17.4	43.8
Eastern hemlock	5.9	.0	.0	.0	.0	5.9	5.9	.0	.0	.0	1.0	6.8	87.1
Other softwoods	.0	.0	.0	.0	1.6	1.6	.9	.0	.0	.0	3.1	4.1	54.1
Total softwoods	25.5	39.4	98.3	.0	26.8	189.9	105.1	148.4	445.7	.0	51.3	750.6	12.3
Red maple	81.6	77.9	45.9	42.0	134.4	381.7	81.6	173.8	288.0	140.8	157.4	841.5	11.4
Sugar maple	100.1	82.0	106.9	35.0	94.7	418.7	100.1	150.9	297.1	110.9	126.8	785.7	11.9
Yellow birch	.0	.0	.0	.0	.0	.0	.0	.0	7.0	.0	.0	7.0	100.0
Hickory	144.9	153.8	90.9	40.7	131.8	562.1	144.9	331.5	534.2	144.8	162.3	1,317.7	8.8
American beech	.0	82.5	121.8	180.7	148.4	533.4	.0	82.5	173.1	265.4	160.9	681.9	18.7
White ash	124.2	116.1	22.0	11.9	68.9	343.2	124.2	159.9	143.3	14.1	89.7	531.3	13.5
Yellow-poplar	994.2	441.7	386.4	274.3	248.0	2,344.5	994.2	819.3	873.4	529.0	263.7	3,479.6	8.6
Blackgum	23.8	.0	3.0	.0	.0	26.8	23.8	15.9	27.0	11.7	8.3	86.7	23.6
Aspen	.0	10.5	82.6	38.8	.0	131.9	.0	40.9	172.7	84.2	3.4	301.2	27.0
Black cherry	124.3	70.2	33.7	26.2	89.7	344.0	124.3	133.4	149.9	44.2	107.4	559.3	18.2
White oak	682.2	484.3	251.9	80.1	210.5	1,709.1	682.2	840.1	852.5	264.0	222.6	2,861.5	7.7
Northern red oak	670.0	305.8	119.0	94.0	54.7	1,243.5	670.0	405.5	254.5	148.4	62.6	1,541.0	10.8
Other white oaks	373.7	244.0	100.9	15.9	115.8	850.4	373.7	443.1	410.1	28.5	127.8	1,383.3	10.6
Other red oaks	603.7	326.7	216.1	146.8	215.7	1,508.9	603.7	467.7	431.1	273.7	235.7	2,011.8	10.1
American basswood	95.6	13.5	9.6	16.2	27.1	162.1	95.6	50.4	70.8	21.9	27.1	265.9	23.8
Elm	34.1	19.4	31.8	11.1	45.1	141.5	34.1	47.7	120.8	49.3	58.5	310.3	16.9
Other hardwoods	259.5	201.4	98.2	40.5	113.0	712.7	259.5	286.1	284.0	82.3	154.1	1,065.9	11.6
Total hardwoods	4,311.9	2,629.6	1,720.6	1,054.2	1,697.9	11,414.2	4,311.9	4,448.9	5,089.6	2,213.0	1,968.2	18,031.6	3.4
Total, all species	4,337.3	2,669.0	1,818.9	1,054.2	1,724.7	11,604.1	4,417.0	4,597.3	5,535.3	2,213.0	2,019.6	18,782.2	3.2
SE	7.5	7.0	9.4	12.6	9.9	4.6	7.3	5.1	4.0	7.8	8.6	3.2	

Table 63. Net volume of sawtimber trees on timberland by species and diameter class, Northwestern Unit, West Virginia, 1989

(In millions of board feet)

Species group	Diameter class (inches at breast height)								All classes	SE
	9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9	21.0-28.9	29.0+		
Red pine	.0	1.5	.0	.0	.0	.0	.0	.0	1.5	100.0
Pitch pine	12.7	7.0	7.6	9.4	3.8	2.6	.0	.0	43.2	33.5
Eastern white pine	7.3	1.2	1.6	5.3	12.8	6.1	31.8	.0	65.9	40.1
Virginia pine	203.6	173.9	111.6	40.5	16.3	7.2	.0	.0	553.1	11.0
Other yellow pines	6.0	9.2	8.4	4.0	1.9	.0	.0	.0	29.5	41.0
Eastern hemlock	2.4	3.0	4.9	2.4	1.8	2.5	9.4	.0	26.5	72.8
Other softwoods	.5	.0	3.1	.0	1.4	.0	.0	.0	5.0	60.7
Total softwoods	232.5	195.9	137.2	61.6	38.1	18.3	41.2	.0	724.8	10.6
Red maple	.0	142.9	104.6	94.5	49.1	23.9	40.1	.0	455.1	12.0
Sugar maple	.0	165.5	149.7	112.7	72.6	58.7	89.7	17.5	666.5	9.7
Hickory	.0	298.3	210.8	175.8	71.5	47.7	39.2	.0	843.4	7.4
American beech	.0	69.6	100.7	76.0	91.7	98.8	237.4	14.1	688.3	12.5
White ash	.0	74.1	99.9	97.4	68.8	42.0	73.4	17.0	472.6	10.0
Sweetgum	.0	.0	3.3	.0	.0	.0	.0	.0	3.3	70.7
Yellow-poplar	.0	523.6	542.8	504.4	390.9	282.6	366.3	37.1	2,647.7	6.6
Blackgum	.0	15.2	14.7	28.3	3.2	8.1	9.4	.0	78.8	17.7
Aspen	.0	27.4	20.6	10.4	11.9	3.7	.0	.0	74.0	29.1
Black cherry	.0	69.2	76.5	71.0	31.7	33.6	39.7	8.7	330.3	14.3
White oak	.0	460.6	525.8	452.1	321.7	222.7	341.1	104.9	2,428.8	5.5
Northern red oak	.0	133.4	177.4	163.5	182.0	164.7	301.2	137.1	1,259.4	8.1
Other white oaks	.0	219.1	216.0	207.4	147.4	88.3	162.2	19.6	1,060.0	8.5
Other red oaks	.0	329.9	360.5	395.1	304.0	238.5	338.0	83.0	2,049.1	6.7
American basswood	.0	63.8	69.9	52.5	29.2	19.4	19.8	.0	254.6	15.5
Elm	.0	69.1	88.1	46.9	51.1	22.7	32.3	3.0	313.2	11.3
Other hardwoods	.0	194.2	171.5	104.6	81.8	51.3	87.1	21.6	712.1	8.8
Total hardwoods	.0	2,856.1	2,932.8	2,592.7	1,908.4	1,406.6	2,176.8	463.8	14,337.1	2.5
Total, all species	232.5	3,052.0	3,070.0	2,654.3	1,946.5	1,424.9	2,218.0	463.8	15,061.9	2.4
SE	13.1	2.9	3.2	3.8	4.7	5.7	5.5	13.8	2.4	

Table 64. Net volume of sawtimber trees on timberland by species and diameter class, Northwestern Unit, West Virginia, 2000

(In millions of board feet)

Species group	Diameter class (inches at breast height)								All classes	SE
	9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9	21.0-28.9	29.0+		
Pitch pine	8.7	17.2	17.4	4.2	.0	.0	.0	.0	47.5	29.4
Eastern white pine	3.9	15.2	4.3	27.9	.0	.0	20.4	.0	71.7	42.7
Virginia pine	126.2	183.4	163.5	86.1	32.5	11.3	.0	.0	603.1	13.7
Other yellow pines	9.5	5.2	2.7	.0	.0	.0	.0	.0	17.4	43.8
Eastern hemlock	1.0	.0	.0	.0	.0	5.9	.0	.0	6.8	87.1
Other softwoods	1.4	1.1	.0	1.6	.0	.0	.0	.0	4.1	54.1
Total softwoods	150.7	222.1	187.9	119.8	32.5	17.2	20.4	.0	750.6	12.3
Red maple	.0	230.7	229.2	176.0	70.0	65.1	54.3	16.3	841.5	11.4
Sugar maple	.0	211.4	155.6	145.2	94.7	50.3	128.6	.0	785.7	11.9
Yellow birch	.0	7.0	.0	.0	.0	.0	.0	.0	7.0	100.0
Hickory	.0	446.8	308.7	233.9	171.4	58.3	98.5	.0	1,317.7	8.8
American beech	.0	55.2	93.3	82.7	173.0	27.8	225.5	24.4	681.9	18.7
White ash	.0	122.8	65.3	134.0	70.9	54.9	58.5	24.9	531.3	13.5
Yellow-poplar	.0	460.4	674.8	558.8	483.5	418.7	794.8	88.7	3,479.6	8.6
Blackgum	.0	23.4	36.5	3.0	17.1	6.7	.0	.0	86.7	23.6
Aspen	.0	73.8	95.6	51.7	39.5	19.3	21.5	.0	301.2	27.0
Black cherry	.0	76.4	138.9	69.8	69.0	19.5	146.1	39.6	559.3	18.2
White oak	.0	493.4	659.1	446.7	408.4	411.7	375.7	66.6	2,861.5	7.7
Northern red oak	.0	126.7	170.8	237.5	247.9	139.9	429.4	188.8	1,541.0	10.8
Other white oaks	.0	243.4	289.5	315.7	168.4	188.9	170.1	7.2	1,383.3	10.6
Other red oaks	.0	235.8	267.1	428.7	294.7	129.6	491.8	164.1	2,011.8	10.1
American basswood	.0	61.2	42.6	24.9	92.6	18.3	26.3	.0	265.9	23.8
Elm	.0	70.5	98.3	50.7	31.0	30.6	29.2	.0	310.3	16.9
Other hardwoods	.0	173.2	180.1	230.3	156.4	120.8	151.5	53.7	1,065.9	11.6
Total hardwoods	.0	3,112.0	3,505.4	3,189.4	2,588.5	1,760.3	3,201.7	674.3	18,031.6	3.4
Total, all species	150.7	3,334.1	3,693.3	3,309.2	2,621.0	1,777.5	3,222.1	674.3	18,782.2	3.2
SE	16.7	3.8	3.9	4.9	6.2	8.3	9.8	20.4	3.2	

Table 65. Average annual net change of growing-stock volume on timberland by species and component of change, Northwestern Unit, West Virginia, 2000

(In thousands of cubic feet)

Species group	Component of change								Net change
	Ingrowth	Accretion	Gross growth	Mortality	Cull decrement	Cull increment	Net growth	Removals	
Pitch pine	0	453	453	-767	0	0	-313	0	-313
Eastern white pine	255	135	390	0	0	0	390	0	390
Virginia pine	522	5,031	5,553	-7,576	0	-135	-2,158	-1,561	-3,719
Other yellow pines	0	104	104	-1,275	0	0	-1,171	0	-1,171
Eastern hemlock	0	293	293	0	0	0	293	0	293
Total softwoods	777	6,017	6,794	-9,618	0	-135	-2,959	-1,561	-4,520
Red maple	2,943	9,105	12,048	-3,309	223	-55	8,907	-485	8,421
Sugar maple	3,599	9,650	13,249	-394	2,051	-1,080	13,826	-592	13,234
Hickory	1,662	10,323	11,986	-4,679	613	-1,484	6,436	-1,042	5,394
American beech	159	3,102	3,261	-2,697	11	-823	-248	-1,988	-2,236
White ash	2,371	3,534	5,905	-126	1,407	0	7,186	-930	6,256
Yellow-poplar	3,363	23,230	26,592	-3,069	475	-61	23,938	-10,418	13,520
Blackgum	319	259	579	-115	32	0	495	0	495
Aspen	0	2,210	2,210	-402	0	0	1,809	0	1,809
Black cherry	1,073	6,171	7,245	-235	346	-749	6,607	-1,987	4,620
White oak	1,335	21,565	22,900	-2,047	821	-578	21,095	-14,564	6,531
Northern red oak	286	7,445	7,732	-673	0	-272	6,786	-4,647	2,139
Other white oaks	639	4,388	5,028	-1,863	93	0	3,258	-3,482	-224
Other red oaks	1,104	12,812	13,916	-3,785	266	-1,374	9,024	-8,550	474
American basswood	764	729	1,494	0	156	-1,040	609	0	609
Elm	1,640	3,170	4,810	-5,574	682	-203	-286	-1,815	-2,101
Other hardwoods	3,358	9,480	12,838	-5,668	183	-2,697	4,656	-561	4,095
Total hardwoods	24,618	127,175	151,793	-34,638	7,359	-10,416	114,099	-51,062	63,036
Total, all species	25,394	133,193	158,587	-44,257	7,359	-10,551	111,139	-52,623	58,516

Table 66. Average annual net change of sawtimber volume on timberland by species and component of change, Northwestern Unit, West Virginia, 2000

(In thousands of board feet)

Species group	Component of change								Net change
	Ingrowth	Accretion	Gross growth	Mortality	Cull decrement	Cull increment	Net growth	Removals	
Pitch pine	0	2,490	2,490	-2,165	0	0	325	0	325
Virginia pine	12,399	12,068	24,468	-19,221	0	0	5,247	-7,167	-1,920
Other yellow pines	0	202	202	-5,174	0	0	-4,971	0	-4,971
Eastern hemlock	0	1,301	1,301	0	0	0	1,301	0	1,301
Total softwoods	12,399	16,062	28,461	-26,560	0	0	1,901	-7,167	-5,265
Red maple	24,269	4,339	28,608	-8,161	0	0	20,447	0	20,447
Sugar maple	24,623	11,571	36,194	0	10,846	-3,287	43,753	0	43,753
Hickory	31,582	7,359	38,941	-17,247	0	-2,791	18,903	-3,622	15,281
American beech	2,983	11,899	14,883	-11,642	0	-1,848	1,393	-3,481	-2,088
White ash	9,342	3,305	12,646	0	2,806	0	15,453	-3,336	12,116
Yellow-poplar	38,950	77,634	116,584	-4,630	0	0	111,953	-49,178	62,775
Blackgum	0	910	910	0	0	0	910	0	910
Aspen	3,775	10,496	14,270	0	0	0	14,270	0	14,270
Black cherry	17,520	14,733	32,253	0	0	0	32,253	-4,003	28,251
White oak	44,250	59,480	103,731	-5,349	2,110	0	100,492	-58,562	41,929
Northern red oak	6,753	23,199	29,953	0	0	0	29,953	-19,740	10,213
Other white oaks	21,017	5,248	26,264	-3,167	0	0	23,098	-11,438	11,660
Other red oaks	26,460	40,368	66,828	-11,042	0	-5,024	50,762	-32,383	18,379
American basswood	2,754	-497	2,256	0	0	-4,689	-2,433	0	-2,433
Elm	11,406	5,244	16,651	-11,580	716	0	5,787	-4,901	886
Other hardwoods	12,277	25,639	37,917	-4,183	0	-10,376	23,358	-1,297	22,061
Total hardwoods	277,961	300,929	578,890	-77,000	16,479	-28,014	490,354	-191,942	298,412
Total, all species	290,360	316,991	607,351	-103,560	16,479	-28,014	492,255	-199,108	293,147

Table 67. Land area by county and land class, West Virginia, 2000

(In thousands of acres)

County	Land class						All classes
	Timberland	Productiv reserved	Unproductive reserved	Other forest	Total forest land	Nonforest land	
Braxton	268.6	.0	.0	.0	268.6	60.1	328.6
Grant	234.1	.0	.0	6.4	240.5	64.9	305.4
Hampshire	292.7	.0	.0	3.1	295.8	114.9	410.7
Hardy	299.4	.0	.0	.0	299.4	74.0	373.4
Harrison	162.8	.0	.0	.0	162.8	103.5	266.3
Lewis	201.2	.0	.0	.0	201.2	47.6	248.9
Mineral	164.2	.0	.0	.0	164.2	45.6	209.8
Morgan	114.6	.0	.0	.0	114.6	32.0	146.6
Pendleton	361.5	.0	.0	6.8	368.4	78.4	446.7
Pocahontas	492.7	40.9	.0	.0	533.6	68.2	601.8
Preston	285.8	.0	.0	.0	285.8	129.1	415.0
Randolph	563.8	24.8	.0	.0	588.6	76.9	665.5
Tucker	184.2	27.9	.0	14.0	226.0	42.1	268.1
Upshur	159.4	.0	.0	.0	159.4	67.7	227.1
Webster	326.6	6.1	.0	.0	332.7	23.2	355.9
Barbour/Taylor	210.3	.0	.0	.0	210.3	118.4	328.7
Berkeley/Jefferson	148.5	.0	.0	.0	148.5	191.2	339.7
Northeastern Unit	4,470.4	99.6	.0	30.3	4,600.3	1,337.8	5,938.2
Boone	270.6	.0	.0	.0	270.6	51.3	321.9
Clay	190.2	.0	.0	.0	190.2	29.0	219.2
Fayette	333.4	28.3	.0	.0	361.7	63.3	424.9
Greenbrier	483.5	.0	.0	5.6	489.1	164.5	653.6
Kanawha	436.9	6.3	.0	.0	443.3	134.7	578.0
Logan	247.9	.0	.0	.0	247.9	42.8	290.7
McDowell	319.2	.0	.0	.0	319.2	23.1	342.2
Mercer	215.7	.0	.0	.0	215.7	53.4	269.1
Mingo	230.5	.0	.0	.0	230.5	40.0	270.5
Monroe	204.1	.0	.0	.0	204.1	98.9	303.0
Nicholas	331.6	.0	.0	.0	331.6	83.5	415.1
Raleigh	295.9	23.3	.0	.0	319.2	69.3	388.5
Summers	170.3	6.1	.0	.0	176.5	54.7	231.2
Wyoming	277.7	.0	.0	.0	277.7	42.9	320.6
Southern Unit	4,007.5	64.0	.0	5.6	4,077.2	951.4	5,028.6
Cabel	124.4	.0	.0	.0	124.4	55.9	180.2
Calhoun	154.6	.0	.0	.0	154.6	25.0	179.6
Doddridge	165.9	.0	.0	.0	165.9	39.2	205.1
Gilmer	180.6	.0	.0	.0	180.6	37.1	217.6
Jackson	196.4	.0	.0	.0	196.4	101.7	298.1
Lincoln	236.5	.0	.0	.0	236.5	43.4	280.0
Marion	130.0	.0	.0	.0	130.0	68.2	198.2
Marshall	145.4	.0	.0	.0	145.4	51.1	196.5
Mason	174.5	.0	.0	.0	174.5	101.9	276.4
Monongalia	144.5	.0	.0	.0	144.5	86.7	231.2
Putnam	168.4	.0	.0	.0	168.4	53.2	221.6
Richie	230.4	7.0	.0	.0	237.5	52.8	290.3
Roane	243.6	.0	.0	.0	243.6	65.9	309.5
Wayne	261.7	.0	.0	.0	261.7	62.0	323.7
Wetzel	188.5	.0	.0	.0	188.5	41.5	229.9
Wirt	132.6	.0	.0	.0	132.6	16.6	149.1
Wood	156.3	.0	.0	.0	156.3	78.8	235.1
Brooke/Hancock/Ohio	106.2	3.3	.0	.0	109.5	68.5	178.0
Pleasant/Tyler	178.8	.0	.0	.0	178.8	69.8	248.5
Northwestern Unit	3,319.0	10.3	.0	.0	3,329.3	1,119.3	4,448.7
Total, all counties	11,797.0	174.0	.0	35.9	12,006.9	3,408.5	15,415.4

Table 68. Area of timberland by county and stand-size class, West Virginia, 2000

(In thousands of acres)

County	Stand-size class				All classes	SE
	Saw-timber	Pole-timber	Sapling and seedling	Non-stocked		
Braxton	194.1	61.6	8.2	4.7	268.6	3.7
Grant	119.7	92.1	22.3	.0	234.1	5.7
Hampshire	192.4	81.8	14.4	4.1	292.7	5.5
Hardy	185.5	86.8	27.0	.0	299.4	3.7
Harrison	100.3	51.2	11.2	.0	162.8	6.2
Lewis	99.5	80.4	19.4	1.9	201.2	4.5
Mineral	90.0	64.4	8.6	1.2	164.2	4.3
Morgan	75.3	25.5	13.8	.0	114.6	3.5
Pendleton	275.4	62.4	20.9	2.8	361.5	4.2
Pocahontas	371.1	96.6	23.7	1.3	492.7	3.8
Preston	199.3	58.7	27.8	.0	285.8	4.4
Randolph	483.4	54.6	23.4	2.4	563.8	2.9
Tucker	134.9	43.7	.0	5.6	184.2	8.1
Upshur	106.2	38.1	7.9	7.2	159.4	4.6
Webster	246.0	67.3	13.3	.0	326.6	3.5
Barbour/Taylor	138.2	31.0	41.1	.0	210.3	5.7
Berkeley/Jefferson	72.7	37.6	37.0	1.1	148.5	8.3
Northeastern Unit	3,084.2	1,034.0	319.9	32.3	4,470.4	1.1
Boone	185.6	50.8	34.3	.0	270.6	3.4
Clay	142.4	44.2	2.4	1.2	190.2	3.1
Fayette	240.8	56.7	35.9	.0	333.4	4.7
Greenbrier	278.6	138.4	64.5	2.0	483.5	2.9
Kanawha	328.9	78.1	29.9	.0	436.9	3.2
Logan	197.7	15.2	33.8	1.2	247.9	2.4
McDowell	209.1	83.0	27.0	.0	319.2	1.2
Mercer	90.4	96.3	22.0	7.0	215.7	4.7
Mingo	194.7	23.3	12.4	.0	230.5	4.0
Monroe	93.7	93.6	8.6	8.2	204.1	5.1
Nicholas	225.3	57.8	43.4	5.1	331.6	3.2
Raleigh	184.8	76.4	34.7	.0	295.9	5.1
Summers	108.4	47.1	13.7	1.2	170.3	6.8
Wyoming	190.0	60.1	17.3	10.3	277.7	2.3
Southern Unit	2,670.4	921.0	380.0	36.2	4,007.5	1.0
Cabel	89.6	28.2	5.0	1.5	124.4	5.9
Calhoun	121.7	32.8	.0	.0	154.6	4.0
Doddridge	132.8	31.3	1.8	.0	165.9	3.8
Gilmer	118.3	53.7	8.5	.0	180.6	4.0
Jackson	134.5	55.4	6.6	.0	196.4	6.0
Lincoln	159.9	64.3	12.4	.0	236.5	4.7
Marion	99.3	17.6	13.1	.0	130.0	6.1
Marshall	98.5	33.6	5.6	7.7	145.4	5.2
Mason	118.6	49.9	6.0	.0	174.5	6.1
Monongalia	114.8	14.7	15.0	.0	144.5	6.4
Putnam	146.0	14.3	8.1	.0	168.4	6.3
Richie	199.7	18.9	10.6	1.3	230.4	4.8
Roane	189.3	39.5	9.5	5.2	243.6	4.4
Wayne	172.5	76.0	13.2	.0	261.7	3.4
Wetzel	163.9	21.2	3.3	.0	188.5	4.2
Wirt	72.1	47.7	12.8	.0	132.6	4.3
Wood	108.6	30.9	16.7	.0	156.3	6.2
Brooke/Hancock/Ohio	53.7	22.5	30.0	.0	106.2	7.3
Pleasant/Tyler	148.5	28.7	1.6	.0	178.8	5.6
Northwestern Unit	2,442.3	681.2	179.8	15.7	3,319.0	1.2
Total, all counties	8,196.9	2,636.2	879.6	84.3	11,797.0	.6
SE	1.5	4.0	7.2	22.0	.6	

Table 69. Area of timberland by county and forest-type group, West Virginia, 2000

(In thousands of acres)

County	Forest-type group									Total	SE
	White/ red pine	Spruce/ fir	Loblolly/ shortleaf	Oak/ pine	Oak/ hickory	Oak/gum/ cypress	Elm/ash/ red maple	Northern hardwoods	Aspen/ birch		
Braxton	2.6	.0	.0	.0	209.8	.0	3.7	52.5	.0	268.6	3.7
Grant	.0	.0	11.2	8.6	136.0	.0	.0	72.9	5.5	234.1	5.7
Hampshire	5.3	.0	25.3	34.3	211.4	.0	5.8	10.6	.0	292.7	5.5
Hardy	7.1	.0	4.7	22.2	238.4	.0	3.8	23.2	.0	299.4	3.7
Harrison	.0	.0	.0	.0	84.5	.0	23.0	55.2	.0	162.8	6.2
Lewis	.0	.0	.0	.0	164.2	.0	14.8	22.3	.0	201.2	4.5
Mineral	.0	.0	8.8	12.7	111.6	.0	8.0	23.1	.0	164.2	4.3
Morgan	.0	.0	20.6	2.2	91.3	.0	.0	.6	.0	114.6	3.5
Pendleton	21.6	5.1	19.9	14.2	229.4	.0	.0	71.3	.0	361.5	4.2
Pocahontas	34.7	11.1	.0	5.1	199.9	.0	5.1	236.7	.0	492.7	3.8
Preston	.0	.0	.0	.0	200.6	.0	.0	85.2	.0	285.8	4.4
Randolph	.0	.0	.0	.0	238.4	.0	1.0	324.4	.0	563.8	2.9
Tucker	18.5	7.4	.0	.0	60.2	.0	5.6	92.5	.0	184.2	8.1
Upshur	3.7	.0	.0	.0	130.6	.0	3.1	22.1	.0	159.4	4.6
Webster	.0	.0	.0	.0	208.2	.0	.0	118.5	.0	326.6	3.5
Barbour/Taylor	.0	.0	.0	.0	127.1	.0	7.9	71.6	3.7	210.3	5.7
Berkeley/Jefferson	.0	.0	1.1	23.5	100.1	.0	10.1	13.7	.0	148.5	8.3
Northeastern Unit	93.4	23.6	91.5	122.7	2,741.6	.0	92.0	1,296.5	9.2	4,470.4	1.1
Boone	.0	.0	3.0	.0	193.2	.0	13.9	60.4	.0	270.6	3.4
Clay	5.5	.0	.0	3.3	150.2	.0	1.2	30.0	.0	190.2	3.1
Fayette	5.9	.0	.0	.0	276.0	.0	.0	51.5	.0	333.4	4.7
Greenbrier	11.3	.0	.9	12.9	350.4	.0	.0	108.0	.0	483.5	2.9
Kanawha	.0	.0	9.1	5.0	349.0	.0	16.9	57.0	.0	436.9	3.2
Logan	.0	.0	.0	.0	194.8	.0	2.3	50.8	.0	247.9	2.4
McDowell	.0	.0	.0	.0	270.9	.0	6.4	41.8	.0	319.2	1.2
Mercer	14.0	.0	.0	5.4	159.9	.0	.0	36.3	.0	215.7	4.7
Mingo	.0	.0	.0	.0	193.3	.0	.0	37.1	.0	230.5	4.0
Monroe	.0	.0	10.3	21.8	147.7	.0	5.8	18.5	.0	204.1	5.1

Table 69. continued

(In thousands of acres)

County	Forest-type group									Total	SE
	White/ red pine	Spruce/ fir	Loblolly/ shortleaf	Oak/ pine	Oak/ hickory	Oak/gum/ cypress	Elm/ash/ red maple	Northern hardwoods	Aspen/ birch		
Nicholas	.0	.0	.0	.0	222.7	.0	.0	108.9	.0	331.6	3.2
Raleigh	.0	.0	.0	.0	239.3	.0	5.4	51.2	.0	295.9	5.1
Summers	.0	.0	12.3	.0	136.7	.0	1.5	19.8	.0	170.3	6.8
Wyoming	8.3	.0	.0	.0	245.6	.0	.0	23.8	.0	277.7	2.3
Southern Unit	45.1	.0	35.6	48.4	3,129.7	.0	53.4	695.2	.0	4,007.5	1.0
Cabel	.0	.0	5.1	3.0	87.5	.0	7.9	20.9	.0	124.4	5.9
Calhoun	.0	.0	.0	4.0	124.3	.0	14.0	12.3	.0	154.6	4.0
Doddridge	.0	.0	.0	.0	151.1	.0	4.1	10.7	.0	165.9	3.8
Gilmer	.0	.0	.0	1.8	155.5	.0	10.4	12.9	.0	180.6	4.0
Jackson	.0	.0	.0	40.9	140.8	.0	4.0	10.6	.0	196.4	6.0
Lincoln	.0	.0	.0	2.2	214.9	.0	5.2	14.2	.0	236.5	4.7
Marion	.0	.0	.0	.0	80.7	.0	7.2	42.0	.0	130.0	6.1
Marshall	.0	.0	.0	.0	62.6	.0	38.7	44.2	.0	145.4	5.2
Mason	.0	.0	16.4	18.6	134.6	.0	5.0	.0	.0	174.5	6.1
Monongalia	.0	.0	.0	.0	123.0	.0	.0	21.5	.0	144.5	6.4
Putnam	.0	.0	.0	4.8	154.5	.0	.0	9.1	.0	168.4	6.3
Richie	4.1	.0	3.1	3.9	194.6	.0	.0	24.7	.0	230.4	4.8
Roane	.0	.0	.0	22.0	203.6	.0	6.6	11.3	.0	243.6	4.4
Wayne	.0	.0	7.1	6.0	227.5	.0	5.8	15.3	.0	261.7	3.4
Wetzel	.0	.0	.0	.0	118.6	.0	22.0	47.8	.0	188.5	4.2
Wirt	.0	.0	5.8	18.2	98.4	.0	.0	10.2	.0	132.6	4.3
Wood	.0	.0	14.7	6.6	118.0	.0	6.9	10.1	.0	156.3	6.2
Brooke/Hancock/Ohio	.0	.0	.0	.0	23.8	.0	23.8	58.6	.0	106.2	7.3
Pleasant/Tyler	.0	.0	.0	13.8	132.5	.0	6.9	25.6	.0	178.8	5.6
Northwestern Unit	4.1	.0	52.1	145.9	2,546.5	.0	168.5	401.9	.0	3,319.0	1.2
Total, all counties	142.6	23.6	179.2	317.0	8,417.9	.0	313.9	2,393.6	9.2	11,797.0	.6
SE	19.1	48.6	16.1	12.5	1.5	.0	12.6	4.2	72.1	.6	

Table 70. Area of timberland by county and ownership class, West Virginia, 2000

(In thousands of acres)

County	Ownership class								All ownerships	SE
	National Forest	Misc. federal	State	County and municipal	Forest industry	Farmer	Corporate	Individual		
Braxton	.0	6.2	.0	17.4	18.8	28.7	6.2	191.2	268.6	3.7
Grant	23.3	.0	.0	.0	.0	19.2	59.2	132.4	234.1	5.7
Hampshire	5.3	.0	13.1	.0	21.7	23.6	34.5	194.7	292.7	5.5
Hardy	58.0	.0	6.2	.0	6.2	32.6	54.9	141.5	299.4	3.7
Harrison	.0	7.8	.0	.0	.0	12.0	30.7	112.2	162.8	6.2
Lewis	.0	21.1	5.8	7.4	14.6	.0	27.1	125.2	201.2	4.5
Mineral	.0	.0	13.0	.0	13.0	1.2	25.0	111.9	164.2	4.3
Morgan	.0	.0	6.9	.0	.0	.0	22.4	85.3	114.6	3.5
Pendleton	141.7	.0	.0	.0	.0	78.8	13.6	127.4	361.5	4.2
Pocahontas	306.1	.0	20.5	.0	6.8	13.9	25.3	120.1	492.7	3.8
Preston	11.1	.0	5.5	.0	51.4	18.7	34.0	165.1	285.8	4.4
Randolph	178.8	.0	12.4	.0	149.0	27.7	55.3	140.7	563.8	2.9
Tucker	69.2	7.4	.0	.0	7.4	.0	27.1	73.2	184.2	8.1
Upshur	.0	.0	3.1	.0	60.2	7.3	24.2	64.6	159.4	4.6
Webster	66.2	.0	.0	.0	117.4	.0	55.6	87.5	326.6	3.5
Barbour/Taylor	.0	.0	.0	.0	5.9	19.2	17.7	167.6	210.3	5.7
Berkeley/Jefferson	.0	.0	29.0	.0	.0	.0	11.4	108.1	148.5	8.3
Northeastern Unit	859.6	42.5	115.5	24.9	472.3	282.8	524.2	2,148.7	4,470.4	1.1
Boone	.0	.0	.0	.0	.0	.0	217.0	53.7	270.6	3.4
Clay	.0	.0	11.0	.0	.0	.0	71.0	108.2	190.2	3.1
Fayette	.0	5.9	4.5	.0	54.6	2.6	191.1	74.7	333.4	4.7
Greenbrier	90.1	.0	5.6	.0	126.6	43.5	48.5	169.1	483.5	2.9
Kanawha	.0	.0	6.3	6.3	9.3	6.3	232.7	175.9	436.9	3.2
Logan	.0	.0	.0	1.1	23.1	.0	155.3	68.4	247.9	2.4
McDowell	.0	.0	4.2	6.4	17.1	.0	194.7	96.7	319.2	1.2
Mercer	.0	.0	11.7	5.2	.0	5.4	38.5	154.8	215.7	4.7
Mingo	.0	.0	.0	.0	13.7	6.2	167.5	43.1	230.5	4.0
Monroe	12.9	.0	.0	.0	11.8	.0	23.1	156.2	204.1	5.1

Table 70. continued

(In thousands of acres)

County	Ownership class								All ownerships	SE
	National Forest	Misc. federal	State	County and municipal	Forest industry	Farmer	Corporate	Individual		
Nicholas	17.7	.0	.0	.0	55.5	3.6	114.2	140.6	331.6	3.2
Raleigh	.0	.0	3.3	.0	10.5	.0	141.7	140.4	295.9	5.1
Summers	.0	18.4	.0	.0	.0	7.0	.0	145.0	170.3	6.8
Wyoming	.0	6.7	.0	.0	79.6	.0	136.9	54.6	277.7	2.3
Southern Unit	120.7	31.1	46.8	19.1	401.7	74.6	1,732.2	1,581.4	4,007.5	1.0
Cabel	.0	.0	.0	.0	.0	6.5	10.5	107.3	124.4	5.9
Calhoun	.0	.0	.0	.0	16.1	11.9	.0	126.6	154.6	4.0
Doddridge	.0	.0	.0	.0	7.6	13.6	5.6	139.0	165.9	3.8
Gilmer	.0	6.6	.0	.0	14.0	64.3	.0	95.7	180.6	4.0
Jackson	.0	.0	.0	.0	4.0	.0	4.0	188.3	196.4	6.0
Lincoln	.0	.0	5.9	.0	5.9	6.5	46.4	171.9	236.5	4.7
Marion	.0	.0	.0	.0	7.0	13.4	31.2	78.4	130.0	6.1
Marshall	.0	.0	.0	4.0	.0	15.2	32.2	93.9	145.4	5.2
Mason	.0	.0	26.8	.0	.0	4.5	13.4	129.8	174.5	6.1
Monongalia	.0	.0	11.7	.0	6.7	13.5	20.4	92.2	144.5	6.4
Putnam	.0	.0	.0	12.2	.0	.0	32.6	123.6	168.4	6.3
Richie	.0	.0	.0	3.1	48.3	1.5	9.8	167.7	230.4	4.8
Roane	.0	.0	6.6	11.9	13.3	16.9	9.3	185.6	243.6	4.4
Wayne	.0	24.2	6.0	.0	.0	5.1	22.6	203.9	261.7	3.4
Wetzel	.0	2.7	13.9	.0	6.9	13.9	18.7	132.3	188.5	4.2
Wirt	.0	.0	.0	.0	67.1	14.0	.0	51.4	132.6	4.3
Wood	.0	.0	.0	.0	10.1	6.6	9.8	129.9	156.3	6.2
Brooke/Hancock/Ohio	.0	.0	4.9	.0	.0	.0	7.2	94.0	106.2	7.3
Pleasant/Tyler	.0	.0	.0	1.8	13.8	42.8	.0	120.3	178.8	5.6
Northwestern Unit	.0	33.5	75.9	33.1	220.8	250.1	273.7	2,431.9	3,319.0	1.2
Total, all counties	980.2	107.0	238.1	77.1	1,094.8	607.6	2,530.2	6,162.0	11,797.0	.6
SE	6.4	24.0	15.7	29.4	6.7	8.9	3.8	2.1	.6	

Table 71. Area of timberland by county and stocking class of growing-stock trees, West Virginia, 2000

(In thousands of acres)

County	Stocking class					All classes	SE
	Nonstocked	Poorly stocked	Moderately stocked	Fully stocked	Over-stocked		
Braxton	6.6	31.6	71.3	154.9	4.1	268.6	3.7
Grant	.0	39.6	58.0	135.9	.5	234.1	5.7
Hampshire	6.4	16.9	146.7	120.9	1.9	292.7	5.5
Hardy	.0	21.0	148.3	128.4	1.7	299.4	3.7
Harrison	2.5	13.2	100.0	45.5	1.5	162.8	6.2
Lewis	15.8	27.3	87.2	71.0	.0	201.2	4.5
Mineral	6.0	33.8	65.2	57.7	1.5	164.2	4.3
Morgan	.6	25.0	48.0	40.9	.0	114.6	3.5
Pendleton	4.5	41.5	90.5	194.7	30.3	361.5	4.2
Pocahontas	11.6	32.2	146.2	260.3	42.2	492.7	3.8
Preston	.0	27.1	149.1	106.7	3.0	285.8	4.4
Randolph	2.4	49.2	207.7	290.2	14.3	563.8	2.9
Tucker	5.6	12.5	71.6	87.2	7.4	184.2	8.1
Upshur	7.2	11.3	73.6	61.9	5.4	159.4	4.6
Webster	.0	24.9	102.6	187.6	11.6	326.6	3.5
Barbour/Taylor	8.8	17.4	65.4	110.2	8.5	210.3	5.7
Berkeley/Jefferson	1.1	31.1	74.1	36.7	5.4	148.5	8.3
Northeastern Unit	79.2	455.6	1,705.6	2,090.6	139.5	4,470.4	1.1
Boone	6.1	41.6	139.0	80.9	3.1	270.6	3.4
Clay	1.2	12.5	74.4	96.5	5.5	190.2	3.1
Fayette	.0	41.7	116.8	158.1	16.8	333.4	4.7
Greenbrier	5.4	45.7	177.1	232.4	22.9	483.5	2.9
Kanawha	4.3	54.1	198.4	174.3	5.9	436.9	3.2
Logan	1.2	61.1	81.6	101.9	2.2	247.9	2.4
McDowell	.0	40.8	136.7	141.7	.0	319.2	1.2
Mercer	7.0	22.5	61.1	123.3	1.7	215.7	4.7
Mingo	.0	26.0	128.7	69.6	6.2	230.5	4.0
Monroe	8.2	25.2	69.7	99.7	1.2	204.1	5.1
Nicholas	5.1	47.4	125.2	138.6	15.3	331.6	3.2
Raleigh	.0	77.0	97.9	120.9	.0	295.9	5.1
Summers	1.2	10.1	59.2	98.5	1.4	170.3	6.8
Wyoming	12.0	46.7	115.9	99.3	3.7	277.7	2.3
Southern Unit	51.6	552.6	1,581.6	1,736.0	85.8	4,007.5	1.0
Cabel	1.5	7.2	56.9	55.0	3.8	124.4	5.9
Calhoun	.0	23.9	81.6	49.0	.0	154.6	4.0
Doddridge	.0	17.5	74.7	73.4	.2	165.9	3.8
Gilmer	1.8	47.8	70.6	56.4	4.0	180.6	4.0
Jackson	.0	19.9	85.1	90.9	.5	196.4	6.0
Lincoln	.0	18.2	108.5	101.0	8.8	236.5	4.7
Marion	3.3	27.4	35.3	54.0	9.9	130.0	6.1
Marshall	7.7	31.0	57.8	48.9	.0	145.4	5.2
Mason	1.5	48.8	56.2	64.2	3.8	174.5	6.1
Monongalia	5.0	17.3	56.7	63.2	2.4	144.5	6.4
Putnam	.0	38.7	54.5	73.9	1.3	168.4	6.3
Richie	1.3	13.8	102.1	108.0	5.3	230.4	4.8
Roane	7.9	47.0	129.2	59.4	.0	243.6	4.4
Wayne	2.6	22.8	83.1	148.7	4.5	261.7	3.4
Wetzel	.0	28.6	91.5	68.4	.0	188.5	4.2
Wirt	.0	5.4	55.6	67.4	4.2	132.6	4.3
Wood	5.2	24.5	63.3	58.6	4.6	156.3	6.2
Brooke/Hancock/Ohio	4.9	32.6	27.9	40.7	.0	106.2	7.3
Pleasant/Tyler	.0	22.8	90.9	65.1	.0	178.8	5.6
Northwestern Unit	42.7	495.2	1,381.4	1,346.3	53.5	3,319.0	1.2
Total, all counties	173.4	1,503.4	4,668.5	5,172.8	278.8	11,797.0	.6
SE	15.8	5.6	2.8	2.5	12.6	.6	

Table 72. Net volume of growing-stock trees on timberland by county and stand-size class, West Virginia, 2000

(In millions of cubic feet)

County	Stand-size class				All classes	SE
	Saw-timber	Pole-timber	Sapling and seedling	Non-stocked		
Braxton	548.9	92.0	3.5	.4	644.7	9.1
Grant	223.5	116.8	5.3	.0	345.6	9.6
Hampshire	327.4	85.4	3.1	.3	416.2	8.3
Hardy	331.3	104.5	6.0	.0	441.9	8.0
Harrison	224.6	62.5	3.0	.0	290.2	10.8
Lewis	233.1	96.7	2.7	.0	332.5	11.4
Mineral	147.2	60.3	.9	.0	208.4	13.2
Morgan	136.2	32.1	4.8	.0	173.2	14.6
Pendleton	606.6	71.4	5.4	.0	683.5	7.1
Pocahontas	1,013.1	149.3	3.2	.0	1,165.6	7.3
Preston	465.2	78.1	5.9	.0	549.2	7.6
Randolph	1,266.7	73.6	8.3	.1	1,348.7	6.0
Tucker	367.0	78.8	.0	.2	445.9	11.0
Upshur	328.3	59.2	2.6	.7	390.9	12.4
Webster	748.6	105.2	1.1	.0	854.8	8.1
Barbour/Taylor	374.6	53.3	5.5	.0	433.4	9.9
Berkeley/Jefferson	124.2	37.1	14.4	.0	175.6	15.7
Northeastern Unit	7,466.5	1,356.2	75.7	1.6	8,900.1	2.3
Boone	360.1	50.5	6.5	.0	417.2	8.7
Clay	360.0	78.6	.0	.0	438.6	6.7
Fayette	568.8	68.8	12.1	.0	649.7	8.2
Greenbrier	644.7	194.4	15.0	.0	854.1	6.6
Kanawha	669.1	101.2	16.4	.0	786.6	6.8
Logan	391.8	21.7	19.3	.2	433.0	7.9
McDowell	478.2	110.2	13.3	.0	601.7	6.3
Mercer	241.0	166.3	8.3	.0	415.6	10.4
Mingo	439.2	33.1	2.9	.0	475.2	8.5
Monroe	153.9	140.6	1.4	.0	295.9	9.5
Nicholas	606.3	86.7	12.0	.0	705.0	7.8
Raleigh	450.2	112.4	17.4	.0	580.0	10.1
Summers	250.4	66.7	3.0	.0	320.1	10.9
Wyoming	439.0	84.3	12.4	.0	535.7	7.8
Southern Unit	6,052.8	1,315.4	140.1	.2	7,508.5	2.2
Cabel	183.6	21.7	2.0	.0	207.3	10.2
Calhoun	247.8	44.3	.0	.0	292.1	8.3
Doddridge	308.5	45.0	.2	.0	353.7	8.7
Gilmer	223.5	68.5	4.7	.0	296.7	9.8
Jackson	269.3	68.7	.0	.0	337.9	8.8
Lincoln	350.5	106.4	4.1	.0	461.0	9.0
Marion	254.6	24.2	3.5	.0	282.3	13.9
Marshall	187.3	44.1	.0	.0	231.4	11.8
Mason	236.6	48.6	2.5	.0	287.6	12.3
Monongalia	262.8	35.7	2.2	.0	300.7	12.5
Putnam	304.5	23.1	1.1	.0	328.7	12.5
Richie	399.7	26.0	1.4	.0	427.1	7.8
Roane	349.7	44.9	1.4	3.2	399.1	7.7
Wayne	370.7	103.4	3.0	.0	477.1	6.9
Wetzel	328.8	19.2	.4	.0	348.4	10.3
Wirt	145.4	62.0	.1	.0	207.4	9.1
Wood	220.0	28.5	1.5	.0	250.0	11.2
Brooke/Hancock/Ohio	85.0	26.9	10.7	.0	122.6	17.8
Pleasant/Tyler	300.0	33.4	.2	.0	333.7	8.8
Northwestern Unit	5,028.3	874.4	39.0	3.2	5,944.8	2.3
Total, all counties	18,547.6	3,546.0	254.8	5.0	22,353.4	1.3
SE	1.9	4.7	11.7	65.4	1.3	

Table 73. Net volume of growing-stock trees on timberland by county and forest-type group, West Virginia, 2000

(In millions of cubic feet)

County	Forest-type group									Total
	White/ red pine	Spruce/ fir	Loblolly/ shortleaf	Oak/ pine	Oak/ hickory	Oak/gum/ cypress	Elm/ash/ red maple	Northern hardwoods	Aspen/ birch	
Braxton	14.6	.0	.0	.0	520.9	.0	1.8	107.4	.0	644.7
Grant	.0	.0	9.7	11.4	168.2	.0	.0	154.5	1.7	345.6
Hampshire	9.1	.0	13.7	26.3	348.6	.0	6.1	12.5	.0	416.2
Hardy	23.2	.0	8.2	20.1	351.0	.0	.1	39.3	.0	441.9
Harrison	.0	.0	.0	.0	166.8	.0	43.8	79.6	.0	290.2
Lewis	.0	.0	.0	.0	294.2	.0	9.1	29.2	.0	332.5
Mineral	.0	.0	12.4	5.9	139.7	.0	13.9	36.4	.0	208.4
Morgan	.0	.0	22.9	2.6	147.5	.0	.0	.2	.0	173.2
Pendleton	38.0	17.7	13.7	21.6	400.7	.0	.0	191.9	.0	683.5
Pocahontas	81.2	26.7	.0	10.0	477.7	.0	2.2	567.8	.0	1,165.6
Preston	.0	.0	.0	.0	395.0	.0	.0	154.2	.0	549.2
Randolph	.0	.0	.0	.0	531.0	.0	.0	817.6	.0	1,348.7
Tucker	50.0	19.3	.0	.0	175.4	.0	.2	201.1	.0	445.9
Upshur	4.4	.0	.0	.0	321.8	.0	.5	64.2	.0	390.9
Webster	.0	.0	.0	.0	530.5	.0	.0	324.3	.0	854.8
Barbour/Taylor	.0	.0	.0	.0	279.9	.0	.7	146.7	6.0	433.4
Berkeley/Jefferson	.0	.0	.2	32.0	102.8	.0	20.3	20.4	.0	175.6
Northeastern Unit	220.4	63.6	80.7	129.9	5,351.6	.0	98.6	2,947.4	7.8	8,900.1
Boone	.0	.0	.0	.0	319.5	.0	22.9	74.8	.0	417.2
Clay	17.8	.0	.0	2.6	332.8	.0	.0	85.3	.0	438.6
Fayette	13.3	.0	.0	.0	543.7	.0	.0	92.7	.0	649.7
Greenbrier	22.6	.0	.8	12.8	673.2	.0	.0	144.8	.0	854.1
Kanawha	.0	.0	15.4	6.2	620.0	.0	17.5	127.6	.0	786.6
Logan	.0	.0	.0	.0	339.5	.0	.2	93.3	.0	433.0
McDowell	.0	.0	.0	.0	511.0	.0	2.8	88.0	.0	601.7
Mercer	42.8	.0	.0	7.4	269.4	.0	.0	96.0	.0	415.6
Mingo	.0	.0	.0	.0	397.8	.0	.0	77.5	.0	475.2

Table 73. continued

(In millions of cubic feet)

County	Forest-type group									Total
	White/ red pine	Spruce/ fir	Loblolly/ shortleaf	Oak/ pine	Oak/ hickory	Oak/gum/ cypress	Elm/ash/ red maple	Northern hardwoods	Aspen/ birch	
Monroe	.0	.0	14.4	38.6	219.1	.0	.5	23.3	.0	295.9
Nicholas	.0	.0	.0	.0	506.9	.0	.0	198.1	.0	705.0
Raleigh	.0	.0	.0	.0	509.3	.0	.2	70.5	.0	580.0
Summers	.0	.0	21.2	.0	274.6	.0	2.6	21.7	.0	320.1
Wyoming	7.2	.0	.0	.0	469.1	.0	.0	59.4	.0	535.7
Southern Unit	103.7	.0	51.7	67.6	5,985.8	.0	46.7	1,252.9	.0	7,508.5
Cabel	.0	.0	7.0	3.4	160.2	.0	6.5	30.1	.0	207.3
Calhoun	.0	.0	.0	8.8	229.4	.0	29.2	24.7	.0	292.1
Doddridge	.0	.0	.0	.0	322.6	.0	12.6	18.5	.0	353.7
Gilmer	.0	.0	.0	.1	272.1	.0	10.6	13.9	.0	296.7
Jackson	.0	.0	.0	55.7	261.9	.0	2.6	17.7	.0	337.9
Lincoln	.0	.0	.0	2.6	430.3	.0	3.5	24.7	.0	461.0
Marion	.0	.0	.0	.0	198.0	.0	14.8	69.5	.0	282.3
Marshall	.0	.0	.0	.0	107.3	.0	46.4	77.7	.0	231.4
Mason	.0	.0	17.2	24.4	242.6	.0	3.5	.0	.0	287.6
Monongalia	.0	.0	.0	.0	252.5	.0	.0	48.2	.0	300.7
Putnam	.0	.0	.0	10.8	302.7	.0	.0	15.2	.0	328.7
Richie	4.6	.0	1.4	6.6	377.0	.0	.0	37.5	.0	427.1
Roane	.0	.0	.0	21.2	358.2	.0	8.3	11.5	.0	399.1
Wayne	.0	.0	5.4	9.6	426.4	.0	4.4	31.3	.0	477.1
Wetzel	.0	.0	.0	.0	231.0	.0	39.0	78.4	.0	348.4
Wirt	.0	.0	6.3	10.4	178.4	.0	.0	12.2	.0	207.4
Wood	.0	.0	22.9	9.3	193.1	.0	11.2	13.5	.0	250.0
Brooke/Hancock/Ohio	.0	.0	.0	.0	16.8	.0	41.3	64.4	.0	122.6
Pleasant/Tyler	.0	.0	.0	24.4	268.1	.0	7.1	34.1	.0	333.7
Northwestern Unit	4.6	.0	60.2	187.2	4,828.7	.0	241.0	623.0	.0	5,944.8
Total, all counties	328.8	63.6	192.7	384.7	16,166.1	.0	386.3	4,823.4	7.8	22,353.4

Table 74. Net volume of sawtimber trees on timberland by county and forest-type group, West Virginia, 2000

(In millions of board feet)

County	Forest-type group									Total	SE
	White/ red pine	Spruce/ fir	Loblolly/ shortleaf	Oak/ pine	Oak/ hickory	Oak/gum/ cypress	Elm/ash/ red maple	Northern hardwoods	Aspen/ birch		
Braxton	48.8	.0	.0	.0	1,592.7	.0	4.7	382.1	.0	2,028.2	12.1
Grant	.0	.0	9.3	11.3	304.9	.0	.0	505.4	.0	831.0	16.0
Hampshire	25.4	.0	18.7	50.9	1,049.9	.0	19.4	41.1	.0	1,205.4	11.5
Hardy	92.4	.0	23.3	37.9	942.9	.0	.0	131.2	.0	1,227.5	12.6
Harrison	.0	.0	.0	.0	544.4	.0	161.0	235.1	.0	940.5	14.6
Lewis	.0	.0	.0	.0	947.3	.0	20.1	92.1	.0	1,059.5	15.0
Mineral	.0	.0	25.0	9.9	292.6	.0	54.8	112.0	.0	494.2	22.2
Morgan	.0	.0	64.2	3.1	422.5	.0	.0	.0	.0	489.8	19.6
Pendleton	115.0	87.0	15.5	74.1	1,261.7	.0	.0	617.4	.0	2,170.8	9.2
Pocahontas	315.3	83.6	.0	43.3	1,535.7	.0	.0	1,897.8	.0	3,875.7	9.2
Preston	.0	.0	.0	.0	1,310.5	.0	.0	527.4	.0	1,837.9	10.1
Randolph	.0	.0	.0	.0	1,871.9	.0	.0	2,780.8	.0	4,652.7	7.4
Tucker	153.0	70.5	.0	.0	627.8	.0	.0	600.5	.0	1,451.7	14.1
Upshur	8.4	.0	.0	.0	1,115.4	.0	2.2	222.6	.0	1,348.5	18.4
Webster	.0	.0	.0	.0	1,991.6	.0	.0	1,172.9	.0	3,164.5	11.2
Barbour/Taylor	.0	.0	.0	.0	921.9	.0	.0	454.9	10.5	1,387.2	13.5
Berkeley/Jefferson	.0	.0	.0	77.3	284.6	.0	63.0	69.8	.0	494.7	22.5
Northeastern Unit	758.2	241.1	156.0	307.8	17,018.3	.0	325.2	9,843.0	10.5	28,660.0	3.1
Boone	.0	.0	.0	.0	1,043.3	.0	92.0	220.6	.0	1,355.9	11.3
Clay	66.7	.0	.0	4.2	1,036.2	.0	.0	309.8	.0	1,416.9	9.0
Fayette	45.5	.0	.0	.0	1,772.4	.0	.0	319.7	.0	2,137.5	9.9
Greenbrier	67.4	.0	1.3	29.6	1,962.1	.0	.0	408.8	.0	2,469.2	9.7
Kanawha	.0	.0	52.7	18.3	2,006.1	.0	49.5	459.2	.0	2,585.8	9.2
Logan	.0	.0	.0	.0	1,178.8	.0	.0	340.0	.0	1,518.8	10.2
McDowell	.0	.0	.0	.0	1,696.3	.0	4.7	273.3	.0	1,974.3	9.2
Mercer	133.0	.0	.0	11.8	678.1	.0	.0	326.1	.0	1,149.0	15.6
Mingo	.0	.0	.0	.0	1,336.2	.0	.0	255.7	.0	1,591.9	11.2
Monroe	.0	.0	37.8	101.8	474.3	.0	.0	49.5	.0	663.4	15.9

Table 74. continued

(In millions of board feet)

County	Forest-type group									Total	SE
	White/ red pine	Spruce/ fir	Loblolly/ shortleaf	Oak/ pine	Oak/ hickory	Oak/gum/ cypress	Elm/ash/ red maple	Northern hardwoods	Aspen/ birch		
Nicholas	.0	.0	.0	.0	1,591.0	.0	.0	760.4	.0	2,351.4	10.3
Raleigh	.0	.0	.0	.0	1,730.6	.0	.0	208.9	.0	1,939.5	13.6
Summers	.0	.0	63.0	.0	855.9	.0	3.0	51.4	.0	973.3	13.6
Wyoming	32.2	.0	.0	.0	1,543.5	.0	.0	227.5	.0	1,803.2	11.0
Southern Unit	344.8	.0	154.8	165.7	18,904.6	.0	149.3	4,211.0	.0	23,930.2	3.0
Cabel	.0	.0	20.2	8.7	476.8	.0	21.1	74.9	.0	601.8	16.5
Calhoun	.0	.0	.0	32.1	705.4	.0	71.4	75.0	.0	883.9	11.1
Doddridge	.0	.0	.0	.0	1,188.5	.0	37.9	63.4	.0	1,289.9	12.5
Gilmer	.0	.0	.0	.0	757.7	.0	35.3	44.2	.0	837.1	13.1
Jackson	.0	.0	.0	182.2	821.5	.0	8.1	65.8	.0	1,077.6	11.7
Lincoln	.0	.0	.0	7.9	1,370.5	.0	7.3	73.8	.0	1,459.5	11.8
Marion	.0	.0	.0	.0	738.5	.0	53.0	207.6	.0	999.1	18.1
Marshall	.0	.0	.0	.0	349.3	.0	152.6	239.7	.0	741.7	15.6
Mason	.0	.0	42.5	67.7	790.3	.0	14.5	.0	.0	915.0	16.6
Monongalia	.0	.0	.0	.0	826.6	.0	.0	154.5	.0	981.1	17.5
Putnam	.0	.0	.0	36.6	1,078.8	.0	.0	42.2	.0	1,157.5	16.0
Richie	8.9	.0	3.2	20.8	1,141.7	.0	.0	100.7	.0	1,275.4	9.7
Roane	.0	.0	.0	56.6	1,113.8	.0	28.8	28.6	.0	1,227.8	10.4
Wayne	.0	.0	10.2	26.3	1,244.0	.0	10.8	85.5	.0	1,376.8	10.3
Wetzel	.0	.0	.0	.0	764.6	.0	112.1	278.0	.0	1,154.7	14.0
Wirt	.0	.0	16.9	27.4	511.4	.0	.0	33.8	.0	589.5	15.1
Wood	.0	.0	52.7	19.9	602.8	.0	26.5	46.8	.0	748.8	13.5
Brooke/Hancock/Ohio	.0	.0	.0	.0	44.0	.0	147.0	199.4	.0	390.4	21.3
Pleasant/Tyler	.0	.0	.0	58.9	877.1	.0	24.2	114.5	.0	1,074.6	12.3
Northwestern Unit	8.9	.0	145.8	545.1	15,403.3	.0	750.7	1,928.4	.0	18,782.2	3.2
Total, all counties	1,111.9	241.1	456.6	1,018.6	51,326.2	.0	1,225.1	15,982.4	10.5	71,372.4	1.8
SE	23.6	51.0	24.3	15.9	2.5	.0	17.4	5.6	100.0	1.8	

Table 75. Net volume of sawtimber trees on timberland by county and stand-size class, West Virginia, 2000

(In millions of board feet)

County	Stand-size class				All classes	SE
	Saw-timber	Pole-timber	Sapling and seedling	Non-stocked		
Braxton	1,894.7	129.3	4.2	.0	2,028.2	12.1
Grant	724.1	103.6	3.3	.0	831.0	16.0
Hampshire	1,089.8	112.9	2.8	.0	1,205.4	11.5
Hardy	1,045.4	165.1	17.0	.0	1,227.5	12.6
Harrison	814.1	126.4	.0	.0	940.5	14.6
Lewis	825.1	234.4	.0	.0	1,059.5	15.0
Mineral	436.5	57.7	.0	.0	494.2	22.2
Morgan	438.6	51.2	.0	.0	489.8	19.6
Pendleton	2,052.3	106.5	12.0	.0	2,170.8	9.2
Pocahontas	3,621.5	254.2	.0	.0	3,875.7	9.2
Preston	1,695.1	122.9	19.9	.0	1,837.9	10.1
Randolph	4,492.1	147.4	13.1	.0	4,652.7	7.4
Tucker	1,300.1	151.6	.0	.0	1,451.7	14.1
Upshur	1,222.2	116.4	7.8	2.2	1,348.5	18.4
Webster	2,934.9	229.5	.0	.0	3,164.5	11.2
Barbour/Taylor	1,289.7	97.6	.0	.0	1,387.2	13.5
Berkeley/Jefferson	429.5	52.5	12.8	.0	494.7	22.5
Northeastern Unit	26,305.7	2,259.4	92.8	2.2	28,660.0	3.1
Boone	1,255.2	86.7	14.1	.0	1,355.9	11.3
Clay	1,261.3	155.6	.0	.0	1,416.9	9.0
Fayette	1,972.5	133.8	31.2	.0	2,137.5	9.9
Greenbrier	2,160.5	278.2	30.5	.0	2,469.2	9.7
Kanawha	2,369.6	155.0	61.2	.0	2,585.8	9.2
Logan	1,414.9	40.8	63.1	.0	1,518.8	10.2
McDowell	1,716.5	215.8	42.0	.0	1,974.3	9.2
Mercer	846.8	295.7	6.5	.0	1,149.0	15.6
Mingo	1,532.9	56.1	3.0	.0	1,591.9	11.2
Monroe	461.7	201.8	.0	.0	663.4	15.9
Nicholas	2,192.0	133.1	26.3	.0	2,351.4	10.3
Raleigh	1,713.2	189.6	36.7	.0	1,939.5	13.6
Summers	829.2	137.5	6.6	.0	973.3	13.6
Wyoming	1,614.8	148.9	39.4	.0	1,803.2	11.0
Southern Unit	21,341.3	2,228.4	360.5	.0	23,930.2	3.0
Cabel	581.2	20.5	.0	.0	601.8	16.5
Calhoun	806.3	77.6	.0	.0	883.9	11.1
Doddridge	1,197.8	92.1	.0	.0	1,289.9	12.5
Gilmer	711.2	123.4	2.5	.0	837.1	13.1
Jackson	942.9	134.6	.0	.0	1,077.6	11.7
Lincoln	1,253.5	204.6	1.4	.0	1,459.5	11.8
Marion	935.4	55.1	8.6	.0	999.1	18.1
Marshall	675.8	65.8	.0	.0	741.7	15.6
Mason	822.7	82.8	9.4	.0	915.0	16.6
Monongalia	901.4	74.8	5.0	.0	981.1	17.5
Putnam	1,108.0	49.5	.0	.0	1,157.5	16.0
Richie	1,228.7	45.9	.8	.0	1,275.4	9.7
Roane	1,153.9	67.8	3.4	2.7	1,227.8	10.4
Wayne	1,207.1	167.7	1.9	.0	1,376.8	10.3
Wetzel	1,116.3	38.4	.0	.0	1,154.7	14.0
Wirt	467.0	122.5	.0	.0	589.5	15.1
Wood	714.6	34.2	.0	.0	748.8	13.5
Brooke/Hancock/Ohio	307.3	57.8	25.3	.0	390.4	21.3
Pleasant/Tyler	1,014.1	60.5	.0	.0	1,074.6	12.3
Northwestern Unit	17,145.3	1,575.8	58.4	2.7	18,782.2	3.2
Total, all counties	64,792.2	6,063.5	511.8	4.9	71,372.4	1.8
SE	2.1	5.6	17.6	71.2	1.8	

Table 76. Average annual net growth of growing-stock and sawtimber volume on timberland by county and species group, West Virginia, 2000

(In thousands of cubic feet/board feet)

County	Growing Stock			Sawtimber		
	Softwoods	Hardwoods	All groups	Softwoods	Hardwoods	All groups
Braxton	0	16,618	16,618	0	65,251	65,251
Grant	1,633	-6,839	-5,206	2,155	-28,203	-26,047
Hampshire	449	6,586	7,035	1,561	28,996	30,557
Hardy	1,289	1,242	2,530	8,581	11,608	20,188
Harrison	0	7,600	7,600	0	22,825	22,825
Lewis	-1,464	9,257	7,793	-5,341	29,792	24,451
Mineral	822	1,877	2,699	4,807	2,964	7,771
Morgan	-427	2,150	1,723	5,183	4,631	9,814
Pendleton	496	-894	-398	1,121	15,797	16,918
Pocahontas	2,386	10,025	12,411	13,713	36,184	49,897
Preston	1,182	13,393	14,574	5,813	70,403	76,217
Randolph	1,516	25,036	26,552	8,717	116,718	125,435
Tucker	989	10,062	11,052	5,371	35,579	40,950
Upshur	-194	9,188	8,994	0	46,772	46,772
Webster	915	24,598	25,514	1,330	135,784	137,113
Barbour/Taylor	0	14,541	14,541	0	64,952	64,952
Berkeley/Jefferson	-59	2,924	2,865	0	12,907	12,907
Northeastern Unit	9,533	147,364	156,897	53,011	672,961	725,972
Boone	15	10,541	10,556	0	49,524	49,524
Clay	142	10,199	10,340	231	37,834	38,065
Fayette	-43	16,060	16,016	-1,079	75,774	74,695
Greenbrier	767	14,411	15,178	6,951	61,301	68,253
Kanawha	-938	12,430	11,492	-1,275	50,359	49,085
Logan	0	13,053	13,053	0	47,777	47,777
McDowell	773	13,183	13,957	3,451	67,832	71,283
Mercer	1,112	8,314	9,425	8,701	34,317	43,018
Mingo	520	12,341	12,861	2,153	46,736	48,889
Monroe	2,019	7,994	10,013	10,216	26,053	36,269
Nicholas	1,405	16,104	17,509	6,127	89,890	96,017
Raleigh	45	9,233	9,277	520	34,301	34,821
Summers	199	2,892	3,091	4,421	24,503	28,924
Wyoming	704	8,926	9,630	2,238	28,994	31,232
Southern Unit	6,720	155,681	162,401	42,656	675,197	717,853
Cabel	-298	6,432	6,134	-701	26,667	25,966
Calhoun	104	5,397	5,501	202	21,889	22,091
Doddridge	0	8,354	8,354	0	37,821	37,821
Gilmer	398	3,394	3,792	872	19,050	19,922
Jackson	-741	3,891	3,150	-1,184	14,294	13,111
Lincoln	-901	12,621	11,720	-2,391	46,358	43,966
Marion	0	5,240	5,240	0	13,898	13,898
Marshall	0	7,956	7,956	0	33,059	33,059
Mason	-661	6,092	5,430	1,337	24,501	25,838
Monongalia	0	3,395	3,395	0	14,283	14,283
Putnam	0	4,491	4,491	0	21,321	21,321
Richie	-1,609	8,173	6,564	-6,077	42,843	36,766
Roane	-342	8,683	8,341	1,659	40,975	42,634
Wayne	349	12,013	12,361	1,230	41,406	42,637
Wetzel	0	6,801	6,801	0	23,608	23,608
Wirt	-240	873	633	-797	-3,217	-4,013
Wood	841	5,267	6,108	4,877	27,523	32,401
Brooke/Hancock/Ohio	0	1,219	1,219	0	21,275	21,275
Pleasant/Tyler	142	3,805	3,947	2,873	22,798	25,671
Northwestern Unit	-2,959	114,099	111,139	1,901	490,354	492,255
Total, all counties	13,293	417,143	430,437	97,569	1,838,512	1,936,080

Table 77. Average annual removals of growing-stock and sawtimber volume on timberland by county and species group, West Virginia, 2000

(In thousands of cubic feet/board feet)

County	Growing-Stock			Sawtimber		
	Softwoods	Hardwoods	All groups	Softwoods	Hardwoods	All groups
Braxton	540	322	862	0	0	0
Grant	0	1,992	1,992	0	4,975	4,975
Hampshire	638	3,070	3,708	2,535	11,987	14,522
Hardy	639	2,120	2,759	2,485	7,487	9,971
Harrison	0	2,949	2,949	0	13,610	13,610
Lewis	0	3,095	3,095	0	13,834	13,834
Mineral	0	5,644	5,644	0	24,152	24,152
Morgan	0	4,247	4,247	0	18,123	18,123
Pendleton	1,572	6,320	7,892	6,538	26,134	32,672
Pocahontas	1,394	9,075	10,469	6,705	33,775	40,480
Preston	0	15,746	15,746	0	70,120	70,120
Randolph	0	15,011	15,011	0	67,237	67,237
Tucker	397	7,343	7,740	1,032	26,385	27,417
Upshur	0	8,404	8,404	0	33,353	33,353
Webster	0	1,571	1,571	0	6,605	6,605
Barbour/Taylor	0	7,930	7,930	0	31,173	31,173
Berkeley/Jefferson	0	2,357	2,357	0	10,980	10,980
Northeastern Unit	5,180	97,198	102,378	19,295	399,931	419,225
Boone	0	5,440	5,440	0	21,762	21,762
Clay	2,726	5,541	8,266	13,896	22,925	36,821
Fayette	0	14,067	14,067	0	51,094	51,094
Greenbrier	0	8,624	8,624	0	28,305	28,305
Kanawha	2,023	12,855	14,878	5,437	45,611	51,048
Logan	0	9,459	9,459	0	39,524	39,524
McDowell	0	3,562	3,562	0	13,945	13,945
Mercer	0	2,420	2,420	0	10,795	10,795
Mingo	0	6,755	6,755	0	29,898	29,898
Monroe	0	2,360	2,360	0	7,621	7,621
Nicholas	0	6,433	6,433	0	23,720	23,720
Raleigh	0	1,934	1,934	0	7,179	7,179
Summers	0	5,024	5,024	0	17,107	17,107
Wyoming	0	3,653	3,653	0	8,925	8,925
Southern Unit	4,749	88,127	92,876	19,333	328,410	347,743
Calhoun	0	4,670	4,670	0	22,361	22,361
Doddridge	0	4,077	4,077	0	13,915	13,915
Gilmer	0	5,679	5,679	0	25,904	25,904
Jackson	0	776	776	0	3,336	3,336
Lincoln	151	482	633	0	1,672	1,672
Marshall	0	1,871	1,871	0	6,765	6,765
Monongalia	0	2,128	2,128	0	4,484	4,484
Richie	0	10,006	10,006	0	35,801	35,801
Roane	0	7,328	7,328	0	29,658	29,658
Wayne	1,410	2,775	4,185	7,167	7,132	14,299
Wetzel	0	2,696	2,696	0	10,953	10,953
Wood	0	359	359	0	1,341	1,341
Brooke/Hancock/Ohio	0	2,870	2,870	0	4,791	4,791
Pleasant/Tyler	0	5,345	5,345	0	23,829	23,829
Northwestern Unit	1,561	51,062	52,623	7,167	191,942	199,108
Total, all counties	11,489	236,387	247,877	45,795	920,282	966,077

Table 78. Biomass of growing stock on timberland, by county and component, dry weight basis, West Virginia, 2000

(In thousands of dry tons)

County	Growing stock			Total growing stock	SE
	Poletimber	Sawlog	Upper stem		
Braxton	4,276	9,823	2,065	16,163	9.7
Grant	4,504	4,822	1,106	10,432	8.8
Hampshire	3,869	6,753	1,455	12,077	8.5
Hardy	4,467	6,994	1,553	13,014	7.5
Harrison	2,066	4,219	899	7,184	10.3
Lewis	2,659	4,724	1,041	8,424	11.8
Mineral	2,684	3,075	689	6,448	13.4
Morgan	1,259	2,751	622	4,632	15.5
Pendleton	5,462	12,892	2,582	20,937	7.8
Pocahontas	8,288	17,965	3,574	29,827	7.2
Preston	3,885	8,593	1,867	14,345	7.6
Randolph	8,037	20,932	4,549	33,518	5.7
Tucker	3,155	5,930	1,229	10,314	9.6
Upshur	2,392	5,700	1,191	9,283	11.3
Webster	4,840	13,287	2,795	20,922	7.6
Barbour/Taylor	2,850	6,700	1,459	11,009	9.1
Berkeley/Jefferson	1,588	2,857	571	5,017	16.2
Northeastern Unit	66,282	138,019	29,245	233,546	2.2
Boone	2,653	6,682	1,418	10,753	8.3
Clay	2,651	6,326	1,386	10,363	6.6
Fayette	3,736	10,661	2,321	16,719	8.0
Greenbrier	7,742	12,782	2,779	23,304	6.9
Kanawha	4,883	13,270	2,757	20,909	6.9
Logan	2,501	7,087	1,506	11,094	7.8
McDowell	3,629	9,206	1,994	14,828	6.4
Mercer	3,791	4,976	1,121	9,889	9.8
Mingo	2,361	7,856	1,662	11,879	9.1
Monroe	3,769	3,294	756	7,819	8.4
Nicholas	4,518	10,238	2,239	16,995	7.7
Raleigh	3,882	8,290	1,722	13,893	10.0
Summers	2,616	5,114	1,087	8,817	11.4
Wyoming	3,327	7,732	1,674	12,732	7.8
Southern Unit	52,060	113,515	24,422	189,997	2.2
Cabel	1,791	2,988	658	5,438	10.5
Calhoun	2,330	4,424	967	7,721	9.5
Doddridge	2,217	5,990	1,268	9,476	9.2
Gilmer	2,814	4,232	952	7,999	9.2
Jackson	2,563	6,255	1,293	10,110	10.8
Lincoln	2,995	7,470	1,581	12,045	9.7
Marion	1,611	4,737	977	7,326	15.5
Marshall	1,791	3,710	811	6,312	10.7
Mason	1,962	4,330	924	7,217	13.3
Monongalia	1,728	4,837	1,028	7,593	12.3
Putnam	1,743	6,029	1,276	9,048	15.8
Richie	3,071	6,556	1,432	11,059	7.7
Roane	3,279	6,083	1,392	10,755	7.1
Wayne	4,080	7,296	1,633	13,009	7.2
Wetzel	2,402	5,489	1,178	9,069	10.6
Wirt	1,643	3,215	681	5,539	10.1
Wood	1,967	4,139	872	6,978	12.7
Brooke/Hancock/Ohio	1,143	2,043	438	3,623	18.6
Pleasant/Tyler	2,369	5,678	1,223	9,270	9.2
Northwestern Unit	43,501	95,500	20,587	159,588	2.5
Total, all counties	161,843	347,034	74,255	583,132	1.3
SE	1.3	1.8	1.6	1.3	

Table 79. Biomass of all timber on timberland, by county, class of timber, and component, West Virginia, 2000

(In thousands of dry tons)

County	Growing stock trees						SE
	Growing stock	Branches	Foliage	Stump and roots	Cull trees	Total timber	
Braxton	16,163.4	1,845.8	505.6	4,682.3	1,239.4	24,436.6	9.0
Grant	10,432.0	1,277.5	399.1	3,155.8	1,502.0	16,766.4	8.1
Hampshire	12,077.0	1,481.0	491.6	3,606.9	1,097.4	18,754.0	7.7
Hardy	13,013.7	1,591.5	513.7	3,887.5	1,210.0	20,216.6	7.1
Harrison	7,184.1	811.8	214.5	2,073.6	1,345.3	11,629.2	10.0
Lewis	8,424.0	1,014.9	280.9	2,563.1	751.7	13,034.7	11.1
Mineral	6,448.3	787.9	243.6	1,950.7	918.2	10,348.7	12.2
Morgan	4,631.6	559.7	186.7	1,364.2	908.6	7,650.9	13.7
Pendleton	20,936.7	2,550.4	827.0	6,239.1	3,803.5	34,356.7	7.0
Pocahontas	29,827.1	3,728.0	1,212.0	9,051.0	3,834.5	47,652.6	6.7
Preston	14,345.0	1,661.8	454.2	4,213.9	1,132.1	21,807.0	7.2
Randolph	33,518.3	3,991.2	1,125.0	10,052.4	3,245.2	51,932.1	5.3
Tucker	10,314.5	1,275.2	413.3	3,110.4	686.3	15,799.6	9.3
Upshur	9,283.1	1,077.7	300.1	2,722.1	785.1	14,168.0	10.6
Webster	20,922.2	2,397.8	644.5	6,102.3	1,970.7	32,037.5	6.9
Barbour/Taylor	11,008.7	1,256.2	334.9	3,200.7	1,291.9	17,092.3	8.4
Berkeley/Jefferson	5,016.7	592.6	185.7	1,462.6	1,159.3	8,416.9	15.2
Northeastern Unit	233,546.5	27,900.9	8,332.4	69,438.7	26,881.1	366,099.7	2.0
Boone	10,753.3	1,279.5	344.0	3,255.7	1,617.3	17,249.8	7.8
Clay	10,362.6	1,218.1	345.9	3,058.0	639.8	15,624.3	6.5
Fayette	16,718.9	1,938.8	520.4	4,936.9	2,235.8	26,350.8	7.7
Greenbrier	23,304.0	2,818.2	836.5	7,022.0	3,028.9	37,009.7	6.6
Kanawha	20,909.6	2,465.8	684.2	6,236.7	1,783.7	32,080.1	6.5
Logan	11,094.4	1,289.4	348.0	3,279.3	1,329.6	17,340.7	7.3
McDowell	14,828.4	1,738.8	476.3	4,410.9	1,315.6	22,770.1	6.2
Mercer	9,888.7	1,229.2	402.6	2,993.7	897.9	15,412.0	9.2
Mingo	11,879.1	1,380.9	363.8	3,527.4	1,277.1	18,428.3	8.7
Monroe	7,819.4	992.9	339.3	2,388.8	1,344.7	12,885.1	8.3
Nicholas	16,995.6	2,000.0	559.9	5,046.0	1,220.2	25,821.7	7.5
Raleigh	13,893.6	1,628.4	445.8	4,125.0	1,666.2	21,759.1	9.5
Summers	8,817.3	1,066.3	326.7	2,634.6	790.7	13,635.6	10.9
Wyoming	12,732.4	1,507.6	422.7	3,802.2	2,015.0	20,479.9	6.9
Southern Unit	189,997.2	22,554.0	6,416.2	56,717.2	21,162.5	296,847.2	2.1
Cabel	5,438.0	644.5	191.5	1,607.2	558.5	8,439.7	9.4
Calhoun	7,721.4	909.1	263.5	2,277.0	1,019.8	12,190.9	9.8
Doddridge	9,475.9	1,078.9	285.0	2,754.0	712.3	14,306.1	9.0
Gilmer	7,998.8	936.3	264.1	2,356.6	779.5	12,335.3	8.3
Jackson	10,110.3	1,182.7	354.8	2,943.4	573.2	15,164.4	10.5
Lincoln	12,045.3	1,392.0	378.3	3,532.3	728.9	18,076.8	9.3
Marion	7,326.0	834.7	219.4	2,133.3	800.6	11,314.0	14.4
Marshall	6,312.0	725.8	195.6	1,844.6	1,053.2	10,131.1	9.3
Mason	7,216.8	862.1	276.4	2,116.0	1,138.9	11,610.2	11.4
Monongalia	7,592.6	862.1	224.0	2,210.2	966.3	11,855.1	10.9
Putnam	9,048.4	1,028.2	281.0	2,611.3	827.1	13,796.1	16.2
Richie	11,058.9	1,304.8	377.1	3,273.6	933.7	16,948.0	7.3
Roane	10,754.6	1,281.9	369.0	3,217.3	1,336.2	16,959.0	6.6
Wayne	13,009.3	1,529.9	430.2	3,857.7	1,146.4	19,973.6	6.8
Wetzel	9,069.4	1,047.5	278.3	2,669.6	1,004.2	14,069.0	9.7
Wirt	5,539.4	663.4	206.5	1,638.2	323.0	8,370.4	9.5
Wood	6,978.1	851.0	274.6	2,085.9	947.1	11,136.7	11.3
Brooke/Hancock/Ohio	3,623.2	434.7	120.6	1,097.2	780.7	6,056.4	16.0
Pleasant/Tyler	9,269.9	1,094.7	330.4	2,715.1	995.8	14,405.9	8.0
Northwestern Unit	159,588.2	18,664.3	5,320.3	46,940.6	16,625.4	247,138.8	2.3
Total, all counties	583,131.9	69,119.2	20,069.0	173,096.4	64,669.0	910,085.6	1.2
SE	1.3	1.2	1.2	1.3	3.4	1.2	

Table 80. Biomass of all trees and shrubs on timberland, by county and class of material, West Virginia, 2000

(In thousands of dry tons)

County	Non-timber					Total trees and shrubs	SE
	Timber	Salvable dead trees	Saplings	Seedlings	Shrubs		
Braxton	24,436.6	164.3	1,317.9	96.1	14.3	26,029.3	8.4
Grant	16,766.4	27.9	1,114.4	29.4	24.2	17,962.2	7.8
Hampshire	18,754.0	71.4	1,315.5	140.4	63.4	20,344.7	7.3
Hardy	20,216.6	105.2	1,315.9	36.7	172.3	21,846.6	6.4
Harrison	11,629.2	61.3	829.8	127.2	41.9	12,689.4	9.3
Lewis	13,034.7	129.2	759.9	68.2	19.1	14,011.2	10.2
Mineral	10,348.7	20.5	777.5	61.6	40.8	11,249.0	11.5
Morgan	7,650.9	134.3	538.3	60.5	7.1	8,391.0	12.3
Pendleton	34,356.7	105.3	1,617.3	83.7	130.4	36,293.4	6.8
Pocahontas	47,652.6	174.6	2,370.4	286.3	38.4	50,522.3	6.4
Preston	21,807.0	150.7	1,188.5	277.9	54.7	23,478.9	6.8
Randolph	51,932.1	262.4	2,439.4	363.3	54.2	55,051.3	5.0
Tucker	15,799.6	214.0	890.0	52.4	7.1	16,963.0	9.1
Upshur	14,168.0	35.5	521.6	77.1	25.4	14,827.6	10.5
Webster	32,037.5	108.4	1,757.1	208.2	25.7	34,137.0	6.5
Barbour/Taylor	17,092.3	494.7	1,261.2	141.9	33.0	19,023.0	7.9
Berkeley/Jefferson	8,416.9	70.5	914.7	131.8	63.2	9,597.2	13.6
Northeastern Unit	366,099.7	2,330.3	20,929.3	2,242.6	815.2	392,417.0	1.9
Boone	17,249.8	129.9	1,164.8	307.7	37.8	18,889.9	7.2
Clay	15,624.3	81.8	891.5	164.4	51.4	16,813.3	6.1
Fayette	26,350.8	164.0	1,506.8	364.1	65.8	28,451.5	7.2
Greenbrier	37,009.7	192.0	3,013.8	378.5	110.1	40,704.0	6.0
Kanawha	32,080.1	42.5	1,732.7	483.3	83.9	34,422.4	6.2
Logan	17,340.7	61.8	1,085.1	213.3	41.3	18,742.2	6.9
McDowell	22,770.1	159.1	1,534.1	282.3	67.0	24,812.6	5.7
Mercer	15,412.0	268.7	1,103.5	184.3	24.2	16,992.7	8.7
Mingo	18,428.3	39.5	852.5	220.8	59.2	19,600.3	8.2
Monroe	12,885.1	444.3	1,067.3	116.5	17.9	14,531.1	7.9
Nicholas	25,821.7	94.4	1,698.0	313.3	69.3	27,996.7	6.9
Raleigh	21,759.1	153.7	1,465.0	234.9	45.7	23,658.4	8.9
Summers	13,635.6	90.5	872.4	75.7	23.2	14,697.3	10.5
Wyoming	20,479.9	69.4	1,303.7	189.8	38.4	22,081.2	6.5
Southern Unit	296,847.2	1,991.4	19,291.1	3,528.7	735.1	322,393.6	2.0
Cabel	8,439.7	84.5	656.4	103.3	10.8	9,294.7	8.4
Calhoun	12,190.9	48.0	486.2	104.6	18.3	12,847.9	9.4
Doddridge	14,306.1	11.2	643.8	41.3	7.2	15,009.6	8.4
Gilmer	12,335.3	244.2	924.3	34.4	20.6	13,558.7	8.0
Jackson	15,164.4	101.8	825.5	126.9	23.1	16,241.7	10.1
Lincoln	18,076.8	121.5	1,031.4	212.0	39.3	19,481.0	8.6
Marion	11,314.0	50.1	591.4	47.3	28.3	12,031.1	13.6
Marshall	10,131.1	10.9	523.1	58.7	33.1	10,756.9	8.9
Mason	11,610.2	108.0	986.2	106.7	22.8	12,833.9	10.6
Monongalia	11,855.1	46.6	626.3	75.9	22.8	12,626.8	10.2
Putnam	13,796.1	58.6	669.5	150.0	62.9	14,737.1	15.5
Richie	16,948.0	104.6	962.1	126.0	12.7	18,153.5	6.8
Roane	16,959.0	98.9	918.5	130.7	16.7	18,123.7	6.2
Wayne	19,973.6	49.1	1,237.3	264.5	14.6	21,539.1	6.2
Wetzel	14,069.0	63.1	631.4	68.5	29.6	14,861.6	9.3
Wirt	8,370.4	74.2	938.2	59.1	10.8	9,452.7	8.9
Wood	11,136.7	115.5	692.4	108.2	26.6	12,079.4	10.3
Brooke/Hancock/Ohio	6,056.4	76.7	462.7	28.4	8.6	6,632.7	14.8
Pleasant/Tyler	14,405.9	26.8	757.8	66.6	35.1	15,292.3	7.9
Northwestern Unit	247,138.8	1,494.4	14,564.3	1,912.9	444.0	265,554.4	2.2
Total, all counties	910,085.6	5,816.0	54,784.7	7,684.2	1,994.3	980,364.9	1.2
SE	1.2	10.3	2.2	2.6	5.4	1.2	

Griffith, Douglas M.; Widmann, Richard H. 2003. **Forest Statistics for West Virginia: 1989 and 2000.** Resour. Bull. NE-157. Newton Square, PA: U.S. Department of Agriculture, Forest Service, Northeastern Research Station. 119 p.

A statistical report on the fifth forest inventory of West Virginia conducted in 2000 by the Forest Inventory and Analysis Unit of the Northeastern Research Station. Statistics for forest area, numbers of trees, tree biomass, timber volume, growth, and change are displayed at the state and, where appropriate, the county level. The current inventory indicates that there are approximately 22 billion cubic feet of growing-stock volume on 12 million acres of timberland in West Virginia.

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