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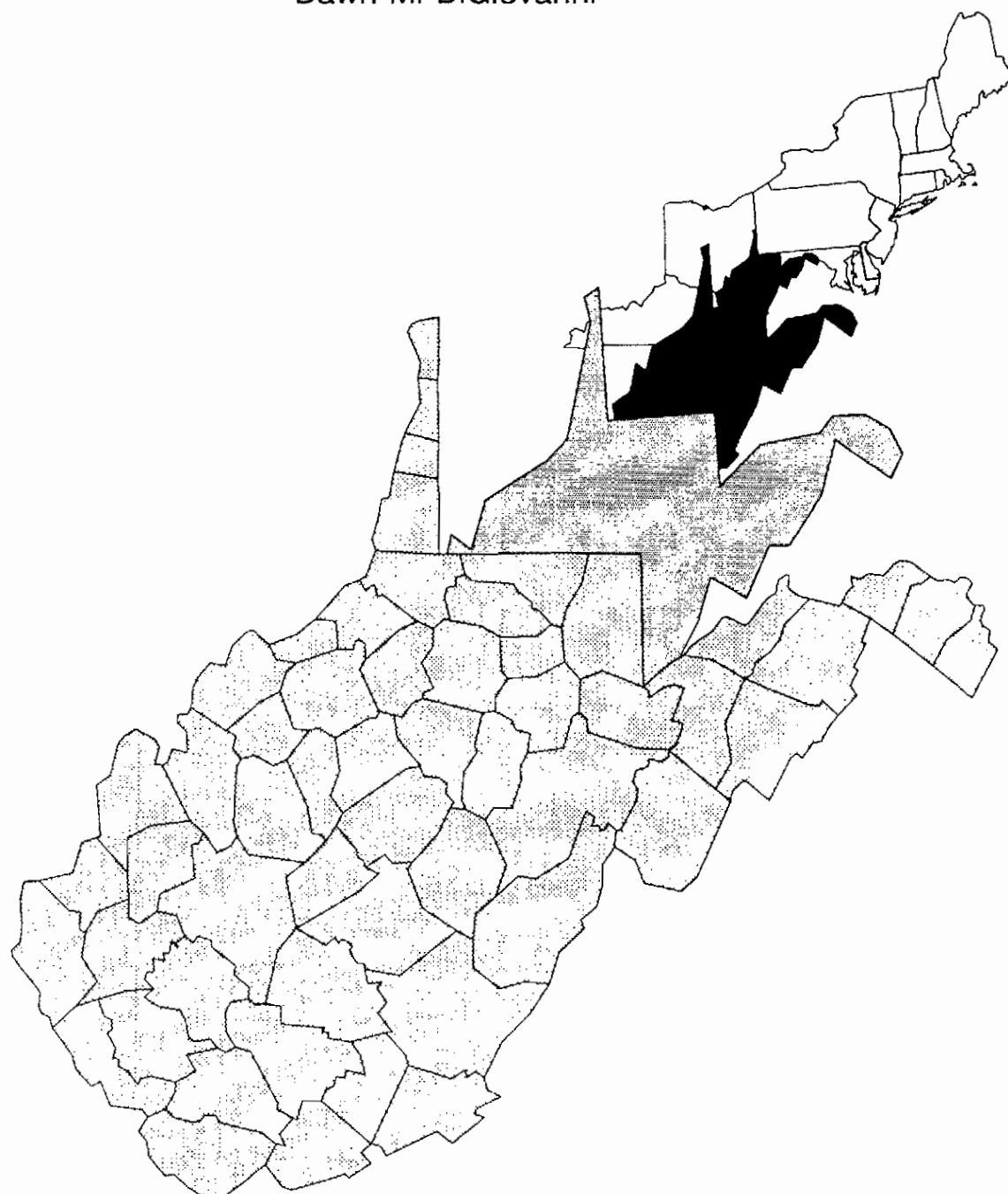
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Forest Statistics for West Virginia--1975 and 1989

Dawn M. DiGiovanni



Abstract

A statistical report on the fourth forest survey of West Virginia conducted in 1987-88 by the Forest Inventory and Analysis Unit, Northeastern Forest Experiment Station. Statistics for forest area, numbers of trees, and timber volume, tree biomass, average annual growth, and timber products output are displayed at the state, and when appropriate at the unit and county levels. The current inventory indicates that the state has approximately 19.0 billion cubic feet of growing-stock volume on 11.9 million acres of timberland. For use in trend analysis, this report includes estimates derived from reprocessing the 1975 data using current methods and standards.

Foreword

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

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Dawn M. DiGiovanni applied FINSYS (Forest INventory SYStem), a generalized data processing system, to the specific needs of the West Virginia inventory and produced summary tables for the state and counties. Rosemary K. Venit rewrote parts of the FINSYS table generating routine. Sandra Richter produced graphics for this report.

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The Forest Inventory and Analysis Unit would like to thank the landowners of West Virginia and the West Virginia Division of Forestry for their cooperation and assistance during this inventory.

Forest Statistics for West Virginia--1975 and 1989

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Highlights

Forest Area

- West Virginia, with 12.1 million acres of forest land, is 79 percent forested.
- Ninety-eight percent of West Virginia's forest land, 11.9 million acres, is classified as timberland (formerly known as commercial forest land).
- There was a 4 percent increase in both total forest land and land classified as timberland.
- Oak/hickory is the dominant forest-type group occupying 77 percent of the timberland and accounting for 77 percent of the growing-stock volume.
- Ninety percent of West Virginia's timberland is privately owned.

Biomass

- The net dry weight of all live trees on timberland is 759.6 million tons or 63.8 tons per acre. Softwoods account for 28.2 million tons or 2.4 tons per acre; hardwoods account for 731.4 million tons or 61.4 tons per acre.
- A little more than 476 million tons, or 63 percent of the net dry weight of all live trees, is in growing-stock material. Of the remaining 284 million tons of all-live-tree weight, 59 percent is in growing-stock tops, 23 percent is in saplings, and 18 percent is in cull trees.
- An additional 13.3 million tons of biomass is contained in salvable dead trees.

Timber Volume

- Growing-stock volume is 19 billion cubic feet, an average of 1,598 cubic feet per acre. This is a 37 percent increase over the 1975 inventory.
- Sawtimber volume is 57.8 billion board feet, an average of 4,847 board feet per acre. This is a 60 percent increase over the 1975 inventory.
- The predominant species in terms of cubic-foot volume is yellow-poplar. With 3 billion cubic feet, yellow-poplar accounts for over 16 percent of the growing-stock volume.
- Virginia pine is the top softwood species with 411 million cubic feet or 2 percent of growing-stock volume.

- Sawtimber stands contain 76 percent of the growing-stock volume.
- Volume in hardwood sawtimber qualifying as log grade 2 or better is up significantly, and represents more than 25 percent of the total hardwood sawtimber inventory.

Growth/Removals

- Average annual net growth of growing-stock volume is 2.6 percent of the inventory.
- Average annual net cubic-foot removals is less than 1 percent of the inventory.
- Average annual net cubic-foot growth of growing-stock volume exceeded removals on a statewide basis (3.7:1).
- The average annual net cubic-foot growth per acre is 42.2 cubic feet.

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 forest inventories of all states to provide up-to-date information on the forest resource of the Nation. The initial inventory of West Virginia's resources was conducted in 1948-49. The second inventory was completed in 1961 and the third was completed in 1974. This report presents the forest resource data from the fourth inventory completed in 1988. This inventory involved a cooperative effort of the West Virginia Division of Forestry and the Northeastern Forest Experiment Station.

The Forest Inventory and Analysis Unit of the Northeastern Forest Experiment Station conducted the inventory on all forest land, developed the resource tables, and prepared this report.

The sampling procedure used during the current resurvey utilized aerial photography, the remeasurement of a sample of the ground plots established in the earlier inventories, and establishment of new ground plots. In West Virginia, this required remeasurement of 1,489 (1,302 forest and 187 nonforest) plots from the earlier inventories, classification of 44,304 new points, and reclassification of 1,489 points from the second survey on aerial photographs into land-use and cubic-foot volume classes, and establishment of 1,727 (1,270 forest and 457 nonforest) new ground-plot locations as a subsample of the new photo points. The data collected were summarized using the FINSYS computer system developed at the Northeastern Forest Experiment Station.

The resurvey of West Virginia's forest resources involved several associated studies and considerable analysis. Reports discussing the State's private forest-land owners and its primary forest products industry are being prepared. Additional reports will also be published containing detailed 1989 biomass and wildlife statistics.

The forest area, numbers of trees, timber volume, biomass, and growth statistics shown in this report summarize the information collected. Other information or additional summaries may be developed. For information about these, contact the **Forest Inventory and Analysis Unit, USDA Forest Service, 5 Radnor Corporate Center, Suite 200, 100 Matsonford Road, Radnor, PA 19087**

The four eastern Forest Experiment Stations have agreed to include a set of 25 core tables in each of their state resource bulletins. The format of any one of these tables will be identical for all 37 states in the Stations' territories. Rather than being grouped as a set, these core tables have been interspersed throughout this publication according to their level of data and content. The index to this report contains a list of tables and the corresponding core table number as presented in this publication.

Reliability of the Estimates

The data in this report were 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 estimating procedure can be judged by two important statistical measures: accuracy and precision. Among statisticians, 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 mainly interested 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 resources of West Virginia. If questions arise, the data are reviewed and reanalyzed to resolve the differences. Also, great care is taken to keep all sources of procedural error to a minimum by 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 reason-

able 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.

Briefly, here is an example of how the sampling error is used to indicate reliability: The estimate of timberland for West Virginia is 11,917,700 acres. The associated sampling error is 0.5 percent, or 59,589 acres. This means that if there are no errors in the procedure and we repeated the inventory in the same way, the odds are 2 to 1 (66 percent probability) that the estimate would be between 11,858,111 and 11,977,289 acres ($11,917,700 \pm 59,589$). Similarly, the odds are 19 to 1 (95 percent probability) that the estimate would be within $\pm 119,178$ acres. It is worth noting that the state estimates have the smallest sampling errors and therefore are the most precise or reliable. County estimates are less reliable. In West Virginia for example, the sampling error for timberland at the state level is 0.5 percent; while the sampling error for Wirt county is 7.9 percent. In general, as the size of the estimate decreases in relation to the total, the sampling error, expressed as a percentage of the estimate, increases.

$$SE = (T/X)^{1/2} SE(T)$$

where:

SE = approximate sampling error
in percent of the estimate X

X = estimate for a table cell

T = estimated table total
(sum over all cells in table)

SE(T) = sampling error of
estimated table total

For most of the tables 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 listed above is for the table total, T. Any estimate with a sampling error of 50 percent or more is not significantly different from zero, and those estimates with errors between 25 and 50 percent are suspect. Therefore, any estimates that have errors exceeding 25 percent should be used with caution.

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, for the comparisons to be valid, the procedures used in the two inventories must be similar. As a result of our ongoing efforts to improve the efficiency of the inventory, we have made several changes in procedures and definitions since 1975.

Because these changes make the direct comparison of the current estimates with those published by Bones (1978) inappropriate, data collected in 1973-74 were reprocessed using the 1989 procedures and are published here. The changes that have had an effect on the results of our computations follow:

A major change was made in the design of the plots established in 1987-88. In addition to the traditional data gathered to estimate forest area and tree volumes, information was collected to describe forest wildlife habitat, forest soils, and forest tree biomass.

New height and volume equations were developed for both growing stock and sawtimber (Scott 1979, 1981). These equations are derived by nonlinear regression techniques; in 1975 linear regression was used. The nonlinear method is used because it yields estimates with smaller errors between predicted and actual values.

Stand size is a classification (seedling/sapling, poletimber, sawtimber, or non-stocked) of forest land based on the size of the trees that dominate an area. In the 1975 inventory only growing-stock trees were considered in determining stand size; the 1989 procedure considers all live trees. This change caused a shift in acres among classes, especially between seedling/sapling and poletimber.

The procedures used to determine forest type also have been modified. In 1975, plots on which red maple made up the plurality of stocking were put into the oak/gum/red maple group. In 1989, such plots were exam-

ined more closely and according to their moisture class and the other species present, were placed in either the northern hardwoods group (red maple/northern hardwoods), oak/hickory group (red maple/central hardwoods), or elm/ash/red maple group.

The basic building block for estimating forest area and timber volume has been changed from the state level or geographic-unit level to the county level. In the past, the statistics were developed at the state or unit level and prorated back to the county level on the basis of distribution of photo-interpretation points. Direct development of county-level data helps users interested in more precise local data, but can make comparisons with past county estimates developed by the proration technique uncertain.

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

Agricultural/herbaceous land. Land with herbaceous plant cover, both grasses and/or forbs, including cropland, pasture land, and natural grass lands.

Aquatic edge. An edge condition created when a terrestrial land use abuts a lake, pond, river, stream, or major wetland.

Basal area class. A classification of forest land in terms of 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.

Board-foot stand-volume class. A classification of forest land in terms of 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 salty or brackish water during high tides.

Browse. Forage resource; defined here as current twig growth of woody-stemmed plants occurring between 1 and 8 feet in height.

Cabin log. A relatively slender roundwood product that is cut to standard sizes; meets specifications of strength, straightness, and soundness; and is finished for use in constructing cabins, barns, and other buildings.

Coarse residues. Manufacturing residues suitable for chipping, such as slabs, edgings, and veneer cores.

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

Condition class. Classification of trees based on live or dead and condition of top of the tree (i.e. intact, broken, dead).

Cord. See Standard cord.

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 in terms of net cubic-foot volume of all live trees per acre.

Cull tree. A rough tree or a rotten tree.

Cull increment. The net volume of growing-stock trees on the previous inventory that became rough or rotten trees in the current inventory, divided by the number of growing seasons between surveys.

Cultural land. Land with human development as the major land cover; includes industrial, commercial, and residential land uses.

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 weight. The weight of wood and bark, oven-dry basis. It is 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 non-farm owners.

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

Fine residues. Manufacturing residues not suitable for chipping, such as sawdust and shavings.

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 1 acre.

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

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

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

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

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

d. *Oak/pine*--forests in which northern red oak or white ash, singly or in combination, make up a plurality of the stocking but where pines or eastern redcedar contribute 25 to 50 percent of the stocking; hemlock, maple, sweet birch, and yellow-poplar are associates.

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

f. *Elm/ash/red maple*--forests in which black ash, elm, red maple (when growing on wet sites), willow, or green ash, singly or in combination, make up a plurality of the stocking; common associates include sugar maple, hickory, yellow-poplar, and black cherry.

g. *Northern hardwoods*--forests in which sugar maple, beech, yellow birch, red maple

(when associated with northern hardwoods), pin cherry, or black cherry, singly or in combination, make up a plurality of the stocking; common associates include hard pines, hemlock, hickory, ash, and yellow-poplar.

h. *Aspen/birch*--forests in which aspen, paper birch, or gray birch, singly or in combination, make up a plurality of the stocking.

Fuelwood. Round, split, or chipped woody material (with or without bark) that is converted to household, commercial, or industrial energy.

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

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

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

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

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.

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

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

Idle farmland. Former cropland or pasture that has not been tended within the last 2 years and that has less than 10.0 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.

Industrial products. All roundwood products except fuelwood.

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.

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

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

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

Land area. (a) Bureau of Census: The area of dry land and land temporarily or partly covered by water, such as marshes, swamps, and river flood plains; streams, sloughs, estuaries, and canals less than 1/8 statute mile wide; and lakes, reservoirs, and ponds less than 40 acres in area. (b) Forest Inventory and Analysis: same as (a) except that the minimum width of streams, etc., is

120 feet, and the minimum size of lakes, etc., is 1 acre.

Land use edge. A condition created by the juxtaposition of two differing land uses.

Logging residues. The unused portions of growing-stock trees harvested or killed in the process of logging.

Manufacturing plant residues. Wood materials that are generated when round timber (roundwood) is converted into wood products. This includes slabs, edgings, trimmings, bark, miscuts, sawdust, shavings, veneer cores and clippings, and pulp screening. If these residues are used, they are referred to as plant byproducts.

Mast. Seed produced by woody-stemmed, perennial plants, generally refers to soft (fruit) and hard (nuts) mast.

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.

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. Components of net change are ingrowth plus accretion, minus mortality, minus cull increment, minus removals.

Net green weight. The green 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 peri-

od between surveys, divided by the number of growing seasons. Components of net growth are ingrowth plus accretion, minus mortality, minus cull increment.

Noncensus water. Streams/ivers between 120 feet and 1/8 mile in width, and bodies of water between 1 and 40 acres in size. The Bureau of the Census classifies such water as land.

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

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

Nonforest land. Land that has never supported forests, or land formerly forested but now in non-forest use such as cropland, pasture, residential areas, and highways.

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

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

Other cropland. Includes cropland used for cover crops, legumes, soil improvement.

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

Ownership class. A classification of forest land based upon ownership and nature of business or control of decision-making 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. Can include lands that had lime fertilizer applied; were seeded; or pure, 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.

Piling (piles). Relatively slender structural roundwood products that are cut to the maximum length possible (within top circumference and other specifications of strength, straightness, and soundness) that when nearly buried in the ground provide vertical or lateral support for buildings, foundations, bridges, docks, and other structures.

Plant byproducts. Wood products, such as pulp chips, recycled from manufacturing plant residues.

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

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

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.

Productive-reserved forest land. Forest land sufficiently productive to qualify as timberland, but withdrawn from timber utilization through statute, administrative designation, or exclusive use for Christmas tree production.

Primary manufacturing plant. A plant that converts round timber into wood products such as woodpulp, lumber, veneer, cooperage, and dimension products.

Pulpwood. Roundwood converted into 4- or 5-foot lengths or chips, and chipped plant byproducts that are prepared for manufacture into woodpulp.

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

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

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.

Roundwood products. Logs, bolts, total tree chips, or other round timber generated by harvested trees for industrial or consumer uses.

Salvable dead trees. A tree at least 5.0 inches in diameter at breast height that has recently died and still has intact bark. The tree may be standing, fallen, windthrown, knocked down, or broken off.

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

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

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

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

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

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

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

Sawtimber trees. Live trees of commercial species at least 9.0 inches d.b.h. for softwoods or 11.0 inches for hardwoods, containing at least one 12-foot sawlog or two noncontiguous 8-foot sawlogs, and meeting regional specifications for freedom from defect.

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

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

Shrub. Woody-stemmed perennial plant, generally with no well-defined main stem and less than 12 feet in height at maturity; defined by species.

Shrub land. Land with shrub and/or tree cover and an obvious herbaceous understory; average canopy height of less than 25 feet and crown closure of less than 70 percent.

Single-family/custom 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 in diameter and at least 10 feet tall (does not include salvageable dead).

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

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

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

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

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.

Standard-lumber log grade. A classification of the quality of sawtimber volume based on standard sawlog grades for hardwoods, white pine, and southern pine. (Note: Red pine was graded using the southern pine guidelines. All specifications are shown under Log-Grade Classification).

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

Two categories of stocking are used in this report: all live trees and growing-stock trees. The relationships between the classes and the percentage of the stocking standard are: non-stocked = 0 to 9, poorly stocked = 10 to 59, moderately stocked = 60 to 99, fully stocked = 100 to 129, and overstocked = 130 to 160.

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 byproducts harvested from growing-stock trees on timberland; from other sources, such as cull trees, salvageable 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 (See Table 47).

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

Tract/multiple family. Multiple individual residential units or attached units (e.g. apartment buildings, 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 present condition. Tree class for poletimber trees is a prospective determination--a forecast of their potential quality when they reach sawtimber size (11.0 inches d.b.h. for hardwoods, 9.0 inches d.b.h. for softwoods).

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

Unused manufacturing residues. Plant residues that are dumped or destroyed and not recovered for plant byproducts.

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 forest land. Noncommercial forest land within urban areas that is completely surrounded by urban development (not parks), whether commercial, industrial, or residential.

Utility right-of-way. Land associated with pipeline and 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.

Woodland. Forest land that is incapable of producing crops of industrial wood under natural conditions, because of adverse site conditions.

References

- Bones, James T. 1978. **The forest resources of West Virginia.** Resour. Bull. NE-56. Broomall, PA: U.S. Department of Agriculture, Forest Service, Northeastern Forest Experiment Station. 105 p.
- Scott, Charles T. 1979. **Northeastern forest survey board-foot volume equations.** Res. Note NE-271. Broomall, PA: U.S. Department of Agriculture, Forest Service, Northeastern Forest Experiment Station. 3 p.
- Scott, Charles T. 1981. **Northeastern forest survey revised cubic-foot volume equations.** Res. Note NE-304. Broomall, PA: U.S. Department of Agriculture, Forest Service, Northeastern Forest Experiment Station. 3 p.

Oaks of the Northeast

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

Tree Species of West Virginia(as encountered on field plots)

Scientific Name ***	Common Name(s)	Occurrence **
Softwoods		
<i>Abies balsamea</i> L.	balsam fir	vr
<i>Juniperus virginiana</i> L.	eastern redcedar	r
<i>P. rubens</i> Sarg.	red spruce	r
<i>Pinus echinata</i> Mill.	shortleaf pine	r
<i>P. pungens</i> Lamb.	table-mountain pine	r
<i>P. resinosa</i> Ait.	red pine	r
<i>P. rigida</i> Mill.	pitch pine	c
<i>P. strobus</i> L.	eastern white pine	c
<i>P. sylvestris</i> L.	Scotch pine	r
<i>P. virginiana</i> Mill.	Virginia pine	c
<i>Tsuga canadensis</i> (L.) Carr.	eastern hemlock	c
Hardwoods		
<i>Acer negundo</i> L.*	boxelder	r
<i>A. nigrum</i> Michx. f.	black maple	vr
<i>A. pensylvanicum</i> L.*	striped maple	r
<i>A. rubrum</i> L.	red maple	vc
<i>A. saccharinum</i> L.	silver maple	vr
<i>A. saccharum</i> Marsh.	sugar maple	vc
<i>A. spicatum</i> Lam.	mountain maple	vr
<i>Aesculus spp.</i> L.	buckeye	c
<i>Ailanthus altissima</i> (Mill.)Swingle*	ailanthus	vr
<i>Betula alleghaniensis</i> Britton	yellow birch	c
<i>B. lenta</i> L.	sweet birch (black)	c
<i>B. nigra</i> L.	river birch	vr
<i>Carpinus caroliniana</i> Walt.*	American hornbeam	r
<i>Carya spp.</i> Nutt.	hickory	vc
<i>Castanea dentata</i> (Marsh.)Borkh.*	American chestnut	vr
<i>Catalpa spp.</i> Scop.*	catalpa	vr
<i>Celtis occidentalis</i> L.	hackberry	r
<i>Ceris canadensis</i> L.	eastern redbud	r
<i>Cornus spp.</i> L.	dogwood	r
<i>Crataegus spp.</i> L.*	hawthorn	vr
<i>Diospyros virginiana</i> L.*	persimmon	r
<i>Fagus grandifolia</i> Ehrh.	American beech	c
<i>Fraxinus americana</i> L.	white ash	c

Tree Species of West Virginia (continued)

Scientific Name ***	Common Name(s)	Occurrence **
<i>F. nigra</i> Marsh.	black ash	vr
<i>F. pennsylvanica</i> Marsh.	green ash	r
<i>Gleditsia triacanthos</i> L.	honeylocust	vr
<i>Gymnocladus dioica</i>	Kentucky coffeetree	vr
<i>Ilex opaca</i> Ait.	American holly	vr
<i>Juglans cinerea</i> L.	butternut	r
<i>J. nigra</i> L.	black walnut	c
<i>Liquidambar styraciflua</i> L.	sweetgum	vr
<i>Liriodendron tulipifera</i> L.	yellow-poplar (tulip tree)	vc
<i>Maclura pomifera</i> (Raf.)	osage-orange	vr
<i>Magnolia</i> spp. L.	magnolia	r
<i>M. acuminata</i> L.	cucumbertree	c
<i>Malus</i> spp. Mill.	apple	r
<i>Morus</i> spp. L.	mulberry	vr
<i>Nyssa sylvatica</i> Marsh.	blackgum	c
<i>Ostrya virginiana</i> (Mill.) K. Koch*	eastern hophornbeam	r
<i>Oxydendrum arboreum</i> L. DC.	sourwood	c
<i>Platanus occidentalis</i> L.	sycamore	r
<i>Populus deltoides</i> Bartr. ex Marsh.	eastern cottonwood	vr
<i>P. grandidentata</i> Michx.	bigtooth aspen	r
<i>P. tremuloides</i> Michx.	quaking aspen	vr
<i>Prunus pensylvanica</i> L. f.*	pin cherry	r
<i>P. serotina</i> Ehrh.	black cherry	c
<i>Quercus alba</i> L.	white oak	vc
<i>Q. bicolor</i> Willd.	swamp white oak	vr
<i>Q. coccinea</i> Muenchh.	scarlet oak	c
<i>Q. falcata</i> Michx.	southern red oak	vr
<i>Q. imbricaria</i> Michx.	shingle oak	vr
<i>Q. lyrata</i> Walt.	overcup oak	vr
<i>Q. macrocarpa</i> Michx.	bur oak	vr
<i>Q. marilandica</i> Muenchh.	blackjack oak	vr
<i>Q. muehlenbergii</i> Engelm.	chinkapin oak	r
<i>Q. palustris</i> Muenchh.	pin oak	vr
<i>Q. phellos</i> L.	willow oak	vr
<i>Q. prinus</i> L.	chestnut oak	vc
<i>Q. rubra</i> L.	northern red oak	vc
<i>Q. stellata</i> Wangenh.	post oak	r

Tree Species of West Virginia (continued)

Scientific Name ***	Common Name(s)	Occurrence **
<i>Q. velutina</i> Lam.	black oak	c
<i>Robinia pseudoacacia</i> L.	black locust	c
<i>Salix</i> spp. Marsh.*	willow	vr
<i>Salix nigra</i> Marsh.	black willow	vr
<i>Sassafras albidum</i> (Nutt.) Nees*	sassafras	c
<i>Tilia americana</i> L.	American basswood	c
<i>Ulmus alata</i> Michx.	winged elm	vr
<i>U. americana</i> L.	American elm	c
<i>U. rubra</i> Muhl.	slippery elm	c

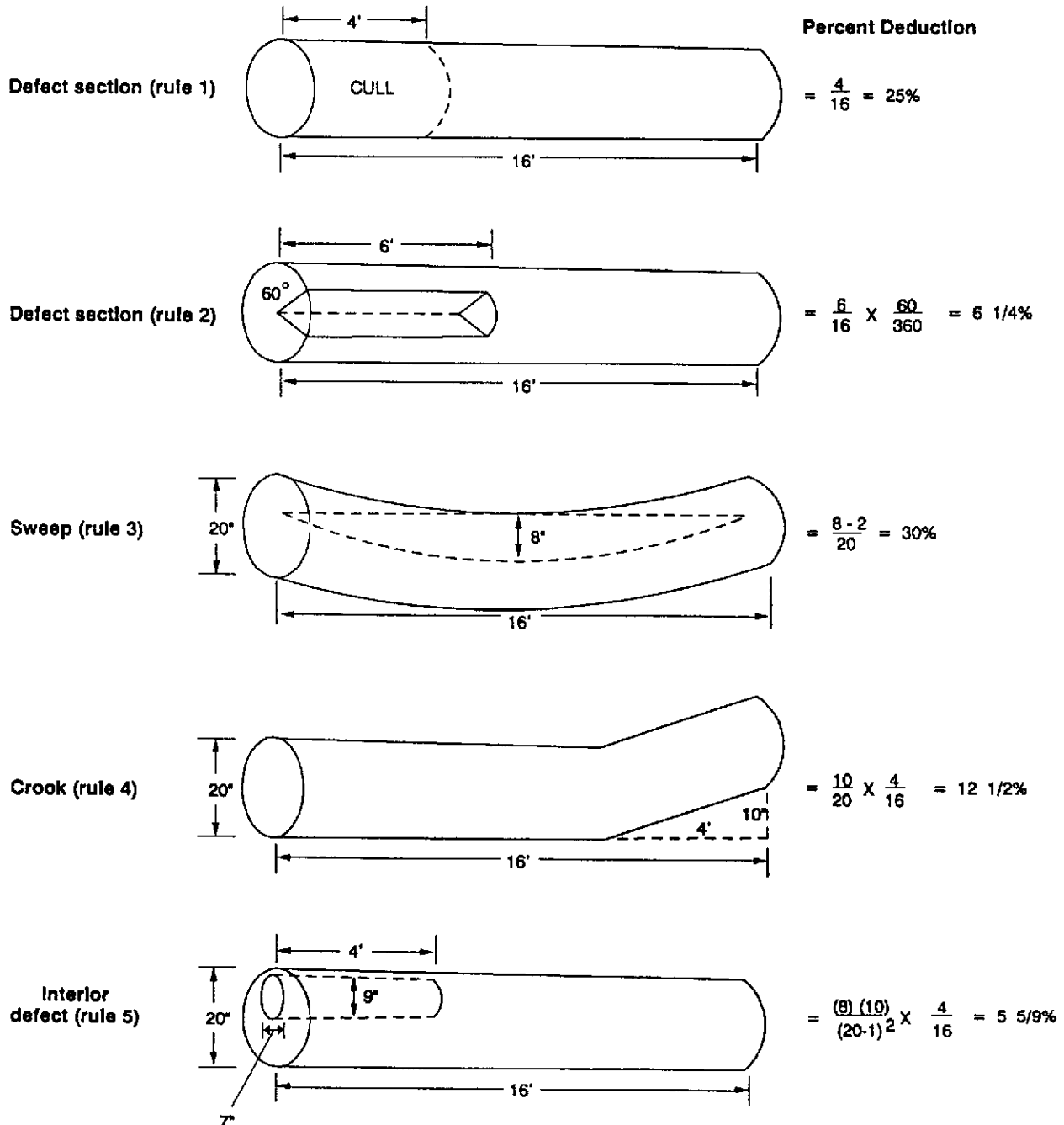
*** Names according to: Little, Elbert L., Jr. Checklist of United States Trees (native and naturalized). Agric. Handb. 541 Washington, DC: U.S Department of Agriculture, Forest Service; 1979. 375 p.

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

*Noncommercial species.

LOG-GRADE CLASSIFICATION

Methods of determining scaling deduction.
(Examples based on a 16-foot log with 20-inch scaling diameter)



From: Grosenbaugh, L. R. 1952. Shortcuts for cruisers and scalers. U.S. Dep. Agric. For. Serv. South. For. Exp. Stn. Occas. Pap. 126.

STANDARD GRADES FOR HARDWOOD FACTORY LUMBER LOGS

Grading Factors		Log grades							F3
		F1			F2				
Position in tree		Butts only	Butts & uppers		Butts & uppers				Butts & uppers
Scaling diameter, inches		13-15 ^a	16-19	20+	11+ ^b	12+			8+
Length without trim, feet		10+			10+	8-9	10-11	12+	8+
Required clear cuttings ^c of each of 3 best faces ^d	Min. length, feet	7	5	3	3	3	3	3	2
	Max. number	2	2	2	2	2	2	3	No limit
	Min. proportion of log length required in clear cutting	5/6	5/6	5/6	2/3	3/4	2/3	2/3	1/2
Maximum sweep & crook allowance	For logs with less than 1/4 of end in sound defects	15%			30%				50%
	For logs with more than 1/4 of end in sound defects	10%			20%				35%
Maximum scaling	deduction	40% ^e			50% ^f				50%

End defects although not visible in standing trees, are important in grading cut logs. Instructions for dealing with this factor are contained in Forest Prod. Lab. Rpt. D 1737.

^a Ash and basswood butts can be 12 inches if they otherwise meet requirements for small #1's.

^b Ten-inch logs of all species can be #2 if they otherwise meet requirements for small #1's.

^c A clear cutting is the portion of a face, extending the width of the face, that is free of defects.

^d A face is 1/4 of the surface of the log as divided lengthwise.

^e Otherwise #1 logs with 41-60% deductions can be #2.

^f Otherwise #2 logs with 51-60% deductions can be #3.

From: Vaughan, C. L., A. C. Wollin, K. A. McDonald, and E. H. Bulgrin. 1966. Hardwood log grades for standard lumber. USDA For. Serv. Res. Pap. FPL-63.

STANDARD SPECIFICATIONS FOR HARDWOOD CONSTRUCTION LOGS ^a

Position in tree		Butt & upper
Min. diameter, small end		8 inches +
Min. length, without trim		8 feet
Clear cuttings		No requirements.
Sweep allowance, absolute		1/4 diameter small end for each 8 feet of length
Sound surface defects	Single knots	Any number, if no one knot has an average diameter above the callus in excess of 1/3 of log diameter at point of occurrence.
	Whorled knots	Any number if sum of knot diameters above the callus does not exceed 1/3 of log diameter at point of occurrence.
	Holes	Any number provided none has a diameter over 1/3 of log diameter at point of occurrence, and none extends over 3 inches into included timber. ^b
Unsound surface defects		Same requirements as for sound defects if they extend into included timber. ^b No limit if they do not.
End defects	Sound	No requirements.
	Unsound	None allowed; log must be sound internally, but will admit 1 shake not to exceed 1/4 the scaling diameter and a longitudinal split not extending over 5 inches into the contained timber.

^a These specifications are minimum for the class. If, from a group of logs, factory logs are selected first, thus leaving only non-factory logs from which to select construction logs, then the quality range of the construction logs so selected is limited, and the class may be considered a grade. If selection for construction logs is given first priority, then it may be necessary to subdivide the class into grades.

^b Included timber is always square, and dimension is judged from small end.

From: Rast, E. D., D. L. Sonderman, and G. L. Gammon. 1973. A guide to hardwood log grading (Revised). USDA For. Serv. Gen. Tech. Rep. NE-1.

EASTERN WHITE PINE SAWLOG GRADE SPECIFICATIONS

GRADING FACTOR	LOG GRADE 1	LOG GRADE 2	LOG GRADE 3	LOG GRADE 4
(1) Minimum scaling diameter (inches)	14 ¹	6	6	6
(2) Minimum log length (feet)	10 ²	8	8	6
(3) Maximum weevil injury (number)	None	None	2 injuries ³	No limit
(4) Minimum face requirements	Two full length or four 50% length good faces.* (In addition, log knots on balance of faces shall not exceed size limitations of grade 2 logs.)	No GOOD faces required. Maximum diameter of log knots on three best faces SOUND RED KNOTS not to exceed 1/6 scaling diameter and 3 inch maximum. DEAD OR BLACK KNOTS including overgrown knots not to exceed 1/12 scaling diameter and 1 1/2 inch maximum.		Includes all logs not qualifying for No. 3 or better and judged to have at least one-third of their gross volume in sound wood suitable for manufacture into standard lumber. SOUND RED KNOTS not to exceed 1/3 scaling diameter and 5 inch maximum. DEAD OR BLACK KNOTS including overgrown knots not to exceed 1/6 scaling diameter and 2 1/2 inch maximum.
(5) Maximum sweep or crook allowance (percent)	20	30	40	66 2/3
(6) Maximum total scaling deduction (percent)	50	50	50	66 2/3
After the tentative log grade is established from face examination, the log will be reduced in grade whenever the following defects are evident: (7) Conks, punk knots, and pine borer damage on bark surface ⁴ Degraded one grade if present on one face. Degraded two grades if present on two faces. Degraded three grades if present on three or more faces. (8) Log end defects: red rot, ring shake, heavy stain and pine borer damage outside heart center of log ⁵ Consider log as having a total of 8 quarters (4 on each end) and degrade as indicated below: Degraded one grade if present in 2 quarters of log ends. Degraded two grades if present in 3 or 4 quarters of log ends. Degraded three grades if present in 5 or more quarters of log ends.				
¹ 12 and 13 inch logs with four full length good faces are acceptable. ² 8 foot logs with four full length good faces are acceptable. ³ 8 foot No. 3 logs limited to one weevil injury. ⁴ Minimum 50% length good face must be at least 8 feet. ⁵ Factors 7 and 8 are not cumulative (total degrade based on more serious of the two). No log to be degraded below grade 4 if net scale is at least one-third gross log scale.				

From: Ostrander, M. D., and R. L. Brislin, 1971. Sawlog grades for eastern white pine. USDA For. Serv. Res. Pap. NE-205.

SOUTHERN PINE LOGS

GRADE 1 - Logs with 3 or 4 clear faces.¹ Code 1.

GRADE 2 - Logs with 1 or 2 clear faces. Code 2.

GRADE 3 - Logs with no clear faces. Code 3.

After the tentative log grade is established from above, the log will be degraded one grade for each of the following, except that no log can be degraded below grade 3.

1. SWEEP - Degraded any tentative 1 or 2 log one grade if sweep amounts to 3 or more inches and equals or exceeds one third (1/3) the diameter inside the bark at small end. This is the final grade if there is no evidence of heart rot.
2. HEART ROT - Degraded any tentative 1 or 2 log one grade if conk, massed hyphae, or other evidence of advanced heart rot is found anywhere in it.

¹ A face is one-fourth of the circumference in width extending full length of the log. Clear faces are those free of: knots measuring more than one-half inch in diameter, overgrown knots of any size, holes more than one-fourth inch in diameter. The faces may be rotated if necessary to obtain the maximum number of clear ones.

From: Schroeder, J. G., R. A. Campbell, and R. C. Rodenbach. 1968. Southern pine sawlogs for yard and structural lumber. USDA For. Serv. Res. Pap. SE-39.

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 ton = 907.1848 kilograms
 1,000 tons = 907,184.8 metric tons
 Breast height = 1.4 meters above ground level

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

Index to Tables

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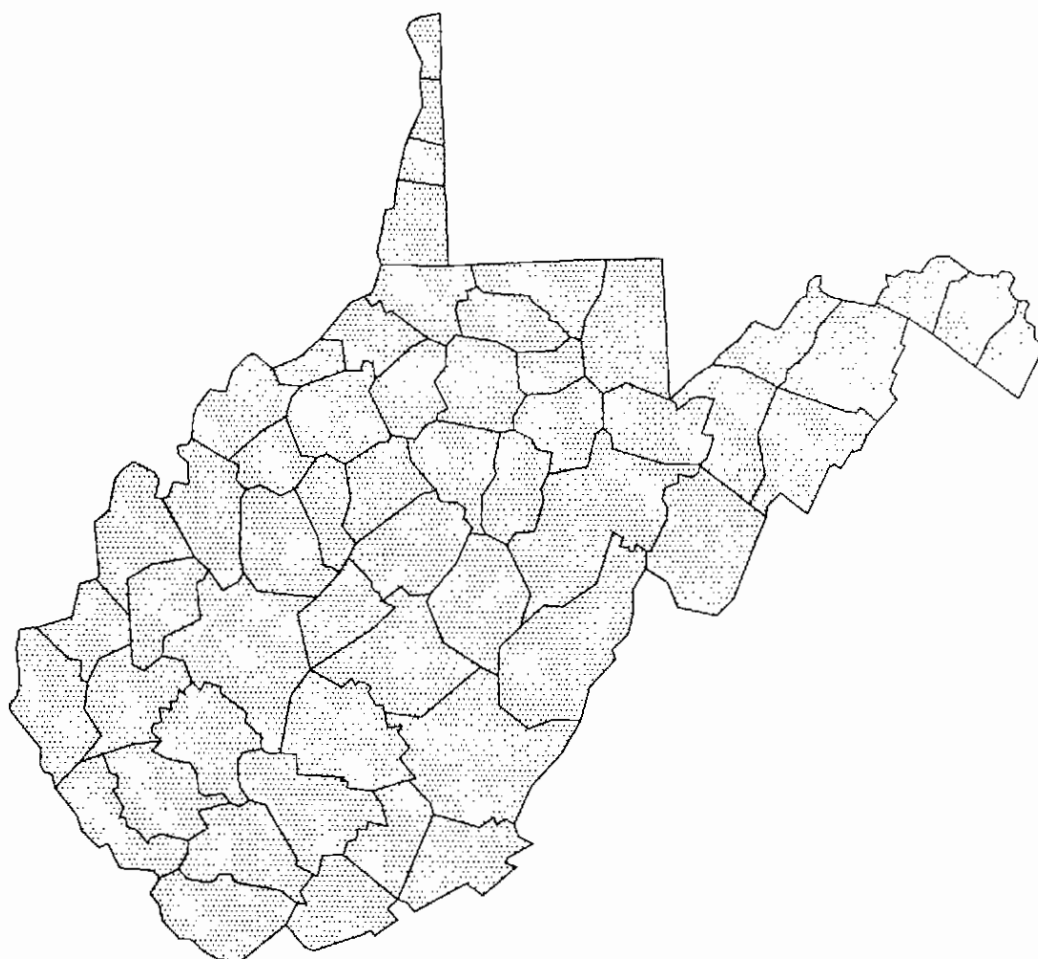
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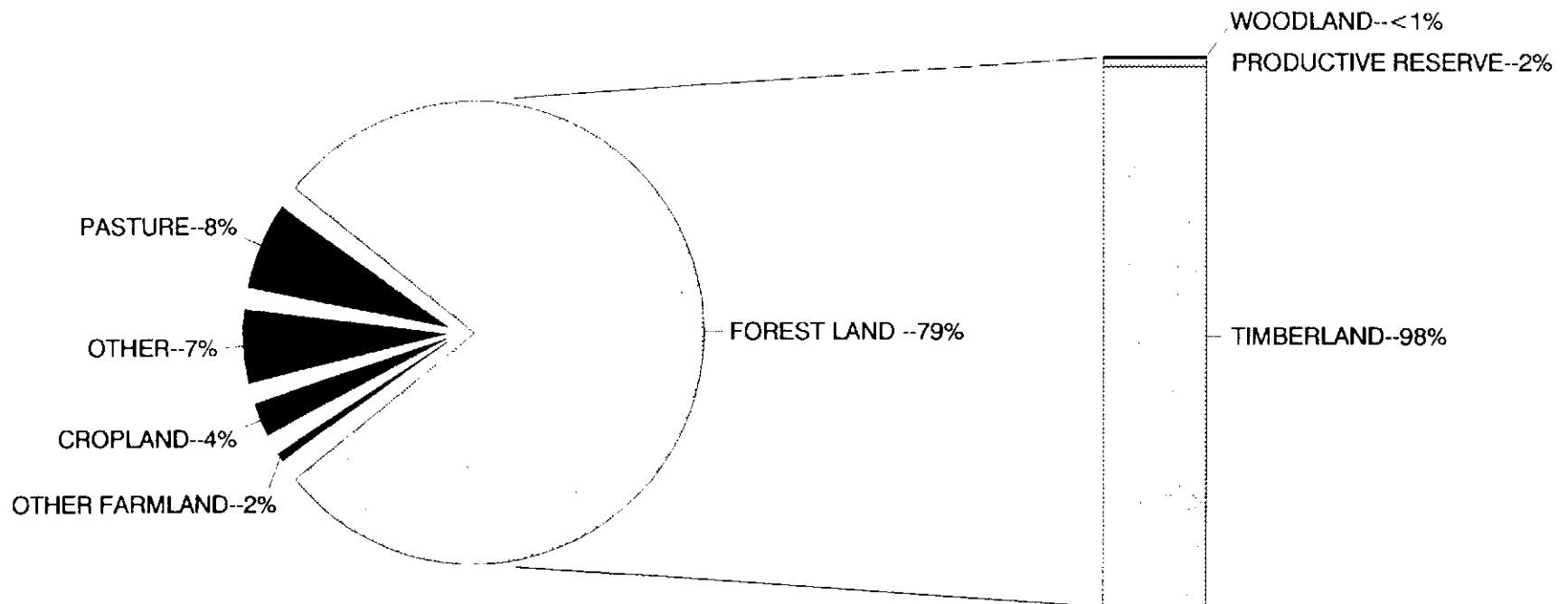
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STATE TABLES



LAND AREA BY LAND CLASS



LAND CLASS

FOREST LAND

Table 1.--Land area by land class, West Virginia, 1989^a

Land class	Area	
	Thousand acres	Percent
Timberland	11,917.7	77
Noncommercial forest land:		
Productive reserved	181.1	2
Woodland ^b	27.7	W
Total forest	12,126.5	79
Nonforest land:		
Cropland ^c	643.0	4
Pasture ^c	1,273.8	8
Other farmland	375.5	2
Other land	1,017.2	7
Total nonforest	3,309.5	21
Total land area ^d	15,436.0	100

^aThis and every other table may not add up due to rounding.

^bIncludes 2,618 acres of reserved woodland.

^cSource: 1982 Census of Agriculture.

^dSource: 1981 United States Department of Commerce, Bureau of Census.

W-Less than 0.5 percent.

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
	Sapling and					
	Sawtimber	Poletimber	seedling	Nonstocked		
Red pine	3.7	.0	.0	.0	3.7	100.0
White pine	38.0	9.9	3.5	.0	51.4	29.9
Hemlock	62.5	4.9	4.7	.0	72.1	26.0
Scotch pine	.0	3.7	.0	.0	3.7	100.0
White/red pine group	104.1	18.4	8.3	.0	130.8	18.8
Balsam fir	4.0	.0	.0	.0	4.0	100.0
Red spruce	30.3	9.7	3.2	.0	43.2	39.4
Spruce/fir group	34.3	9.7	3.2	.0	47.2	37.0
Shortleaf pine	4.1	6.2	0	.0	10.3	72.2
Virginia pine	77.4	93.3	30.7	.0	201.4	16.1
Eastern redcedar	.0	.0	8.6	.0	8.6	70.7
Pitch pine	20.7	.0	.0	.0	20.7	50.9
Table mountain pine	3.9	4.6	.0	0	8.5	70.9
Loblolly/shortleaf group	106.1	104.0	39.3	0	249.4	14.4
Wh. pine/no.red oak/wh. ash	82.9	19.3	13.3	0	115.5	23.4
Eastern redcedar/hardwood	.0	0	5.1	0	5.1	72.3
Shortleaf pine/oak	.0	0	7.3	0	7.3	71.0
Virginia pine/oak	114.5	77.3	46.1	0	238.0	14.4
Loblolly pine/hardwood	0	4.6	0	0	4.6	100.0
Other oak/pine	23.8	41.1	8.5	0	73.4	28.6
Oak/pine group	221.1	132.4	80.3	0	443.8	10.2
Post. black. or bear oak	49.4	4.0	3.1	.0	56.4	29.8
Chestnut oak	407.4	136.4	15.7	.0	561.5	9.1
White oak/red oak/hickory	766.8	257.3	132.0	.0	984.1	6.7
White oak	219.0	112.6	40.2	.0	378.8	11.1
Northern red oak	141.9	4.5	23.9	.0	170.2	17.9
Y-poplar/wh. oak/no.red oak	95.7	113.7	7.0	.0	315.4	9.6
Black locust	66.4	47.7	85.0	.0	199.0	15.3
Black walnut	21.3	20.9	4.5	.0	46.7	33.7
Yellow-poplar	382.0	214.5	58.9	.0	656.2	8.4
Hawthorn/reverting field	3.2	5.2	115.4	2.6	126.4	19.6
Scarlet oak	44.9	34.2	0	0	79.1	25.2
Sassafras/persimmon	4.0	5.6	31.5	.0	41.2	33.7
Red maple/central hardwood	37.8	40.7	31.2	.0	109.7	21.0
Mixed central hardwoods	5,537.0	1,367.0	344.6	.0	5,269.1	2.3
Oak/hickory group	5,977.2	2,401.2	892.9	2.6	9,173.9	1.2

Table 2.-continued

(In thousands of acres)

Forest type	Stand-size class				All classes	SE
	Sawtimber	Poletimber	seedling	Nonstocked		
Black ash/Amer. elm/red maple	32.3	43.6	5.1	.0	81.1	24.3
Red maple(upland)	1.8	.0	2.9	.0	4.7	72.6
River birch/sycamore	32.0	4.6	14.6	.0	51.2	29.3
Willow	.0	5.1	.0	.0	5.1	100.0
Sycamore/pecan/American elm	18.4	11.0	2.3	.0	31.7	38.7
Elm/ash/red maple group	84.6	64.2	24.9	.0	173.7	16.1
Sugar maple/beech/yellow birch	644.2	131.5	41.7	.0	817.4	7.5
Black Cherry	136.7	70.1	29.8	.0	236.5	14.4
Red maple/northern hardwoods	114.9	42.6	14.3	.0	171.8	19.4
Pin cherry/reverting field	10.7	12.7	33.6	.0	57.0	28.3
Mixed northern hardwoods	260.7	118.4	19.6	.0	398.7	11.2
Northern hardwoods group	1,167.2	375.3	139.0	.0	1,681.5	5.0
Aspen	.0	4.5	12.9	.0	17.4	58.5
Aspen/birch group	.0	4.5	12.9	.0	17.4	58.5
All forest types	7,594.6	3,119.7	1,200.9	2.6	11,917.7	.5
SE	1.5	3.4	6.1	100.0	.5	

Table 3.--Area of timberland by forest type, forest-type group, and stand-size class (excludes all National Forest), West Virginia, 1975^a

(In thousands of acres)

Forest type	Stand-size class				All classes	SE
	Sawtimber	Poletimber	seedling	Nonstocked		
Jack pine	.0	.0	9.2	.0	9.2	100.0
White pine	11.8	11.8	.0	.0	23.6	70.7
Hemlock	32.4	7.1	11.4	.0	50.9	45.2
White/red pine group	44.2	18.9	20.6	.0	83.8	33.0
Balsam fir	.0	.0	12.9	.0	12.9	99.7
Red spruce	11.1	.0	11.1	.0	22.3	70.7
Spruce/fir group	11.1	.0	24.1	.0	35.2	57.8
Virginia pine	118.6	95.9	90.3	.0	304.8	14.7
Pitch pine	.0	9.7	9.7	.0	19.5	69.5
Table mountain pine	9.4	.0	.0	.0	9.4	100.0
Loblolly/shortleaf group	128.0	105.6	100.0	.0	333.7	14.3
Wh. pine/no.red oak/wh. ash	9.6	10.2	.0	.0	19.8	70.7
Shortleaf pine/oak	.0	.0	10.8	.0	10.8	100.0
Virginia pine/oak	115.0	139.7	154.6	.0	409.3	15.3
Other oak/pine	11.5	20.4	.0	.0	31.9	57.9
Oak/pine group	136.1	170.3	165.4	.0	471.8	14.1
Post, black, or bear oak	107.4	19.0	36.7	.0	163.0	26.5
Chestnut oak	293.2	120.5	100.5	.0	514.3	14.3
White oak/red oak/hickory	386.7	278.7	351.6	.0	1,017.0	10.0
White oak	152.9	150.5	175.1	.0	478.5	15.0
Northern red oak	77.1	18.8	10.8	.0	106.7	30.0
Y-poplar/wh. oak/no.red oak	215.0	60.8	71.7	.0	347.5	17.6
Black locust	9.7	10.6	173.1	.0	193.4	24.4
Black walnut	9.6	10.7	40.5	.0	60.9	42.4
Yellow-poplar	96.4	72.5	115.6	.0	284.4	20.2
Hawthorn/reverting field	.0	.0	9.2	.0	9.2	100.0
Scarlet oak	31.3	19.0	10.1	.0	60.4	40.9
Sassafras/persimmon	.0	.0	41.6	.0	41.6	58.0
Red maple/central hardwood	.0	33.2	21.1	.0	54.3	44.8
Mixed central hardwoods	2,099.7	1,671.6	1,136.6	9.6	4,917.6	3.5
Oak/hickory group	3,479.0	2,465.8	2,294.4	9.6	8,248.8	1.7
Sweetbay/swamp tupelo/red mple	.0	.0	11.8	.0	11.8	100.0
Oak/gum/cypress group	.0	.0	11.8	.0	11.8	100.0

Table 3.--continued

(In thousands of acres)

Forest type	Stand-size class				All classes	SE
	Sapling and					
	Sawtimber	Poletimber	seedling	Nonstocked		
Black ash/Amer. elm/red maple	31.1	53.3	50.1	.0	134.5	28.9
Red maple(lowland)	.0	.0	18.6	.0	18.6	70.7
River birch/sycamore	9.4	9.2	9.4	.0	28.1	57.4
Sycamore/pecan/American elm	.0	10.8	.0	.0	10.8	100.0
American elm/green ash	.0	.0	30.2	.0	30.2	57.8
Elm/ash/red maple group	40.6	73.3	108.3	.0	222.2	21.7
Sugar maple/beech/yellow birch	493.1	199.9	105.4	.0	798.5	11.8
Black Cherry	54.5	34.7	30.1	.0	119.3	30.1
Red maple/northern hardwoods	34.3	34.6	32.2	.0	101.1	33.0
Pin cherry/reverting field	.0	14.4	4.0	.0	18.4	62.1
Mixed northern hardwoods	107.1	30.8	10.1	.0	148.0	28.7
Northern hardwoods group	689.0	314.4	181.8	.0	1,185.3	9.3
Aspen	.0	.0	18.5	.0	18.5	69.3
Aspen/birch group	.0	.0	18.5	.0	18.5	69.3
All forest types	4,528.1	3,148.4	2,924.9	9.6	10,611.0	1.0
SE	3.4	4.9	4.7	100.0	1.0	

^aDue to previous sampling techniques forest type and stand size could not be calculated for national forest data. Total timberland area can be directly compared.

Previous timberland area, including national forest, was 11,483.7 thousand acres.

Table 4.--Area of timberland by forest type, forest-type group, and stand-size class (excludes all National Forest), West Virginia, 1989

(In thousands of acres)

Forest type	Stand-size class				All classes	SE
	Sapling and					
	Sawtimber	Poletimber	seedling	Nonstocked		
Red pine	2.9	.0	.0	.0	2.9	100.0
White pine	30.8	9.5	3.5	.0	43.8	31.5
Hemlock	52.1	4.9	2.4	.0	59.3	28.5
Scotch pine	.0	3.6	.0	.0	3.6	100.0
White/red pine group	85.8	18.0	5.9	.0	109.7	20.1
Balsam fir	3.7	.0	.0	.0	3.7	100.1
Red spruce	5.9	8.6	3.0	0	17.5	62.1
Spruce/fir group	9.6	8.6	3.0	.0	21.2	54.1
Shortleaf pine	.0	7.4	.0	0	7.4	100.0
Virginia pine	76.0	87.3	24.7	.0	188.0	16.6
Eastern redcedar	.0	.0	8.2	.0	8.2	70.7
Pitch pine	14.3	.0	.0	.0	14.3	58.0
Loblolly/shortleaf group	90.4	94.7	32.9	0	218.0	15.4
Wh. pine/no. red oak/wh. ash	69.8	18.3	13.3	.0	101.4	24.9
Eastern redcedar/hardwood	.0	.0	4.8	0	4.8	71.8
Shortleaf pine/oak	.0	.0	7.3	.0	7.3	71.1
Virginia pine/oak	113.7	70.5	46.0	0	230.3	14.6
loblolly pine/hardwood	.0	3.8	.0	.0	3.8	100.0
Other oak/pine	19.3	41.5	8.5	.0	69.3	29.7
Oak/pine group	202.9	134.1	79.9	0	416.9	10.4
Post. black, or bear oak	41.5	.0	2.4	.0	43.9	32.3
Chestnut oak	361.0	112.6	11.5	.0	485.2	9.7
White oak/red oak/hickory	535.4	270.8	120.0	.0	926.2	6.9
White oak	214.4	118.9	39.4	.0	372.7	11.2
Northern red oak	117.0	4.7	23.7	.0	145.4	18.7
Y-poplar/wh. oak/no. red oak	368.7	113.7	5.2	.0	487.5	9.8
Black locust	63.7	45.5	80.2	.0	189.3	15.5
Black walnut	21.2	20.8	3.7	.0	45.8	33.9
Yellow-poplar	366.3	214.4	58.4	.0	639.1	8.5
Hawthorn/reverting field	3.2	5.2	114.6	2.6	125.6	19.6
Scarlet oak	44.9	33.6	.0	.0	78.6	25.4
Sassafras/persimmon	4.0	5.6	31.5	.0	41.2	33.8
Red maple/central hardwood	37.0	40.9	28.7	.0	106.6	21.2
Mixed central hardwoods	3,353.4	1,323.0	320.9	.0	4,997.3	2.3
Oak/hickory group	5,531.8	2,309.8	840.2	2.6	8,684.3	1.2

Table 4.-continued

(In thousands of acres)

Forest type	Stand-size class				All classes	SE
	Sapling and					
	Sawtimber	Poletimber	seedling	Nonstocked		
Black ash/Amer. elm/red maple	32.3	43.6	5.1	.0	81.0	24.4
Red maple(upland)	1.8	.0	9.4	.0	11.2	21.5
River birch/sycamore	32.0	4.6	14.0	.0	50.7	29.4
Willow	.0	5.1	.0	.0	5.1	100.0
Sycamore/pecan/American elm	18.8	11.0	2.3	.0	32.1	38.8
Elm/ash/red maple group	85.0	64.2	30.9	.0	180.1	15.6
Sugar maple/beech/yellow birch	519.3	122.5	35.1	.0	676.9	8.0
Black Cherry	100.9	62.0	13.3	.0	176.2	16.6
Red maple/northern hardwoods	69.6	31.7	14.6	.0	115.9	21.9
Pin cherry/reverting field	8.9	11.4	30.2	.0	50.5	28.8
Mixed northern hardwoods	202.7	106.0	23.2	.0	331.9	12.3
Northern hardwoods group	901.4	333.6	116.5	.0	1,351.4	5.5
Aspen	.0	4.5	10.0	.0	14.5	58.6
Aspen/birch group	.0	4.5	10.0	.0	14.5	58.6
All forest types	6,906.7	2,967.5	1,119.3	2.6	10,996.1	.7
SE	1.6	3.5	6.2	100.2	7	

Table 5.--Area of timberland by forest-type group and ownership class, West Virginia, 1989

(In thousands of acres)

Forest-type group	Ownership class				All classes	SE
	National Forest	Other public	Forest industry	Other private		
White/red pine	16.8	2.8	9.8	101.4	130.8	18.8
Spruce/fir	26.7	2.1	.0	18.4	47.2	37.0
Loblolly/shortleaf	34.0	8.7	18.6	206.7	249.4	14.4
Oak/pine	22.5	17.7	24.3	379.3	443.8	10.2
Oak/hickory	487.0	193.5	530.2	7,963.2	9,173.9	1.2
Elm/ash/red maple	.0	1.8	4.9	167.0	173.7	16.1
Northern hardwoods	334.8	24.6	215.5	1,106.6	1,681.5	5.0
Aspen/birch	.0	.0	.0	17.4	17.4	58.5
Total, all groups	921.7	250.9	803.4	9,941.7	11,917.7	.5
SE	.0	.0	7.6	1.0	.5	

Table 6.--Area of timberland by stand-size class and ownership class, West Virginia, 1989

(In thousands of acres)

Stand-size class	Ownership class				All classes	SE
	National Forest	Other public	Forest industry	Other private		
Sawtimber	709.7	174.5	529.0	6,181.4	7,594.6	1.5
Poletimber	155.0	56.7	185.4	2,722.6	3,119.7	3.4
Sapling and seedling	57.0	19.7	89.0	1,035.2	1,200.9	6.1
Nonstocked	.0	.0	.0	2.6	2.6	100.0
Total, all classes	921.7	250.9	803.4	9,941.7	11,917.7	.5
SE	.0	.0	7.6	1.0	.5	

Table 7.--Area of timberland by board-foot stand-volume class and ownership class,
West Virginia, 1989

(In thousands of acres)

Stand-volume class	Ownership class				All classes	SE
	National Forest	Other public	Forest industry	Other private		
0 - 1,999	119.5	33.5	140.0	2,483.0	2,776.0	3.4
2000 - 3,999	156.1	49.8	196.0	2,408.4	2,810.3	3.7
4000 - 5,999	146.8	50.3	157.5	2,057.7	2,412.3	4.1
6000 - 7,999	166.5	38.5	117.1	1,394.1	1,716.2	5.0
8000 - 9,999	135.6	29.5	110.2	840.7	1,116.0	6.5
10000+	197.3	49.4	82.7	758.1	1,086.9	6.5
Total, all classes	921.7	250.9	803.4	9,941.7	11,917.7	.5
SE	.0	.0	7.6	1.0	.5	

Table 8.--Area of timberland by ownership class and stocking class of growing-stock
trees, West Virginia, 1989

(In thousands of acres)

Ownership class	Stocking class					All classes	SE
	Nonstocked	Poorly stocked	Moderately stocked	Fully stocked	Over- stocked		
National Forest	.0	8.8	209.4	367.1	336.4	921.7	.0
Other public	.0	10.7	37.0	114.7	88.3	250.9	.0
Forest industry	.0	20.0	160.2	343.0	280.2	803.4	7.6
Other private	18.6	665.4	2,727.4	3,933.3	2,597.1	9,941.7	1.0
All classes	18.6	705.0	3,134.0	4,758.2	3,301.9	11,917.7	.5
SE	46.5	8.0	3.4	2.6	3.3	.5	

Table 9.--Area of timberland by forest-type group and cubic-foot stand-volume class, West Virginia, 1989

(In thousands of acres)

Forest-type group	Stand-volume class (cubic feet per acre)						All classes	SE
	0-499	500-999	1000-1499	1500-1999	2000-2499	2500+		
White/red pine	6.4	28.9	13.8	10.0	19.3	52.5	130.8	18.8
Spruce/fir	3.2	11.0	.0	.0	10.2	22.7	47.2	37.0
Loblolly/shortleaf	24.7	63.9	79.3	52.2	20.0	9.4	249.4	14.4
Oak/pine	64.4	97.0	112.3	79.1	36.9	54.1	443.8	10.2
Oak/hickory	715.5	1,124.9	2,113.8	2,266.2	1,584.8	1,368.7	9,173.9	1.2
Elm/ash/red maple	19.9	75.2	23.4	40.1	9.8	5.3	173.7	16.1
Northern hardwoods	134.4	162.7	342.4	363.4	325.7	353.0	1,681.5	5.0
Aspen/birch	12.9	.0	4.5	.0	.0	.0	17.4	58.5
Total, all groups	981.4	1,563.4	2,689.4	2,810.9	2,006.7	1,865.8	11,917.7	.5
SE	6.3	5.1	3.7	3.7	4.6	4.7	.5	

Table 10.--Area of timberland by forest-type group and board-foot stand-volume class, West Virginia, 1989

(In thousands of acres)

Forest-type group	Stand-volume class (board feet per acre)						All classes	SE
	0-1999	2000-3999	4000-5999	6000-7999	8000-9999	10000+		
White/red pine	24.8	24.2	12.5	24.5	24.0	20.8	130.8	18.8
Spruce/fir	7.1	.0	10.2	.0	.0	29.8	47.2	37.0
Loblolly/shortleaf	120.5	79.9	31.1	13.2	4.7	.0	249.4	14.4
Oak/pine	166.3	117.7	78.3	30.6	14.2	36.8	443.8	10.2
Oak/hickory	2,018.7	2,211.7	1,982.3	1,324.1	887.5	749.6	9,173.9	1.2
Elm/ash/red maple	72.0	53.3	21.6	21.5	3.5	1.8	173.7	16.1
Northern hardwoods	353.7	319.0	276.2	302.3	182.1	248.1	1,681.5	5.0
Aspen/birch	12.9	4.5	.0	.0	.0	.0	17.4	58.5
Total, all groups	2,776.0	2,810.3	2,412.3	1,716.2	1,116.0	1,086.9	11,917.7	.5
SE	3.4	3.7	4.1	5.0	6.5	6.5	.5	

Table 11.--Area of timberland by forest-type group and green ton stand-volume class, West Virginia, 1989

(In thousands of acres)

Forest-type group	Stand-volume class (green tons per acre)									All classes	SE
	0-24	25-49	50-74	75-99	100-124	125-149	150-174	175-199	200+		
White/red pine	6.4	4.9	22.3	30.9	13.9	24.7	21.0	6.7	.0	130.8	18.8
Spruce/fir	3.2	4.0	10.2	16.8	9.7	.0	3.3	.0	.0	47.2	37.0
Loblolly/shortleaf	15.1	42.2	98.2	55.2	34.0	4.7	.0	.0	.0	249.4	14.4
Oak/pine	50.6	41.8	119.9	111.5	47.9	30.3	15.6	17.5	8.8	443.8	10.2
Oak/hickory	349.7	616.3	1,304.9	2,003.7	2,088.5	1,633.0	675.4	336.3	166.0	9,173.9	1.2
Elm/ash/red maple	6.9	21.2	56.2	22.9	38.0	21.4	7.1	.0	.0	173.7	16.1
Northern hardwoods	71.1	115.6	211.9	387.0	414.3	251.9	165.5	47.8	16.3	1,681.5	5.0
Aspen/birch	12.9	.0	4.5	.0	.0	.0	.0	.0	.0	17.4	58.5
Total, all groups	515.9	845.9	1,828.1	2,628.0	2,646.3	1,966.0	888.0	408.3	191.1	11,917.7	.5
SE	8.7	7.5	4.8	3.8	3.9	4.7	7.5	11.3	17.2	.5	

Table 12.--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	.0	2.9	3.5	46.3	78.1	130.8	18.8
Spruce/fir	.0	3.2	11.0	19.4	13.6	47.2	37.0
Loblolly/shortleaf	.0	9.7	46.9	116.3	76.5	249.4	14.4
Oak/pine	.0	3.0	114.9	175.7	150.3	443.8	10.2
Oak/hickory	2.6	248.1	1,531.1	3,807.1	3,584.9	9,173.9	1.2
Elm/ash/red maple	.0	14.9	56.0	65.0	37.9	173.7	16.1
Northern hardwoods	.0	37.0	351.6	657.5	635.3	1,681.5	5.0
Aspen/birch	.0	12.9	.0	4.5	.0	17.4	58.5
Total, all groups	2.6	331.7	2,115.0	4,891.8	4,576.6	11,917.7	.5
SE	100.0	12.3	4.4	2.5	2.6	.5	

Table 13.--Area of timberland by forest-type group and stocking class of all live trees (excludes all National Forest), West Virginia, 1975

(In thousands of acres)

Forest-type group	Stocking class					All classes	SE
	Nonstocked	Poorly stocked	Moderately stocked	Fully stocked	Over-stocked		
White/red pine	.0	9.2	11.4	29.2	34.0	83.8	33.0
Spruce/fir	.0	11.1	12.9	.0	11.1	35.2	57.8
Loblolly/shortleaf	.0	.0	67.8	200.4	65.5	333.7	14.3
Oak/pine	.0	10.8	81.6	276.2	103.2	471.8	14.1
Oak/hickory	9.6	115.4	1,202.7	4,823.5	2,097.6	8,248.8	1.7
Oak/gum/cypress	.0	.0	.0	.0	11.8	11.8	100.0
Elm/ash/red maple	.0	.0	91.4	103.8	27.0	222.2	21.7
Northern hardwoods	.0	35.0	184.2	666.8	299.3	1,185.3	9.3
Aspen/birch	.0	.0	.0	9.2	9.2	18.5	69.3
Total, all groups	9.6	181.5	1,652.0	6,109.1	2,658.8	10,611.0	1.0
SE	100.0	24.9	7.6	2.8	5.4	1.0	

Table 14.--Area of timberland by forest-type group and stocking class of all live trees (excludes all National Forest), 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	.0	2.6	3.5	38.2	65.4	109.7	20.1
Spruce/fir	.0	3.0	9.6	8.6	.0	21.2	54.1
Loblolly/shortleaf	.0	9.3	46.7	94.6	67.4	218.0	15.4
Oak/pine	.0	3.0	113.8	162.7	137.5	416.9	10.4
Oak/hickory	2.6	239.1	1,492.2	3,619.2	3,331.3	8,684.3	1.2
Elm/ash/red maple	.0	14.4	56.4	65.0	44.4	180.1	15.6
Northern hardwoods	.0	27.3	306.2	528.0	490.0	1,351.4	5.5
Aspen/birch	.0	10.0	.0	4.5	.0	14.5	58.6
Total, all groups	2.6	308.6	2,028.3	4,520.6	4,136.0	10,996.1	.7
SE	100.2	12.5	4.5	2.6	2.7	.7	

Table 15.- 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	1.0	6.4	1.0	65.7	58.7	130.8	18.8
Spruce/fir	1.0	3.2	11.0	19.4	13.6	47.2	37.0
Loblolly/shortleaf	1.0	9.7	61.7	114.7	63.2	249.4	14.4
Oak/pine	1.0	8.0	156.7	155.9	123.3	443.8	10.2
Oak/hickory	18.6	556.3	2,332.9	3,684.7	2,581.4	9,173.9	1.2
Elm/ash/red maple	1.0	38.7	54.2	61.2	19.6	173.7	16.1
Northern hardwoods	0	62.8	517.4	652.3	442.1	1,691.5	5.0
Aspen/birch	0	12.9	1.0	4.5	0	17.4	59.5
Total, all groups	18.6	705.0	3,134.0	4,758.2	3,501.9	11,917.7	5
SE	46.5	8.0	4.4	2.6	4.4	5	

Table 16.--Area of timberland by forest-type group and stocking class of growing-stock trees (excludes all National Forest), West Virginia, 1975

(In thousands of acres)

Forest-type group	Stocking class					All classes	SE
	Nonstocked	Poorly stocked	Moderately stocked	Fully stocked	Over-stocked		
White/red pine	9.2	.0	18.5	44.2	11.8	83.8	33.0
Spruce/fir	11.1	.0	12.9	.0	11.1	35.2	57.8
Loblolly/shortleaf	.0	29.5	161.1	132.0	11.1	333.7	14.3
Oak/pine	.0	52.0	241.2	178.6	.0	471.8	14.1
Oak/hickory	43.8	1,046.5	3,944.8	2,920.5	293.2	8,248.8	1.7
Oak/gum/cypress	.0	.0	.0	11.8	.0	11.8	100.0
Elm/ash/red maple	9.4	51.4	131.0	21.0	9.4	222.2	21.7
Northern hardwoods	9.6	147.7	678.2	301.9	47.9	1,185.3	9.3
Aspen/birch	9.2	.0	9.2	.0	.0	18.5	69.3
Total, all groups	92.3	1,327.2	5,196.9	3,609.9	384.7	10,611.0	1.0
SE	33.2	8.5	3.3	4.3	16.1	1.0	

Table 17.--Area of timberland by forest-type group and stocking class of growing-stock trees (excludes all National Forest), 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	.0	6.1	.0	54.2	49.3	109.7	20.1
Spruce/fir	.0	3.0	9.6	8.6	.0	21.2	54.1
Loblolly/shortleaf	.0	9.3	46.7	107.8	54.2	218.0	15.4
Oak/pine	.0	8.0	151.8	146.0	111.1	416.9	10.4
Oak/hickory	18.1	545.0	2,231.9	3,505.2	2,384.0	8,684.3	1.2
Elm/ash/red maple	.0	38.2	54.7	67.7	19.6	180.1	15.6
Northern hardwoods	.0	58.5	436.8	515.7	340.5	1,351.4	5.5
Aspen/birch	.0	10.0	.0	4.5	.0	14.5	58.6
Total, all groups	18.1	678.0	2,931.4	4,409.8	2,958.7	10,996.1	.7
SE	46.1	8.1	3.5	2.6	3.5	.7	

Table 18.--Area of timberland by forest-type group and basal-area class, West Virginia, 1989

(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	6.4	31.6	46.9	45.9	.0	.0	.0	130.8	18.8
Spruce/fir	3.2	11.0	19.9	13.0	.0	.0	.0	47.2	37.0
Loblolly/shortleaf	33.9	117.6	87.8	10.2	.0	.0	.0	249.4	14.4
Oak/pine	62.4	211.5	127.1	42.8	.0	.0	.0	443.8	10.2
Oak/hickory	721.5	3,303.7	4,366.0	751.4	31.4	.0	.0	9,173.9	1.2
Fir/ash/red maple	32.6	87.5	51.8	1.8	.0	.0	.0	173.7	16.1
Northern hardwoods	161.3	518.8	773.3	213.9	10.2	.0	3.9	1,681.5	5.0
Aspen/birch	12.9	4.5	.0	.0	.0	.0	.0	17.4	58.5
Total, all groups	1,034.3	4,286.2	5,472.8	1,078.9	41.6	.0	3.9	11,917.7	.5
SE	6.3	2.7	2.2	6.6	35.9	.0	100.0	.5	

PERCENT TIMBERLAND BY FOREST TYPE GROUP

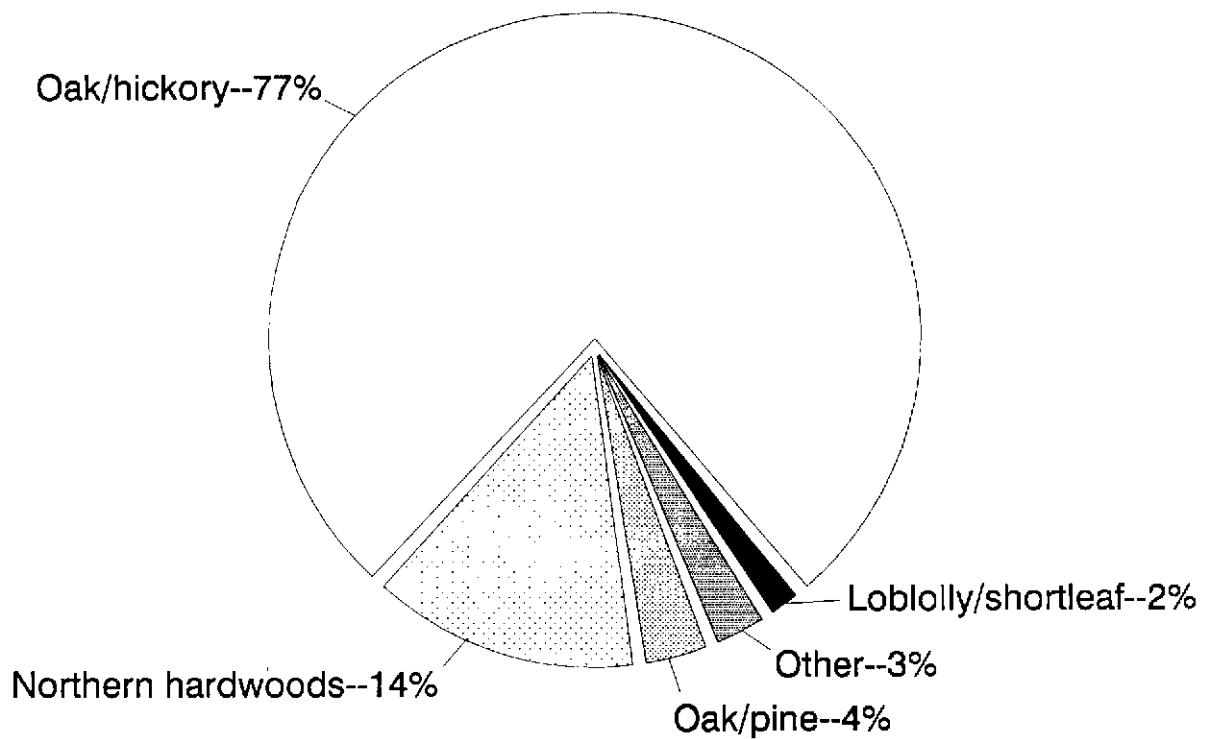


Table 19. Number of live trees on timberland by species and diameter class, West Virginia, 1989

(In thousands of trees)

Species	Diameter class (inches at breast height)							
	Seedlings	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
Eastern redcedar	26,689	7,888	846	699	384	124	17	48
Red spruce	231,619	12,539	3,777	939	1,020	1,097	959	912
White pine	175,485	31,897	8,447	8,088	3,992	2,094	1,624	1,150
Virginia pine	103,759	38,845	26,740	17,509	17,682	10,759	4,934	1,904
Other yellow pines	29,473	7,209	7,574	6,653	4,781	3,442	1,925	1,154
Hemlock	164,373	39,710	16,731	11,851	5,533	2,763	2,128	1,472
Other softwoods	1,212	2,412	404	33	84	31	28	0
Total softwoods	732,588	136,501	64,519	45,772	33,477	20,310	11,614	6,640
Red maple	5,321,676	540,815	176,199	82,276	43,461	24,184	13,757	8,144
Sugar maple	3,380,785	451,142	105,638	45,866	25,917	15,950	9,469	5,904
Yellow birch	83,617	40,873	14,340	10,606	7,603	4,145	1,635	726
Sweet birch	537,430	73,297	32,080	20,684	15,991	8,917	3,583	2,165
Hickory	1,253,810	124,051	77,303	52,915	33,522	22,506	13,221	7,158
Beech	1,831,934	304,577	65,897	24,005	12,879	9,394	6,531	5,174
Ash	1,978,838	33,657	25,029	15,130	9,058	6,904	3,685	2,403
Black walnut	43,118	4,075	3,362	4,458	3,407	2,577	1,656	1,307
Yellow-poplar	632,816	71,673	53,188	40,626	32,885	28,379	21,510	15,881
Cucumber tree	247,060	12,817	4,585	4,296	4,048	3,206	1,973	1,685
Blackgum	1,219,923	156,670	44,787	12,333	5,292	2,266	1,162	1,317
Black cherry	1,595,519	58,827	16,682	14,536	9,259	7,424	5,301	3,513
Select white oaks	831,627	61,504	55,868	39,278	33,575	23,632	15,555	11,418
Select red oaks	1,036,811	61,375	37,515	20,593	16,740	13,402	10,972	9,011
Other white oaks	926,137	43,583	41,115	46,177	41,357	28,920	18,799	12,945
Other red oaks	1,110,471	45,829	35,517	23,908	24,535	20,439	14,338	10,682
Basswood	113,818	19,104	7,391	8,760	7,119	4,497	4,464	3,421
Other commercial hardwoods	6,221,826	676,420	170,305	52,831	29,500	17,852	10,096	5,353
Other noncommercial hardwoods	10,973,837	720,116	187,065	62,876	23,335	7,533	2,636	1,207
Total hardwoods	39,341,057	3,548,716	1,133,866	582,156	379,482	252,129	160,347	109,418
Total, all species	40,073,645	3,685,217	1,198,385	627,927	412,959	272,439	171,961	116,058
SE	1.7	2.5	3.3	1.6	1.5	1.5	1.5	1.6

Table 19.-continued

(In thousands of trees)

Species	Diameter class (inches at breast height)					Total 5.0 and larger	All classes	SE
	15.0- 16.9	17.0- 18.9	19.0- 20.9	21.0- 28.9	29.0+			
Eastern redcedar	6	9	0	0	0	1,287	36,710	29.2
Red spruce	851	451	206	98	0	6,534	254,468	38.2
White pine	754	441	299	400	19	18,862	234,692	25.4
Virginia pine	519	167	46	0	0	53,520	222,864	13.0
Other yellow pines	472	109	58	0	0	18,594	60,831	28.9
Hemlock	1,012	667	631	607	85	26,750	247,564	18.3
Other softwoods	0	0	0	0	0	175	4,203	71.5
Total softwoods	3,615	1,845	1,240	1,105	105	125,723	1,061,332	11.7
Red maple	4,660	2,089	1,109	1,392	131	181,203	6,219,094	3.8
Sugar maple	3,415	1,814	1,123	1,503	262	111,225	4,048,790	4.4
Yellow birch	360	176	121	349	67	25,788	164,620	15.5
Sweet birch	1,215	420	238	142	11	53,367	696,085	9.8
Hickory	4,064	1,846	949	641	25	136,848	1,592,012	4.2
Beech	3,135	2,789	1,871	2,626	550	68,954	2,151,361	5.4
Ash	2,097	993	431	467	41	41,209	2,128,733	5.3
Black walnut	637	356	134	95	7	14,633	65,188	28.4
Yellow-poplar	11,270	7,070	3,559	2,948	229	164,357	922,035	6.4
Cucumbertree	1,172	800	248	187	12	17,628	281,290	12.3
Blackgum	804	466	303	349	16	24,309	1,445,689	5.9
Black cherry	2,554	1,783	882	874	64	46,193	1,717,221	6.9
Select white oaks	7,120	3,891	2,097	2,416	320	139,304	1,088,304	6.2
Select red oaks	6,364	4,577	3,120	4,139	636	89,555	1,225,256	5.2
Other white oaks	8,371	4,719	2,971	3,558	497	168,315	1,179,150	6.9
Other red oaks	7,657	4,304	2,751	3,189	321	112,124	1,303,941	6.3
Basswood	2,460	1,255	797	619	66	33,459	173,772	13.8
Other commercial hardwoods	3,188	1,881	941	957	144	122,744	7,191,295	3.3
Other noncommercial hardwoods	521	170	61	100	7	98,447	11,979,465	2.8
Total hardwoods	71,064	41,401	23,705	26,554	3,406	1,649,662	45,573,300	1.5
Total, all species	74,679	43,246	24,945	27,659	3,511	1,775,385	46,634,632	1.5
SE	1.9	2.3	2.8	2.8	5.1	.9	1.5	

Table 20.--Number of live trees on timberland by diameter class, tree class, and softwoods and hardwoods, West Virginia, 1989

(in thousands of trees)

Diameter class	Growing stock		Cull		All classes	SE
	Softwoods	Hardwoods	Softwoods	Hardwoods		
Seedlings	732,588	28,367,220	0	10,973,837	40,073,645	1.7
1.0 - 2.9	138,501	2,728,600	0	720,116	3,587,217	2.5
3.0 - 4.9	64,519	946,801	0	187,065	1,198,385	3.3
Total seedlings and saplings	935,608	32,042,621	0	11,881,018	44,859,247	2.2
5.0 - 6.9	44,716	491,840	1,056	90,315	627,927	1.6
7.0 - 8.9	32,971	340,240	506	39,242	412,959	1.5
9.0 - 10.9	-	235,927	-	16,202	252,129	1.5
Total pole/timber	77,688	1,068,007	1,562	145,759	1,293,015	1.3
9.0 - 10.9	19,799	-	511	-	20,310	1.5
11.0 - 12.9	11,281	147,680	333	12,667	171,961	1.5
13.0 - 14.9	6,470	101,875	170	7,543	116,058	1.6
Total small sawtimber	37,550	249,555	1,014	20,209	308,329	1.3
15.0 - 16.9	3,559	66,039	55	5,025	74,679	1.9
17.0 - 18.9	1,819	38,050	25	3,351	43,246	2.3
19.0 - 20.9	1,203	21,535	37	2,170	24,945	2.8
21.0 - 28.9	1,096	22,812	9	3,742	27,659	2.8
29.0 and larger	105	2,319	0	1,087	3,511	5.1
Total large sawtimber	7,783	150,756	127	15,375	174,040	1.6
All classes	1,058,630	33,510,938	2,702	12,062,361	46,634,632	1.5
SE	11.7	1.6	15.1	2.7	1.5	

Table 21.--Number of trees (5.0+ inches d.b.h.) on timberland by species and tree class, West Virginia, 1989

(In thousands of trees)

Species	Tree class						All classes	SE
	Preferred	Acceptable	Growing stock	Rough cull	Rotten cull	All cull		
Eastern redcedar	0	1,209	1,209	78	0	78	1,287	28.5
Red spruce	419	5,927	6,346	157	30	187	6,534	29.9
White pine	350	18,224	18,575	173	114	288	18,862	17.2
Virginia pine	99	52,361	52,460	910	150	1,060	53,520	9.0
Other yellow pines	188	17,908	18,096	288	210	498	18,594	16.1
Hemlock	1,057	25,102	26,159	482	109	591	26,750	11.0
Other softwoods	0	175	175	0	0	0	175	100.0
Total softwoods	2,113	120,908	123,021	2,088	614	2,702	125,723	5.9
Red maple	203	170,459	170,662	3,682	6,859	10,541	181,203	3.3
Sugar maple	404	105,399	105,803	2,024	3,398	5,422	111,225	4.0
Yellow birch	12	23,605	23,617	475	1,696	2,171	25,788	12.3
Sweet birch	40	50,825	50,866	854	1,647	2,501	53,367	7.8
Hickory	839	132,007	132,847	1,828	2,172	4,001	136,848	3.2
Beech	122	59,278	59,400	2,139	7,414	9,553	68,954	5.7
Ash	365	38,695	39,059	1,133	1,016	2,149	41,209	5.4
Black walnut	58	13,063	13,120	919	594	1,513	14,633	9.6
Yellow-poplar	4,696	156,759	161,454	661	2,242	2,903	164,357	3.8
Cucumber tree	255	16,683	16,938	225	465	690	17,628	6.1
Black gum	80	22,289	22,369	542	1,398	1,940	24,309	6.8
Black cherry	613	43,468	44,081	1,027	1,084	2,112	46,193	6.8
Select white oaks	1,338	134,839	136,177	1,441	1,686	3,127	139,304	3.9
Select red oaks	2,199	84,160	86,359	1,290	1,905	3,196	89,555	3.7
Other white oaks	856	161,894	162,750	2,658	2,907	5,565	168,315	3.9
Other red oaks	1,123	107,923	109,046	866	2,212	3,078	112,124	3.9
Basswood	643	31,376	32,020	371	1,067	1,439	33,459	6.9
Other commercial hardwoods	274	100,736	101,010	10,369	11,365	21,734	122,744	3.7
Other noncommercial hardwoods	0	740	740	86,959	10,748	97,707	98,447	4.8
Total hardwoods	14,121	1,454,198	1,468,319	119,466	61,877	181,343	1,649,662	.9
Total, all species	16,234	1,575,106	1,591,340	121,554	62,491	184,045	1,775,385	.9
SE	5.9	1.0	1.0	3.8	3.5	3.0	.9	

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

(In thousands of trees)

Species	Diameter class (inches at breast height)							
	Seedlings	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
Eastern redcedar	26,689	7,888	846	699	384	69	0	48
Red spruce	231,619	12,539	3,777	847	1,020	1,074	925	912
White pine	175,485	31,897	8,447	7,973	3,909	2,066	1,624	1,088
Virginia pine	103,759	38,845	26,740	16,977	17,517	10,639	4,776	1,843
Other yellow pines	29,453	5,209	7,574	6,569	4,551	3,345	1,869	1,122
Hemlock	164,373	39,710	16,731	11,618	5,505	2,574	2,059	1,457
Other softwoods	1,212	2,412	404	33	84	31	28	0
Total softwoods	732,588	138,901	64,519	44,716	32,971	19,799	11,281	6,470
Red maple	5,321,676	540,015	176,199	79,196	40,918	22,934	12,258	7,300
Sugar maple	3,380,785	451,142	105,638	43,675	25,120	15,425	8,781	5,723
Yellow birch	83,617	40,873	14,340	9,876	6,859	4,019	1,495	595
Sweet birch	537,430	73,207	32,080	20,047	15,306	8,572	3,285	2,009
Hickory	1,253,810	124,051	77,303	51,165	32,991	22,143	12,534	6,921
Beech	1,831,934	204,577	45,897	21,689	11,609	8,554	5,597	4,143
Ash	1,978,838	83,657	25,029	14,141	8,760	6,675	3,444	2,336
Black walnut	43,118	4,075	3,362	4,133	3,131	2,407	1,365	1,097
Yellow-poplar	632,816	71,673	53,188	39,641	32,329	28,065	21,138	15,713
Cucumber tree	247,060	12,017	4,585	4,181	3,965	3,145	1,857	1,537
Black gum	1,219,923	156,670	44,787	11,733	4,842	2,003	1,077	1,064
Black cherry	1,595,519	58,827	16,682	13,818	9,058	7,193	4,936	3,296
Select white oaks	831,627	61,504	55,868	38,429	33,088	23,354	14,987	11,213
Select red oaks	1,036,811	61,375	37,515	19,175	16,203	13,170	10,695	8,913
Other white oaks	926,137	43,583	41,115	45,200	40,536	28,262	18,046	12,198
Other red oaks	1,110,471	45,829	35,517	23,278	23,967	20,137	13,920	10,375
Basswood	113,818	19,104	7,391	8,383	6,763	4,411	4,318	3,299
Other hardwoods	6,221,826	676,420	170,305	44,079	24,791	15,457	7,945	4,143
Total hardwoods	28,367,220	2,728,600	946,801	491,840	340,240	235,927	147,680	101,875
Total, all species	29,099,808	2,867,101	1,011,320	536,557	373,211	255,726	158,962	108,345
SE	1.8	2.6	3.6	1.7	1.6	1.5	1.6	1.7

Table 22.-continued

(In thousands of trees)

Species	Diameter class (inches at breast height)					Total 5.0 and larger	All classes	SE
	15.0- 16.9	17.0- 18.9	19.0- 20.9	21.0- 28.9	29.0+			
Eastern redcedar	0	9	0	0	0	1,209	36,632	29.3
Red spruce	826	451	202	89	0	6,346	254,281	38.2
White pine	754	441	299	400	19	18,575	234,404	25.4
Virginia pine	495	167	46	0	0	52,460	221,804	13.0
Other yellow pines	472	109	58	0	0	18,096	60,333	28.9
Hemlock	1,012	642	598	607	85	26,159	246,973	18.4
Other softwoods	0	0	0	0	0	175	4,203	71.5
Total softwoods	3,559	1,819	1,203	1,096	105	123,021	1,058,630	11.7
Red maple	4,104	1,921	920	1,056	54	170,662	6,208,553	3.8
Sugar maple	3,040	1,731	977	1,211	119	105,803	4,043,368	4.4
Yellow birch	294	136	97	216	31	23,617	162,449	15.6
Sweet birch	993	369	193	79	11	50,866	693,584	9.8
Hickory	3,865	1,724	906	573	25	132,847	1,588,011	4.2
Beech	2,535	2,109	1,339	1,647	177	59,400	2,141,808	5.4
Ash	1,984	910	345	436	27	39,059	2,126,583	5.3
Black walnut	523	272	123	64	7	13,120	63,675	29.0
Yellow-poplar	11,134	6,862	3,515	2,849	208	161,454	919,132	6.5
Cucumbertree	1,115	735	230	164	7	16,938	280,600	12.3
Blackgum	712	388	270	269	8	22,369	1,443,748	6.0
Black cherry	2,436	1,668	813	815	47	44,081	1,715,109	6.9
Select white oaks	6,916	3,712	2,028	2,163	286	136,177	1,085,177	6.2
Select red oaks	6,153	4,485	3,001	4,020	542	86,359	1,222,061	5.2
Other white oaks	7,970	4,370	2,711	3,088	368	162,750	1,173,585	7.0
Other red oaks	7,436	4,059	2,674	2,929	270	109,046	1,300,863	6.4
Basswood	2,345	1,189	738	532	40	32,020	172,333	13.9
Other hardwoods	2,483	1,410	653	697	91	101,750	7,126,953	3.3
Total hardwoods	66,039	38,050	21,535	22,812	2,319	1,468,319	33,510,938	1.6
Total, all species	69,598	39,870	22,738	23,908	2,424	1,591,340	34,569,568	1.6
SE	2.0	2.4	2.9	2.9	5.9	1.0	1.6	

Table 22.--Net dry weight of all live trees on timberland by species and diameter class, West Virginia, 1989

(In millions of tons)

Species	Diameter class (inches at breast height)										All classes	SE
	1.0- 4.9	5.0- 6.9	7.0- 8.9	9.0- 10.9	11.0- 12.9	13.0- 14.9	15.0- 16.9	17.0- 18.9	19.0- 20.9	21.0+		
Eastern redcedar	.1	.1	.1	.0	.0	.0	.0	.0	.0	.0	.3	25.1
Red spruce	.2	.1	.1	.2	.3	.4	.5	.4	.2	.1	2.4	28.7
White pine	.3	.4	.4	.4	.5	.5	.5	.4	.3	.7	4.4	14.9
Virginia pine	.9	1.2	2.5	2.5	1.8	1.0	.4	.1	.1	.0	10.4	7.9
Other yellow pines	.2	.4	.6	.8	.7	.6	.3	.1	.1	.0	3.8	13.5
Hemlock	.7	.6	.6	.5	.7	.6	.6	.5	.7	1.2	6.8	10.6
Other softwoods	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	79.1
Total softwoods	2.4	2.8	4.3	4.5	3.9	3.1	2.3	1.5	1.3	2.0	28.2	5.4
Red maple	8.7	6.5	6.9	6.5	5.6	4.7	3.8	2.1	1.5	3.2	49.4	3.2
Sugar maple	11.9	8.7	9.7	10.2	8.9	7.6	5.8	4.0	3.0	7.5	77.3	4.3
Yellow birch	.8	.9	1.2	1.1	.6	.4	.3	.2	.1	.9	6.7	12.3
Sweet birch	1.5	1.7	2.9	2.8	1.7	1.5	1.2	.5	.4	.4	14.6	6.5
Hickory	3.3	5.0	7.0	8.3	8.0	6.3	5.0	3.0	2.1	2.3	50.3	3.2
Beech	5.9	4.5	4.9	5.9	6.0	6.2	5.1	5.3	4.6	12.1	60.5	5.4
Ash	2.3	2.4	2.9	3.6	2.8	2.5	3.0	1.6	.9	1.7	23.6	5.1
Black walnut	.1	.4	.6	.7	.7	.8	.5	.4	.2	.2	4.7	8.7
Yellow-poplar	1.7	2.7	4.6	7.0	8.2	9.0	9.0	7.3	4.9	7.1	61.5	3.5
Cucumber tree	.3	.4	.7	1.0	.9	1.2	1.1	1.0	.4	.4	7.4	5.9
Blackgum	2.4	1.1	.9	.7	.6	.9	.7	.5	.5	.9	9.0	6.1
Black cherry	1.0	1.3	1.7	2.3	2.5	2.3	2.4	2.1	1.4	2.5	19.5	6.8
Select white oaks	1.9	3.0	5.6	7.1	7.6	8.4	7.6	5.6	4.1	10.1	60.9	3.5
Select red oaks	1.4	1.9	3.4	4.8	6.2	7.7	8.0	7.7	6.9	20.8	68.7	3.7
Other white oaks	1.7	4.3	7.9	9.8	9.9	10.0	9.1	6.8	5.7	13.7	79.0	3.7
Other red oaks	1.6	2.2	5.7	6.7	7.4	8.1	8.1	5.8	5.0	10.7	60.2	3.5
Basswood	.3	.7	1.2	1.3	2.1	2.4	2.5	1.6	1.4	2.0	15.6	6.8
Other commercial hardwoods	8.0	4.0	5.8	5.0	4.5	3.4	2.9	2.1	1.5	3.1	39.4	3.6
Other noncommercial hardwoods	9.5	4.9	3.8	2.0	1.2	.7	.5	.2	.1	.2	23.1	4.1
Total hardwoods	64.2	56.6	75.1	86.9	85.6	84.1	76.7	57.7	44.6	99.9	731.4	1.0
Total, all species	66.6	59.4	79.5	91.4	89.5	87.2	78.9	59.2	45.9	101.9	759.6	.9
SE	2.9	1.7	1.6	1.6	1.6	1.7	2.0	2.5	2.9	2.9	.9	

Table 24.--Net dry weight of all trees on timberland by class of material and species group, West Virginia, 1989

(In millions of tons)

Class of material	Weight ^a		All groups	SE
	Softwoods	Hardwoods		
Sawlog portion	12.3	258.3	270.7	1.4
Upper stem	1.5	57.1	58.6	1.3
Total	13.9	315.4	329.3	1.4
Poletimber trees	4.8	142.2	147.0	1.3
All growing stock	18.6	457.7	476.3	1.0
Rough cull trees ^b	.3	21.1	21.4	3.5
Rotten cull trees ^b	.1	16.5	16.6	4.0
Salvable dead ^c	1.0	12.2	13.3	8.5
Saplings ^d	2.4	64.2	66.6	2.9
Tops - growing stock	6.7	158.8	165.4	1.0
Tops - rough and rotten	.1	13.1	13.2	2.6
All nongrowing stock	10.6	286.0	296.5	1.1
Total, all classes	29.2	743.6	772.8	.9
SE	5.5	1.0	.9	

^aIncludes bark and sound cull; excludes rotten cull.

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

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

^dIncludes entire tree aboveground.

Table 25.--Net volume of all trees on timberland by class of timber and species group, West Virginia, 1989

(In millions of cubic feet)

Class of timber	Species group				All species	SE
		Other	Soft	Hard		
	Pines	softwoods	hardwoods	hardwoods		
Sawtimber trees:						
Sawlog portion	475.7	328.8	3,661.6	6,003.0	10,469.1	1.3
Upper stem portion	65.4	35.6	835.7	1,363.7	2,300.4	1.3
Total	541.1	364.4	4,497.3	7,366.7	12,769.5	1.3
Poletimber trees						
	242.0	71.2	2,130.9	3,827.6	6,271.7	1.4
Total growing stock	783.1	435.6	6,628.1	11,194.4	19,041.3	1.0
Rough trees:						
Sawtimber size	3.6	3.6	104.3	123.6	235.1	5.5
Poletimber size	1.3	.5	187.6	131.8	321.3	4.3
Total	4.9	4.1	291.9	255.4	556.3	4.0
Rotten trees:						
Sawtimber size	.6	.3	55.8	132.5	188.6	5.1
Poletimber size	.4	.2	21.0	26.7	48.3	8.4
Total	.5	.5	76.7	159.2	236.9	4.6
Salvable dead trees:						
Sawtimber size	6.2	23.9	31.0	108.5	169.7	13.8
Poletimber size	8.7	7.8	51.4	77.3	135.2	8.4
Total	15.0	31.6	82.4	185.8	324.9	10.6
Total, all trees	803.4	572.1	7,089.1	11,794.8	20,159.4	1.0
SE	6.0	12.7	2.1	1.3	1.0	

Table 26.--Net volume of all live, growing-stock, and sawtimber trees on timberland
by species group and ownership class, West Virginia, 1989

Species group	Ownership class				All classes	SE
	National Forest	Other public	Forest industry	Other private		
All live (cubic feet):						
Softwoods	231.0	72.5	68.2	857.0	1,228.7	6.0
Hardwoods	1,372.6	779.6	1,390.6	15,062.9	18,605.8	1.0
Total, all groups	1,603.6	852.1	1,458.8	15,920.0	19,834.5	1.0
Growing stock (cubic feet):						
Softwoods	228.6	72.3	66.6	851.3	1,218.8	6.0
Hardwoods	1,324.9	755.7	1,330.2	14,411.8	17,822.5	1.1
Total, all groups	1,553.4	828.0	1,396.8	15,263.1	19,041.3	1.0
Sawtimber (board feet):						
Softwoods	908.7	251.0	202.9	2,439.2	3,801.7	7.2
Hardwoods	4,450.9	2,482.3	4,053.1	42,973.0	53,959.2	1.5
Total, all groups	5,359.6	2,733.2	4,255.9	45,412.2	57,760.9	1.4
SE	8.3	13.9	9.4	1.8	1.4	

Table 27.--Net volume of growing-stock trees on timberland by forest-type group and stand-size class, West Virginia, 1989

(In millions of cubic feet)

Forest-type group	Stand-size class				All classes	SE
	Sawtimber	Poletimber	Sapling and seedling	Nonstocked		
White/red pine	234.5	17.8	3.9	.0	256.2	21.9
Spruce/fir	76.6	26.8	.0	.0	103.5	43.1
Loblolly/shortleaf	173.9	116.3	17.3	.0	307.5	16.0
Oak/pine	403.9	142.3	44.5	.0	590.7	13.0
Oak/hickory	11,097.3	3,169.4	402.0	.0	14,668.7	1.6
Elm/ash/red maple	119.2	49.1	11.2	.0	179.6	18.5
Northern hardwoods	2,384.5	486.8	57.7	.0	2,928.9	5.8
Aspen/birch	.0	6.2	.0	.0	6.2	100.0
Total, all groups	14,489.9	4,014.8	536.6	.0	19,041.3	1.0
SE	1.7	3.9	9.1	.0	1.0	

Table 28.--Net volume of growing-stock trees on timberland by forest-type group and basal-area class, West Virginia, 1989

(In millions of cubic feet)

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	1.7	28.6	91.8	134.2	.0	.0	.0	256.2	21.9
Spruce/fir	.0	9.7	51.2	42.5	.0	.0	.0	103.5	43.1
Loblolly/shortleaf	14.8	113.7	160.4	18.6	.0	.0	.0	307.5	16.0
Oak/pine	12.0	228.0	238.0	112.6	.0	.0	.0	590.7	13.0
Oak/hickory	206.0	3,992.5	8,386.4	1,994.0	89.7	.0	.0	14,668.7	1.6
Elm/ash/red maple	11.6	77.2	84.6	6.1	.0	.0	.0	179.6	18.5
Northern hardwoods	51.2	664.8	1,555.0	607.3	35.9	.0	14.8	2,928.9	5.8
Aspen/birch	.0	6.2	.0	.0	.0	.0	.0	6.2	100.0
Total, all groups	297.2	5,120.8	10,567.4	2,915.4	125.6	.0	14.8	19,041.3	1.0
SE	9.0	3.0	2.4	7.0	36.5	.0	100.0	1.0	

Table 29.--Net volume of growing-stock trees on timberland by species and forest-type group, West Virginia, 1989

(In millions of cubic feet)

Species	Forest-type group									All groups	SE
	White/ red pine	Spruce/ fir	Loblolly/ shortleaf	Oak/ pine	Oak/ hickory	Oak/gum/ cypress	Elm/ash/ red maple	Northern hardwoods	Aspen/ birch		
Eastern redcedar	.0	.0	.0	1.4	2.6	.0	.0	.0	.0	4.0	29.3
Red spruce	6.0	89.2	.0	.0	1.6	.0	.0	42.5	.0	139.4	29.9
White pine	71.8	.0	6.0	86.0	60.8	.0	.0	.5	.0	225.1	15.3
Virginia pine	2.9	.0	180.7	109.6	109.5	.0	.9	6.9	.0	410.6	8.6
Other yellow pines	15.3	.0	44.9	28.7	56.8	.0	.0	1.9	.0	147.5	14.2
Hemlock	76.0	.5	.4	8.5	97.1	.0	.0	108.4	.0	290.9	11.0
Other softwoods	.0	1.4	0	.0	.0	.0	.0	.0	.0	1.4	100.0
Total softwoods	172.0	91.1	232.1	234.1	328.4	.0	.9	160.1	.0	1,218.8	6.0
Red maple	14.1	3.3	4.7	35.5	1,035.6	.0	7.0	332.6	.0	1,432.7	3.7
Sugar maple	2.7	.0	1.6	2.9	533.1	.0	12.5	485.2	.0	1,037.9	4.7
Yellow birch	3.0	7.5	.0	.0	34.3	.0	.0	131.5	.0	176.3	13.4
Sweet birch	4.5	.1	.1	4.1	260.4	.0	.3	148.8	.0	418.3	7.7
Hickory	4.3	.0	10.0	21.6	1,180.8	.0	5.2	77.3	1.0	1,300.2	3.3
Beech	3.4	1.4	3	2.9	464.0	.0	.5	317.2	.0	789.6	6.0
Ash	.3	.0	3.4	7.6	279.9	.0	12.9	139.0	.0	443.1	5.6
Black walnut	.3	.0	.6	1.8	106.7	.0	9.4	10.5	.0	129.4	9.1
Yellow-poplar	14.7	.0	7.4	45.3	2,744.4	.0	12.9	171.3	.9	2,996.9	3.6
Cucumbertree	.5	.0	0	.8	183.9	.0	.2	41.2	.0	226.6	6.1
Blackgum	1.9	.0	1.1	5.7	158.7	.0	.2	10.3	.0	177.9	6.4
Black cherry	2.3	.1	3.2	3.0	221.8	.0	4.6	391.2	.0	626.2	7.3
Select white oaks	9.3	.0	12.6	98.6	1,532.7	.0	4.2	24.0	.0	1,681.4	3.6
Select red oaks	6.3	.0	4.5	30.2	1,433.6	.0	4.0	102.8	.0	1,581.4	3.7
Other white oaks	4.7	.0	8.5	40.7	1,705.5	.0	.0	15.0	.0	1,774.4	3.7
Other red oaks	8.9	.0	13.6	45.1	1,613.3	.0	.6	14.5	.0	1,696.0	3.6
Basswood	.7	.0	.0	1.0	279.0	.0	3.1	244.3	.0	528.0	6.9
Other hardwoods	2.3	.0	3.9	9.5	572.7	.0	101.1	112.3	4.4	806.0	4.3
Total hardwoods	84.2	12.4	75.4	356.5	14,340.3	.0	178.6	2,768.8	6.2	17,822.5	1.1
Total, all species	256.2	103.5	307.5	590.7	14,668.7	.0	179.6	2,928.9	6.2	19,041.3	1.0
SE	21.9	43.1	16.0	13.0	1.6	.0	18.5	5.8	100.0	1.0	

Table 30.--Net volume of growing-stock trees on timberland by species and stand-size class, West Virginia, 1989

(In millions of cubic feet)

Species	Stand-size class				All classes	SE
	Sawtimber	Poletimber	Sapling and seedling	Nonstocked		
Eastern redcedar	2.3	.6	1.0	.0	4.0	29.3
Red spruce	112.4	26.6	.4	.0	139.4	29.9
White pine	176.3	39.4	9.4	.0	225.1	15.3
Virginia pine	242.4	139.6	28.6	.0	410.6	8.6
Other yellow pines	96.6	46.8	4.1	.0	147.5	14.2
Hemlock	247.9	40.6	2.4	.0	290.9	11.0
Other softwoods	1.4	.0	.0	.0	1.4	100.0
Total softwoods	879.3	293.6	45.9	.0	1,218.8	6.0
Red maple	1,110.8	288.5	33.4	.0	1,432.7	3.7
Sugar maple	874.3	149.2	14.4	.0	1,037.9	4.7
Yellow birch	144.7	26.0	5.5	.0	176.3	13.4
Sweet birch	326.7	86.3	5.2	.0	418.3	7.7
Hickory	903.3	350.8	46.0	.0	1,300.2	3.3
Beech	670.7	99.2	19.7	.0	789.6	6.0
Ash	312.1	113.2	17.8	.0	443.1	5.6
Black walnut	80.8	41.2	7.4	.0	129.4	9.1
Yellow-poplar	2,301.3	611.7	83.8	.0	2,996.9	3.6
Cucumber tree	187.3	35.7	3.7	.0	226.6	6.1
Blackgum	136.9	35.3	5.8	.0	177.9	6.4
Black cherry	469.2	133.0	24.1	.0	626.2	7.3
Select white oaks	1,191.6	427.7	62.1	.0	1,681.4	3.6
Select red oaks	1,315.1	236.6	29.7	.0	1,581.4	3.7
Other white oaks	1,351.5	387.5	35.5	.0	1,774.4	3.7
Other red oaks	1,241.8	407.8	46.4	.0	1,696.0	3.6
Basswood	464.9	56.4	6.7	.0	528.0	6.9
Other hardwoods	527.7	235.0	43.4	.0	806.0	4.3
Total hardwoods	13,610.6	3,721.2	490.7	.0	17,822.5	1.1
Total, all species	14,489.9	4,014.8	536.6	.0	19,041.3	1.0
SE	1.7	3.9	9.1	.0	1.0	

Table 31.--Net volume of growing-stock trees on timberland by species and cubic-foot stand-volume class, West Virginia, 1989

(In millions of cubic feet)

Species	Stand-volume class (cubic feet per acre)						All classes	SE
	0-499	500-999	1000-1499	1500-1999	2000-2499	2500+		
Eastern redcedar	5	1.6	1.0	.9	.0	0	4.0	29.3
Red spruce	.0	7.6	1.3	18.4	24.0	88.0	139.4	29.9
White pine	1.7	21.5	25.0	25.4	45.7	105.8	225.1	15.3
Virginia pine	10.0	61.8	120.4	114.0	66.2	38.2	410.6	8.6
Other yellow pines	3.0	15.9	62.0	42.1	9.2	15.2	147.5	14.2
Hemlock	1.5	6.7	13.8	64.8	49.6	154.4	290.9	11.0
Other softwoods	0	1.4	.0	.0	.0	.0	1.4	100.0
Total softwoods	16.7	116.5	223.5	265.7	194.7	401.6	1,218.8	6.0
Red maple	15.5	49.0	220.4	294.9	389.6	463.4	1,432.7	3.7
Sugar maple	8.5	63.9	170.7	216.6	281.3	316.8	1,037.9	4.7
Yellow birch	1.5	7.1	20.2	32.1	26.4	69.0	176.3	13.4
Sweet birch	3.2	6.5	52.4	25.0	110.1	120.6	418.3	7.7
Hickory	19.1	87.5	285.3	473.6	403.8	222.8	1,300.2	3.3
Beech	1.7	21.4	35.6	163.3	229.2	285.5	709.6	6.0
Ash	7.3	25.1	33.2	135.1	31.3	92.0	443.1	5.6
Black walnut	7.1	29.2	21.6	33.7	17.5	10.2	129.4	9.1
Yellow-poplar	20.2	145.6	405.5	637.3	668.8	1,153.2	2,996.6	3.6
Cucumber tree	1.1	12.3	27.8	57.1	74.8	63.2	226.6	5.1
Black gum	2.1	8.6	39.3	51.8	34.0	42.1	177.9	6.4
Black cherry	11.3	38.3	95.3	93.9	115.8	269.0	626.2	7.3
Select white oaks	17.3	125.2	397.0	515.1	482.7	265.4	1,681.4	3.0
Select red oaks	3.7	25.8	213.9	360.1	465.2	530.3	1,581.4	4.7
Other white oaks	18.0	111.2	412.7	509.1	377.0	151.2	1,774.4	3.7
Other red oaks	9.7	69.0	407.3	533.2	412.7	327.5	1,696.8	3.6
Basswood	1.2	19.6	63.0	117.3	112.6	213.1	528.0	6.9
Other hardwoods	28.0	118.5	183.4	214.3	123.4	137.2	806.5	4.3
Total hardwoods	180.4	1,015.3	3,030.3	5,447.6	4,126.2	5,022.6	17,822.5	1.1
Total, all species	197.1	1,131.8	3,253.8	5,713.3	4,320.9	5,424.2	19,041.3	1.0
SE	8.8	1.3	1.8	1.7	3.7	4.8	1.0	

CHANGE IN GROWING STOCK VOLUME BY MAJOR SPECIES GROUP

SPECIES GROUP

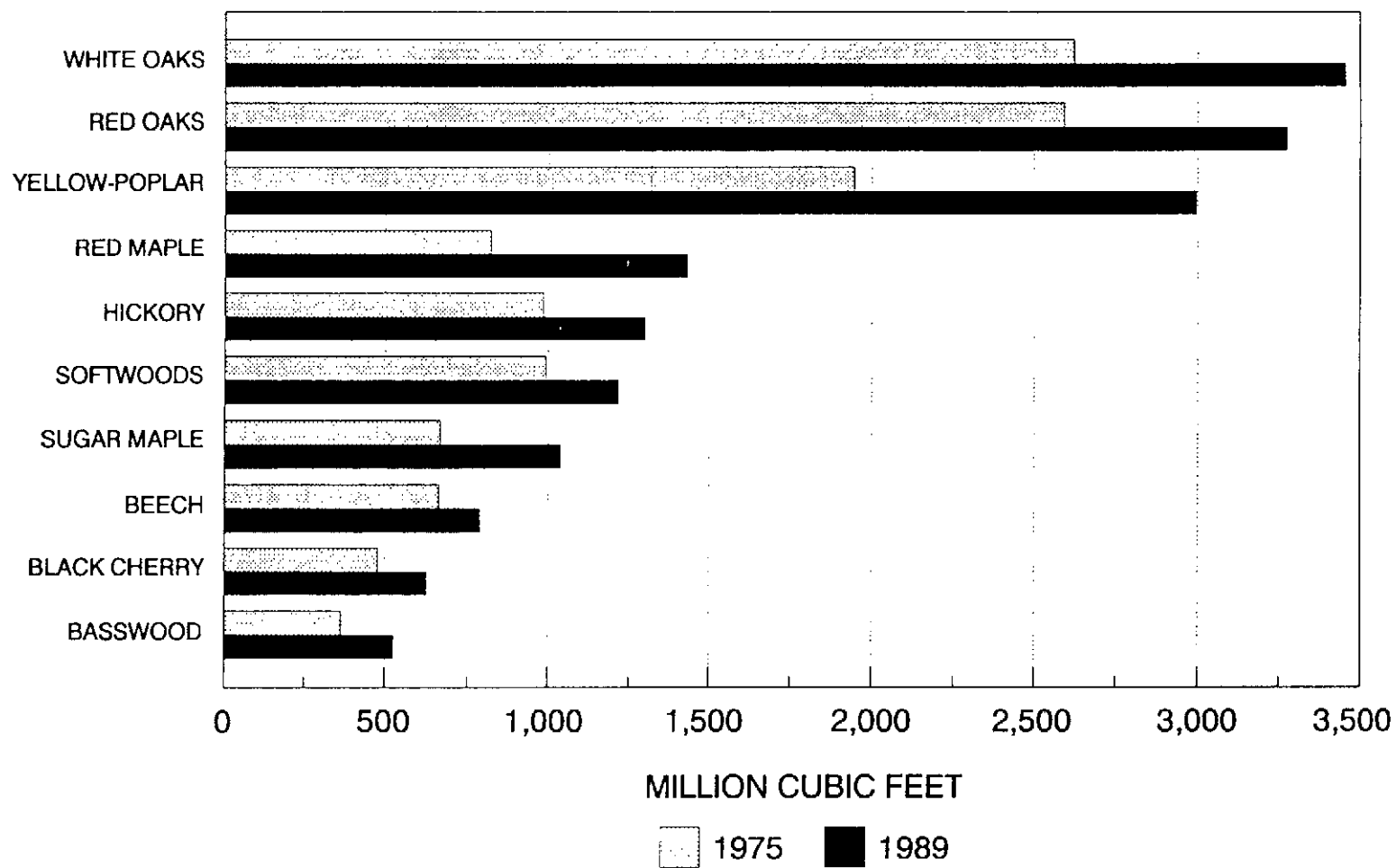


Table 32.--Net volume of growing-stock trees on timberland by species and diameter class, West Virginia, 1975

(In millions of cubic feet)

Species	Diameter class (inches at breast height)										All classes
	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+	
Eastern redcedar	.0	.0	.0	.6	.0	.0	.0	.0	.0	.0	.6
Red spruce	5.2	16.3	22.9	35.9	28.1	34.6	17.3	9.8	6.5	.0	176.6
White pine	13.3	22.1	10.1	11.4	6.1	4.3	8.0	13.8	15.3	5.5	110.1
Virginia pine	52.4	91.3	92.0	78.2	42.5	18.9	6.7	.0	.0	.0	382.0
Other yellow pines	8.8	30.4	34.5	31.4	20.0	17.9	3.6	5.7	.0	.0	152.1
Hemlock	28.7	21.9	13.4	18.7	18.8	18.3	16.7	13.6	19.8	.7	170.5
Other softwoods	.1	.6	.2	.5	.0	.0	.0	.0	.0	.0	1.4
Total softwoods	108.5	182.7	173.1	176.8	115.5	93.9	52.3	42.8	41.6	6.2	993.3
Red maple	156.3	166.5	160.4	121.2	92.4	41.5	32.3	11.7	35.7	4.3	822.2
Sugar maple	118.7	119.6	129.0	75.3	67.2	48.4	28.7	17.8	54.8	7.2	666.5
Yellow birch	37.9	39.8	26.6	9.3	3.2	9.0	3.7	8.8	18.4	.0	156.8
Sweet birch	86.2	69.1	63.2	29.8	27.1	9.9	6.3	9.1	4.2	.0	304.9
Hickory	176.5	188.0	185.1	147.0	110.8	76.9	50.4	23.6	25.9	1.0	985.3
Beech	62.2	67.3	84.5	97.9	81.4	100.9	62.8	34.5	63.0	9.7	664.2
Ash	39.1	45.6	34.0	59.6	50.7	43.7	24.2	9.9	18.3	2.6	327.7
Black walnut	10.1	13.6	16.9	12.9	15.9	10.5	4.7	2.8	6.2	.0	93.6
Yellow-poplar	162.0	217.3	260.8	300.4	325.2	283.5	184.7	98.5	106.8	6.9	1,946.4
Cucumbertree	16.6	31.1	22.4	36.5	21.4	24.0	10.9	7.6	1.8	.0	172.3
Blackgum	18.9	12.6	5.7	9.3	14.4	9.9	11.8	7.9	19.0	.0	109.4
Black cherry	34.8	46.1	66.6	70.8	106.4	58.9	37.1	33.2	23.1	.0	477.0
Select white oaks	129.9	176.3	200.5	198.0	181.0	137.8	96.5	69.3	67.1	19.8	1,276.1
Select red oaks	77.4	99.4	145.4	138.4	146.8	157.8	124.3	96.6	187.8	36.0	1,209.7
Other white oaks	156.9	182.0	203.6	168.1	176.1	127.4	111.7	83.4	121.8	18.7	1,349.8
Other red oaks	128.6	159.1	173.2	145.8	208.9	172.3	133.0	86.7	148.6	30.2	1,386.3
Basswood	50.0	36.2	74.8	58.4	35.4	39.0	15.5	16.0	39.8	.0	365.1
Other hardwoods	78.9	115.4	101.0	84.5	70.8	54.6	33.5	21.9	29.9	5.7	596.0
Total hardwoods	1,541.0	1,785.0	1,953.7	1,763.1	1,735.1	1,406.0	971.7	639.1	972.2	142.1	12,909.5
Total, all species	1,649.5	1,967.7	2,126.8	1,940.0	1,850.6	1,499.9	1,024.0	681.9	1,013.8	148.3	13,902.8

Table 33.--Net volume of growing-stock trees on timberland by species and diameter class, West Virginia, 1989

(In millions of cubic feet)

Species	Diameter class (inches at breast height)										All classes	SE
	5.0- 6.9	7.0- 8.9	9.0- 10.9	11.0- 12.9	13.0- 14.9	15.0- 16.9	17.0- 18.9	19.0- 20.9	21.0- 28.9	29.0+		
Eastern redcedar	1.4	1.2	.4	.0	.9	.0	.2	.0	.0	.0	4.0	29.3
Red spruce	2.6	7.9	14.3	18.3	25.6	30.6	21.4	11.8	6.9	.0	139.4	29.9
White pine	20.8	22.9	22.5	28.3	27.4	27.0	21.1	17.8	34.5	2.8	225.1	15.3
Virginia pine	47.6	108.0	114.5	76.2	41.1	14.4	6.5	2.3	.0	.0	410.6	8.6
Other yellow pines	16.5	26.2	33.6	28.0	23.1	13.3	3.7	3.0	.0	.0	147.5	14.2
Hemlock	27.9	29.6	25.4	32.3	32.9	31.6	25.6	32.7	42.6	10.3	290.9	11.0
Other softwoods	.1	.6	.2	.5	.0	.0	.0	.0	.0	.0	1.4	100.0
Total softwoods	116.8	196.4	211.0	183.5	151.0	117.0	78.4	67.5	84.0	13.1	1,218.8	6.0
Red maple	196.8	254.3	256.2	214.9	177.9	131.8	80.2	46.0	68.8	5.9	1,432.7	3.7
Sugar maple	112.1	155.1	172.0	155.9	142.3	98.6	68.5	47.2	74.3	12.1	1,037.9	4.7
Yellow birch	25.0	40.9	41.9	23.4	12.8	7.4	4.6	3.8	13.9	2.6	176.3	13.4
Sweet birch	57.3	101.2	96.5	56.9	48.0	29.3	14.8	8.7	4.6	1.0	418.3	7.7
Hickory	127.3	209.3	256.6	233.3	175.6	132.7	73.4	49.6	39.4	3.0	1,300.2	3.3
Beech	48.8	65.4	95.3	99.5	103.5	84.6	87.8	67.4	115.6	21.7	789.6	6.0
Ash	36.4	55.3	71.7	61.0	60.6	65.1	39.1	18.4	32.3	3.1	443.1	5.6
Black walnut	10.0	17.5	23.4	21.9	24.5	13.9	9.8	4.5	3.7	.3	129.4	9.1
Yellow-poplar	108.8	238.9	374.1	453.1	483.9	461.8	362.8	228.9	253.4	31.3	2,996.9	3.6
Cucumbertree	10.9	23.5	33.9	31.4	37.2	34.6	32.1	11.6	11.0	.5	226.6	6.1
Blackgum	25.8	26.0	21.0	16.8	23.1	21.8	13.6	11.9	16.4	1.5	177.9	6.4
Black cherry	37.9	58.3	82.4	93.1	85.7	86.0	76.1	44.0	57.3	5.5	626.2	7.3
Select white oaks	101.8	195.5	245.3	247.9	259.3	215.3	145.2	96.4	140.7	34.1	1,681.4	3.6
Select red oaks	52.9	102.0	145.2	182.6	215.0	198.3	182.2	151.1	279.6	72.4	1,581.4	3.7
Other white oaks	106.2	223.1	269.9	264.5	247.3	207.8	143.4	104.9	171.8	35.5	1,774.4	3.7
Other red oaks	64.9	154.4	219.8	237.5	254.2	239.5	163.3	131.9	197.0	33.5	1,696.0	3.6
Basswood	21.7	46.4	54.7	85.9	92.3	85.4	55.3	40.4	41.2	4.8	528.0	6.9
Other hardwoods	98.9	135.4	152.7	121.8	91.8	69.3	52.4	29.3	43.1	11.3	806.0	4.3
Total hardwoods	1,243.6	2,102.5	2,612.4	2,601.3	2,535.0	2,183.2	1,604.5	1,096.0	1,564.1	280.0	17,822.5	1.1
Total, all species	1,360.4	2,298.9	2,823.4	2,784.9	2,686.0	2,300.1	1,682.9	1,163.6	1,648.0	293.1	19,041.3	1.0
SE	1.8	1.7	1.6	1.6	1.8	2.0	2.6	3.1	3.1	6.4	1.0	

Table 34.--Net volume of growing-stock in the sawlog portion of sawtimber trees on timberland by species and diameter class,
West Virginia, 1989

(In millions of cubic feet)

Species	Diameter class (inches at breast height)								All classes	SE
	9.0- 10.9	11.0- 12.9	13.0- 14.9	15.0- 16.9	17.0- 18.9	19.0- 20.9	21.0- 28.9	29.0+		
Eastern redcedar	.3	.0	.8	.0	.1	.0	.0	.0	1.3	52.5
Red spruce	12.0	15.9	22.9	27.9	19.7	11.0	6.5	.0	115.8	29.8
White pine	18.9	24.6	24.5	24.6	19.4	16.5	32.2	2.6	163.5	15.7
Virginia pine	96.3	66.3	36.8	13.1	6.0	2.1	.0	.0	220.5	9.2
Other yellow pines	28.3	24.4	20.7	12.1	3.4	2.8	.0	.0	91.7	14.0
Hemlock	21.4	28.1	29.4	28.7	23.6	30.4	39.8	9.7	211.1	11.6
Other softwoods	.2	.4	.0	.0	.0	.0	.0	.0	.6	100.0
Total softwoods	177.4	159.7	135.0	106.4	72.3	62.8	78.5	12.3	804.5	6.8
Red maple	.0	158.2	144.1	110.7	68.1	39.1	58.5	5.0	583.7	5.3
Sugar maple	.0	114.7	115.2	82.8	58.2	40.1	63.2	10.3	484.5	6.3
Yellow birch	.0	17.2	10.4	6.2	3.9	3.3	11.8	2.2	54.9	17.7
Sweet birch	.0	41.9	38.9	24.6	12.5	7.4	3.9	.8	130.1	11.1
Hickory	.0	171.7	142.3	111.5	62.4	42.2	33.5	2.5	565.9	4.3
Beech	.0	73.3	83.8	71.1	74.6	57.3	98.3	18.4	476.8	6.5
Ash	.0	44.9	49.1	54.7	33.2	15.6	27.5	2.6	227.7	7.0
Black walnut	.0	16.1	19.8	11.7	8.4	3.8	3.1	.3	63.2	10.6
Yellow-poplar	.0	333.5	391.9	387.9	308.4	194.6	215.4	26.6	1,858.2	4.0
Cucumbertree	.0	23.1	30.1	29.1	27.3	9.9	9.3	.4	129.2	7.5
Blackgum	.0	12.4	18.7	18.3	11.6	10.1	13.9	1.2	86.3	8.5
Black cherry	.0	68.5	69.4	72.2	64.7	37.4	48.7	4.6	365.6	8.8
Select white oaks	.0	182.5	210.0	180.8	123.4	81.9	119.6	29.0	927.2	4.1
Select red oaks	.0	134.4	174.2	166.6	154.9	128.4	237.7	61.6	1,057.7	4.2
Other white oaks	.0	194.7	200.3	174.6	121.9	89.1	146.0	30.2	956.8	4.2
Other red oaks	.0	174.8	205.9	201.1	138.8	112.1	167.5	28.5	1,028.7	4.1
Basswood	.0	63.2	74.8	71.7	47.0	34.4	35.0	4.1	330.2	7.7
Other hardwoods	.0	89.6	74.3	58.2	44.5	24.9	36.6	9.6	337.8	5.7
Total hardwoods	.0	1,914.6	2,053.3	1,833.9	1,363.8	931.6	1,329.4	238.0	9,664.6	1.4
Total, all species	177.4	2,074.3	2,188.3	1,940.3	1,436.1	994.4	1,408.0	250.3	10,469.1	1.3
SE	7.7	1.6	1.8	2.1	2.6	3.1	3.1	6.4	1.3	

CHANGE IN SAWTIMBER VOLUME BY MAJOR SPECIES GROUP

SPECIES GROUP

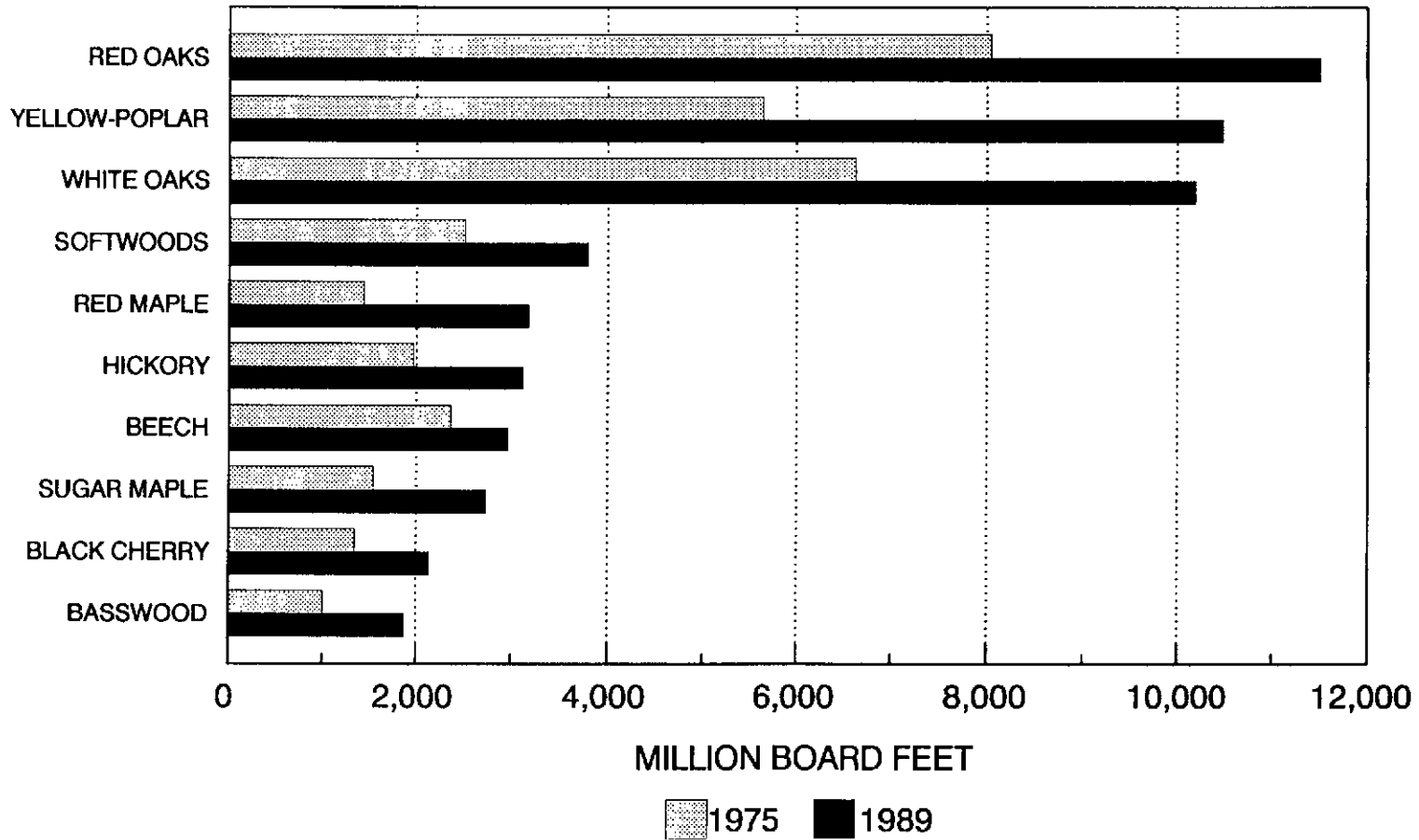


Table 35.--Net volume of sawtimber trees on timberland by species and diameter class, West Virginia, 1975

(In millions of board feet)^a

Species	Diameter class (inches at breast height)								All classes
	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+	
Eastern redcedar	.0	1.5	.0	.0	.0	.0	.0	.0	1.5
Red spruce	73.1	137.2	117.7	147.6	81.2	49.8	32.0	.0	638.6
White pine	29.0	35.6	21.3	16.5	30.8	57.3	62.2	13.2	265.9
Virginia pine	225.0	218.5	134.7	61.9	23.0	.0	.0	.0	663.1
Other yellow pines	94.9	97.8	70.0	64.2	11.6	17.9	.0	.0	356.4
Hemlock	55.2	87.7	89.8	80.0	88.0	89.3	98.8	3.6	592.4
Other softwoods	.7	2.2	.0	.0	.0	.0	.0	.0	2.9
Total softwoods	478.1	580.5	433.5	370.2	234.6	214.3	193.0	16.8	2,520.8
Red maple	.0	461.6	391.9	188.6	148.8	57.5	166.7	21.3	1,436.4
Sugar maple	.0	349.7	333.1	257.0	153.2	96.8	307.9	40.5	1,538.2
Yellow birch	.0	34.1	15.7	51.8	18.8	56.0	87.1	.0	263.5
Sweet birch	.0	120.7	104.3	37.3	32.3	57.1	32.8	.0	384.5
Hickory	.0	596.0	495.5	369.1	252.5	119.1	135.5	4.7	1,972.4
Beech	.0	420.4	406.7	542.8	359.5	206.3	370.0	64.0	2,369.7
Ash	.0	210.0	196.5	181.8	98.1	42.8	82.9	12.7	824.8
Black walnut	.0	37.5	61.3	40.9	15.0	8.9	25.1	.0	188.7
Yellow-poplar	.0	1,124.1	1,355.4	1,301.6	853.0	465.7	512.8	33.4	5,646.0
Cucumber tree	.0	167.6	106.6	131.6	60.3	44.9	11.1	.0	522.1
Blackgum	.0	20.6	53.8	39.4	46.2	26.6	89.6	.0	276.2
Black cherry	.0	244.8	429.1	252.4	159.6	153.3	101.0	.0	1,340.2
Select white oaks	.0	778.7	774.1	605.0	431.3	321.0	312.1	92.1	3,314.3
Select red oaks	.0	527.2	625.9	709.7	570.7	449.1	887.6	157.8	3,928.0
Other white oaks	.0	607.5	705.2	530.6	481.9	369.6	541.9	85.8	3,322.5
Other red oaks	.0	574.9	897.8	788.2	615.3	399.8	701.1	145.1	4,122.2
Basswood	.0	235.4	177.1	226.9	71.5	85.1	209.8	.0	1,005.8
Other hardwoods	.0	286.8	260.7	218.8	133.5	98.6	123.8	22.0	1,144.2
Total hardwoods	.0	6,797.6	7,390.7	6,473.5	4,501.5	3,058.2	4,698.8	679.4	33,599.7
Total, all species	478.1	7,378.1	7,824.2	6,843.7	4,736.1	3,272.5	4,891.8	696.2	36,120.5

^aInternational 1/4-inch rule.

Table 36.--Net volume of sawtimber trees on timberland by species and diameter class, West Virginia, 1989

(In millions of board feet)^a

Species	Diameter class (inches at breast height)								All classes	SE
	9.0- 10.9	11.0- 12.9	13.0- 14.9	15.0- 16.9	17.0- 18.9	19.0- 20.9	21.0- 28.9	29.0+		
Eastern redcedar	.8	.0	2.6	.0	.6	.0	.0	.0	4.0	54.5
Red spruce	53.0	80.3	126.0	159.3	113.4	64.7	37.8	.0	634.6	30.2
White pine	69.8	111.6	121.8	129.8	107.2	88.8	190.4	16.7	836.2	15.6
Virginia pine	370.6	285.7	164.7	60.1	29.2	9.6	.0	.0	920.0	9.4
Other yellow pines	108.2	106.4	93.7	57.8	17.3	12.8	.0	.0	396.2	13.8
Hemlock	75.1	116.3	130.0	136.4	119.5	150.4	217.9	62.3	1,007.9	11.8
Other softwoods	.7	2.2	.0	.0	.0	.0	.0	.0	2.9	100.0
Total softwoods	678.3	702.6	638.9	543.3	387.2	326.2	446.1	79.0	3,801.7	7.2
Red Maple	.0	774.4	741.0	611.0	394.8	233.9	384.2	46.1	3,185.3	5.4
Sugar maple	.0	577.1	591.6	450.4	331.4	243.7	449.1	97.1	2,740.4	6.2
Yellow birch	.0	89.2	54.7	32.9	24.4	16.3	85.7	21.4	324.6	18.8
Sweet birch	.0	214.3	201.3	133.8	71.2	46.8	25.0	6.3	698.7	11.2
Hickory	.0	859.5	749.2	623.9	375.0	253.0	243.2	21.1	3,124.9	4.4
Beech	.0	381.7	455.8	401.8	457.9	382.2	732.9	156.3	2,968.5	6.7
Ash	.0	230.9	255.7	297.0	186.4	93.3	177.6	15.8	1,256.8	7.2
Black walnut	.0	78.9	99.2	60.9	43.1	21.9	20.7	4.0	328.7	10.9
Yellow-poplar	.0	1,673.0	2,052.7	2,123.9	1,794.7	1,199.7	1,431.4	218.4	10,494.0	4.0
Cucumbertree	.0	114.3	158.4	164.8	161.3	63.2	61.2	4.4	727.6	7.8
Blackgum	.0	59.4	95.6	100.4	64.8	58.8	97.1	7.2	483.3	8.5
Black cherry	.0	351.1	368.2	401.5	377.8	244.6	358.8	40.4	2,142.3	8.9
Select white oaks	.0	933.8	1,097.6	994.8	707.4	488.8	797.6	221.9	5,241.8	4.1
Select red oaks	.0	637.3	864.4	859.3	851.9	739.8	1,529.9	433.8	5,916.4	4.2
Other white oaks	.0	912.7	952.2	870.9	632.4	497.3	888.5	203.5	4,957.5	4.3
Other red oaks	.0	840.8	1,025.6	1,047.2	766.9	646.0	1,063.1	208.0	5,597.5	4.1
Basswood	.0	315.9	392.0	397.1	275.8	215.9	241.7	36.1	1,874.6	7.8
Other hardwoods	.0	453.1	392.2	325.8	251.0	157.4	241.2	75.3	1,896.0	5.9
Total hardwoods	.0	9,497.5	10,547.4	9,897.4	7,768.1	5,602.6	8,829.2	1,817.2	53,959.2	1.5
Total all species	678.3	10,200.0	11,186.3	10,440.7	8,155.3	5,928.8	9,275.3	1,896.2	57,760.9	1.4
SE	8.0	1.7	1.8	2.1	2.6	3.1	3.1	6.2	1.4	

^aInternational 1/4-inch rule.

Table 37.--Net volume of sawtimber trees on timberland by species and standard-lumber log grade, West Virginia, 1975

(In millions of board feet)^a

Species	All size classes				All grades
	Grade 1	Grade 2	Grade 3	Grade 4	
White pine	16.1	56.9	143.1	49.5	265.9
Virginia pine	17.9	22.1	623.1	.0	663.1
Other yellow pines	22.1	27.0	307.5	.0	356.4
Other softwoods	1,235.5	.0	.0	.0	1,235.5
Total softwoods	1,291.6	106.0	1,073.7	49.5	2,520.8
Red maple	158.3	188.9	731.6	357.8	1,436.5
Sugar maple	196.6	253.1	743.1	345.5	1,538.2
Yellow birch	41.6	46.3	117.7	58.1	263.5
Sweet birch	50.7	74.6	173.5	76.2	375.2
Hickory	189.5	277.3	903.2	602.4	1,972.4
Beech	199.7	316.1	1,134.5	719.1	2,369.7
Ash	109.9	193.5	364.7	156.7	824.8
Black walnut	4.7	25.1	120.0	39.0	188.7
Yellow-poplar	1,138.3	1,036.7	2,310.6	1,160.4	5,646.0
Cucumbertree	46.6	97.1	269.7	108.6	522.1
Blackgum	55.4	79.5	104.5	36.8	276.2
Black cherry	188.5	259.5	596.0	296.3	1,340.2
Select white oaks	225.6	524.4	1,730.4	833.9	3,314.3
Select red oaks	899.0	875.0	1,634.8	519.0	3,928.0
Other white oaks	358.6	629.2	1,535.6	799.1	3,322.5
Other red oaks	606.4	649.8	1,811.3	1,054.6	4,122.2
Basswood	143.9	232.0	472.2	157.8	1,005.8
Other hardwoods	70.2	159.9	661.3	262.2	1,153.5
Total hardwoods	4,683.5	5,918.0	15,414.7	7,583.5	33,599.7

^aInternational 1/4-inch rule.

Table 38.--Net volume of sawtimber trees on timberland by species, size class, and standard-lumber log grade, West Virginia, 1989

(In millions of board feet)^a

Species	All size classes				All grades	>15" Diameter at breast height				All grades	SE
	Grade 1	Grade 2	Grade 3	Grade 4		Grade 1	Grade 2	Grade 3	Grade 4		
Eastern redcedar	4.0	.0	.0	.0	4.0	.6	.0	.0	.0	.6	100.0
Red spruce	634.6	.0	.0	.0	634.6	375.2	.0	.0	.0	375.2	29.9
White pine	73.3	212.4	399.6	150.9	836.2	61.2	126.6	248.2	97.0	533.0	17.6
Virginia pine	16.7	39.2	864.0	.0	920.0	3.1	7.6	88.2	.0	98.9	18.6
Other yellow pines	30.6	45.6	320.0	.0	396.2	13.3	13.1	61.5	.0	87.9	19.6
Hemlock	1,007.9	.0	.0	.0	1,002.6	681.2	.0	.0	.0	681.2	13.2
Other softwoods	2.9	.0	.0	.0	2.9	.0	.0	.0	.0	.0	.0
Total softwoods	1,769.7	297.2	1,583.6	150.9	3,801.7	1,134.5	147.3	397.9	97.0	1,776.7	9.8
Red maple	87.0	315.3	1,572.3	1,210.8	3,185.3	85.1	189.4	833.6	561.9	1,670.0	6.8
Sugar maple	306.5	391.4	1,105.5	937.0	2,740.4	262.8	276.2	560.0	472.6	1,571.7	7.5
Yellow birch	9.4	39.5	197.8	77.9	324.6	7.7	23.0	108.0	42.0	180.7	25.6
Sweet birch	29.3	76.0	361.6	231.8	698.7	24.2	33.6	140.3	85.0	283.1	14.8
Hickory	156.3	651.8	1,250.5	1,066.3	3,124.9	146.2	439.0	507.8	423.2	1,516.2	6.0
Beech	56.6	105.7	1,255.4	1,550.9	2,968.5	53.2	97.1	904.2	1,076.6	2,131.0	7.4
Ash	147.5	366.5	485.0	257.8	1,256.8	134.9	248.1	252.2	134.9	770.2	9.0
Black walnut	23.8	68.8	161.1	75.1	328.7	20.6	41.9	63.5	24.7	150.7	16.8
Yellow-poplar	1,290.4	1,837.8	3,440.3	3,925.5	10,494.0	1,236.6	1,389.1	2,083.0	2,059.6	6,768.2	4.7
Cucumber tree	79.2	145.0	339.8	163.5	727.6	75.5	100.6	189.6	89.1	454.8	10.5
Blackgum	41.9	91.6	250.9	98.9	483.3	41.9	70.2	161.8	54.3	328.3	10.1
Black cherry	301.7	350.6	1,049.7	440.4	2,142.3	286.9	232.9	651.1	252.1	1,423.0	10.5
Select white oaks	497.5	913.2	1,830.9	2,000.2	5,241.8	481.4	643.4	955.6	1,129.9	3,210.5	5.0
Select red oaks	1,002.3	1,371.6	2,172.5	1,370.1	5,916.4	980.8	1,115.3	1,405.1	913.6	4,414.7	5.0
Other white oaks	424.0	894.5	1,975.8	1,663.1	4,957.5	415.4	634.9	1,019.6	1,022.8	3,092.7	5.2
Other red oaks	422.6	853.1	1,709.4	2,612.5	5,597.5	416.6	677.5	1,098.8	1,538.3	3,731.2	4.8
Basswood	217.0	390.7	939.2	327.6	1,874.6	200.7	264.2	519.9	181.7	1,166.6	9.4
Other hardwoods	91.6	212.1	960.6	631.9	1,896.0	88.6	152.3	494.6	315.4	1,050.8	8.0
Total hardwoods	5,184.4	9,075.3	21,058.2	18,641.3	53,959.2	4,959.1	6,628.9	11,948.6	10,377.8	33,914.4	1.9
SE	3.9	2.2	1.6	1.7	1.5	4.0	2.6	2.1	2.3	1.9	
Percent of hardwood in each grade	10	17	39	34	100	15	20	35	30	100	

^aInternational 1/4-inch rule.

Table 39.--Average annual net change of growing-stock volume on timberland by species and component,
West Virginia, 1975-89

(In thousands of cubic feet)

Species	Ingrowth	Accretion	Gross growth	Mortality	Cull Decrement	Cull Increment	Net growth	Removals	Net change
Eastern redcedar	28	12	41	0	0	0	41	0	41
Red spruce	68	3,069	3,137	-1,147	0	-34	1,956	-4,312	-2,356
White pine	1,913	7,176	9,089	-650	96	-68	8,467	-402	8,065
Virginia pine	1,789	7,922	9,712	-4,118	793	-80	6,306	-4,348	1,958
Other yellow pines	385	1,347	1,732	-1,832	358	0	257	-594	-337
Hemlock	2,118	7,501	9,619	-302	1,047	-214	10,150	-1,830	8,320
Total softwoods	6,301	27,028	33,329	-8,050	2,293	-396	27,177	-11,486	15,690
Red maple	13,739	40,028	53,766	-2,191	5,723	-4,235	53,064	-9,134	43,929
Sugar maple	6,286	25,368	31,654	-1,715	3,844	-1,244	32,539	-6,234	26,305
Yellow birch	1,127	3,629	4,756	-950	1,238	-678	4,365	-2,585	1,780
Sweet birch	2,264	8,687	10,952	-1,266	1,036	-717	10,004	-1,971	8,034
Hickory	5,496	27,336	32,832	-5,220	2,504	-930	29,186	-6,854	22,332
Beech	1,518	13,317	14,835	-1,317	6,708	-3,887	16,340	-6,849	9,491
Ash	2,428	8,727	11,154	-1,374	1,676	-104	11,352	-3,227	8,125
Black walnut	798	2,813	3,611	-672	925	-354	3,510	-1,040	2,470
Yellow-poplar	12,468	81,324	93,792	-4,215	2,697	-853	91,422	-15,615	75,807
Cucumbertree	880	4,934	5,814	-746	335	-327	5,076	-1,259	3,816
Blackgum	1,158	2,202	3,360	-236	2,911	-265	5,770	-1,068	4,702
Black cherry	3,337	14,835	18,172	-1,020	1,360	-1,015	17,497	-7,000	10,497
Select white oaks	4,459	35,017	39,475	-2,183	4,525	-835	40,982	-12,732	28,250
Select red oaks	3,512	39,406	42,918	-3,298	3,032	-831	41,822	-16,146	25,676
Other white oaks	4,621	30,906	35,527	-2,827	7,855	-1,137	39,418	-9,537	29,881
Other red oaks	3,917	37,522	41,439	-4,742	3,540	-997	39,239	-16,825	22,414
Basswood	1,336	12,847	14,183	-1,058	1,042	-337	13,831	-2,318	11,513
Other hardwoods	7,021	13,980	21,001	-3,699	4,540	-1,451	20,392	-5,437	14,955
Total hardwoods	76,365	402,877	479,242	-38,729	55,494	-20,197	475,809	-125,831	349,978
Total, all species	82,666	429,905	512,571	-46,778	57,787	-20,593	502,986	-137,318	365,668

Table 40.--Average annual net growth and average annual removals
of growing-stock volume on timberland by species,
West Virginia, 1975-89

(In thousands of cubic feet)

Species	Growth	Removals
Eastern redcedar	41	0
Red spruce	1,956	-4,312
White pine	8,467	-402
Virginia pine	6,306	-4,348
Other yellow pines	257	-594
Hemlock	10,150	-1,830
Total softwoods	27,177	-11,486
Red maple	53,064	-9,134
Sugar maple	32,539	-6,234
Yellow birch	4,365	-2,585
Sweet birch	10,004	-1,971
Hickory	29,186	-6,854
Beech	16,340	-6,849
Ash	11,352	-3,227
Black walnut	3,510	-1,040
Yellow-poplar	91,422	-15,615
Cucumbertree	5,076	-1,259
Blackgum	5,770	-1,068
Black cherry	17,497	-7,000
Select white oaks	40,982	12,732
Select red oaks	41,822	-16,146
Other white oaks	39,418	-9,537
Other red oaks	39,239	-16,825
Basswood	13,831	-2,318
Other hardwoods	20,392	-5,437
Total hardwoods	475,809	-125,831
Total, all species	502,986	-137,318

Table 41.--Average annual net growth and average annual removals of growing-stock volume on timberland by ownership class and species group, West Virginia, 1975-89

(In thousands of cubic feet)

Ownership class	Growth			Removals		
	Softwoods	Hardwoods	All groups	Softwoods	Hardwoods	All groups
Public	3,325	44,280	47,605	-1,476	-13,018	-14,494
Private	23,852	431,529	455,381	-10,011	-112,813	-122,824
Total, all classes	27,177	475,809	502,986	-11,486	-125,831	-137,318

Table 42.--Average annual mortality of growing-stock and sawtimber volume on timberland by species, West Virginia, 1975-89

Species	Growing stock	Sawtimber
	(In thousands of cubic feet)	(In thousands of board feet) ^a
Eastern redcedar	0	0
Red spruce	-1,147	-4,019
White pine	-650	-2,369
Virginia pine	-4,118	-7,271
Other yellow pines	-1,832	-2,746
Hemlock	-302	-683
Total softwoods	-8,050	-17,088
Red maple	-2,191	-4,624
Sugar maple	-1,715	-4,883
Yellow birch	-950	-485
Sweet birch	-1,266	-265
Hickory	-5,220	-11,376
Beech	-1,317	-5,257
Ash	-1,374	-2,911
Black walnut	-672	-1,602
Yellow-poplar	-4,215	-9,974
Cucumber tree	-746	-2,065
Blackgum	-236	-339
Black cherry	-1,020	-1,394
Select white oaks	-2,183	-3,757
Select red oaks	-3,298	-10,798
Other white oaks	-2,827	-6,276
Other red oaks	-4,742	-12,583
Basswood	-1,058	-898
Other hardwoods	-3,699	-5,175
Total hardwoods	-38,729	-84,662
Total, all species	-46,778	-101,750

^aInternational 1/4-inch rule.

Table 43.--Average annual net growth and average annual removals
of sawtimber volume on timberland by species,
West Virginia, 1975-89

(In thousands of board feet)^a

Species	Growth	Removals
Eastern redcedar	139	0
Red spruce	14,314	-14,355
White pine	40,289	-159
Virginia pine	27,680	-9,707
Other yellow pines	4,160	-1,568
Hemlock	34,681	-6,824
Total softwoods	121,262	-32,613
Red maple	146,996	-22,424
Sugar maple	104,134	-18,556
Yellow birch	7,885	-3,259
Sweet birch	24,172	-2,995
Hickory	99,944	-18,124
Beech	69,864	-25,175
Ash	42,262	-11,673
Black walnut	11,803	-2,117
Yellow-poplar	408,591	-59,219
Cucumber tree	18,398	-4,147
Blackgum	17,463	-3,374
Black cherry	80,038	-24,743
Select white oaks	175,629	-40,664
Select red oaks	204,605	-66,699
Other white oaks	145,823	-30,321
Other red oaks	168,801	-62,154
Basswood	69,854	-8,737
Other hardwoods	60,533	-7,072
Total hardwoods	1,856,794	-411,413
Total, all species	1,978,056	-444,025

^aInternational 1/4-inch rule.

Table 44.--Average annual net growth and average annual removals of sawtimber volume on timberland by ownership class and species group.
West Virginia, 1975-89

(In thousands of board feet)^a

Ownership class	Growth			Removals		
	Softwoods	Hardwoods	All groups	Softwoods	Hardwoods	All groups
Public	14,895	174,898	189,793	-4,376	-41,832	-46,208
Private	106,367	1,681,896	1,788,263	-28,237	-369,581	-397,818
Total, all classes	121,262	1,856,794	1,978,056	-32,613	-411,413	-444,025

^aInternational 1/4-inch rule.

Table 45.--Output^a of timber products by product, softwoods and hardwoods, and source of material, West Virginia, 1987

(In standard units and thousands of cubic feet)

Product and species	Output from roundwood			Output from primary manufacturing residue	Total, timber products output
	Board-foot output ^b	Cordwood output	Output in common units		
	<u>Thousand board feet</u>	<u>Standard cords</u>	<u>-----</u>	<u>Thousand cubic feet</u>	<u>-----</u>
Sawlogs		INDUSTRIAL PRODUCTS			
Softwoods	6,786	--	999	0	999
Hardwoods	556,092	--	76,078	0	76,078
Total	562,878	--	77,077	0	77,077
Veneer					
Softwoods	0	--	0	0	0
Hardwoods	7,604	--	1,030	0	1,030
Total	7,604	--	1,030	0	1,030
Other products ^c					
Softwoods	21,058	--	2,970	17	2,987
Hardwoods	43,811	--	6,179	6,010	12,189
Total	64,869	--	9,149	6,027	15,176
Pulpwood ^d					
Softwoods	--	69,434	5,902	3,028	8,930
Hardwoods	--	202,548	17,217	21,314	38,531
Total	--	271,982	23,119	24,342	47,461
All products		TOTAL, INDUSTRIAL PRODUCTS			
Softwoods	27,844	69,434	9,871	3,045	12,916
Hardwoods	607,507	202,548	100,504	27,324	127,828
Total	635,351	271,982	110,375	30,369	140,744
Fuelwood ^e		NONINDUSTRIAL PRODUCTS			
Softwoods	--	2,024	162	40	202
Hardwoods	--	38,456	3,076	12,570	15,646
Total	--	40,480	3,238	12,610	15,848
All products ^f		TOTAL, ALL PRODUCTS			
Softwoods	27,844	71,458	10,033	3,085	13,118
Hardwoods	607,507	241,004	103,580	39,894	143,474
Total	635,351	312,462	113,613	42,979	156,592

^aThe volume of roundwood harvested from timber within the state and received at primary manufacturing plants in the state, in other states, and in foreign countries. Reported volumes by product may be underestimated because overseas shipments are difficult to track.

^bInternational 1/4-inch rule.

^cIncludes cooperage, mine timbers, fence stock, and metallurgical wood.

^dA standard cord of pulpwood is equivalent to 85 cubic feet of solid wood.

^eA standard cord of fuelwood is equivalent to 80 cubic feet of solid wood.

^fDoes not include 19,000 cubic feet of softwood and 5,938,000 cubic feet of hardwood residues used for agricultural bedding.

Table 46.--Output of roundwood products by product, softwoods and hardwoods, and source of material.^a West Virginia, 1987

(In thousands of cubic feet)

Product and species	Growing-stock trees			Rough or rotten cull trees	Salvable dead trees	Other sources	All sources
	Poletimber	Sawtimber	Total				
Sawlogs	INDUSTRIAL PRODUCTS						
Softwoods	0	660	660	0	0	339	999
Hardwoods	122	49,451	49,573	510	220	25,775	76,078
Total	122	50,111	50,233	510	220	26,114	77,077
Veneer							
Softwoods	0	0	0	0	0	0	0
Hardwoods	2	676	678	0	0	352	1,030
Total	2	676	678	0	0	352	1,030
Other products							
Softwoods	40	1,148	1,188	50	99	1,633	2,970
Hardwoods	83	2,389	2,472	105	206	3,396	6,179
Total	123	3,537	3,660	155	305	5,029	9,149
Pulpwood							
Softwoods	30	2,245	2,275	0	0	3,627	5,902
Hardwoods	88	6,548	6,636	0	0	10,581	17,217
Total	118	8,793	8,911	0	0	14,208	23,119
All products	TOTAL, INDUSTRIAL PRODUCTS						
Softwoods	70	4,053	4,123	50	99	5,599	9,871
Hardwoods	295	59,064	59,359	615	426	40,104	100,504
Total	365	63,117	63,482	665	525	45,703	110,375
Fuelwood	NONINDUSTRIAL PRODUCTS						
Softwoods	5	8	13	43	47	59	162
Hardwoods	35	223	258	813	900	1,105	3,076
Total	40	231	271	856	947	1,164	3,238
All products	TOTAL, ALL PRODUCTS						
Softwoods	75	4,061	4,136	93	146	5,659	10,033
Hardwoods	330	59,287	59,617	1,428	1,326	41,209	103,590
Total	405	63,348	63,753	1,521	1,472	46,867	113,613

^aGrowing-stock trees, rough or rotten cull trees, and salvable dead trees are from timberland only. Other sources include trees less than 5.0 inches in diameter at breast height and tree tops and limbs from timberland, as well as any material from nontimberland or nonforest land such as fencerows, pastureland, and urban areas.

Table 47.--Timber removals from growing stock and sawtimber on timberland by component^a and softwoods and hardwoods, West Virginia, 1987

Components of timber removals	Growing stock			Sawtimber		
	Softwoods	Hardwoods	All species	Softwoods	Hardwoods	All species
	----- Thousand cubic feet -----			----- Thousand board feet ^b -----		
Roundwood products						
Sawlogs	660	49,573	50,233	2,610	222,133	224,743
Veneer	0	678	678	0	3,037	3,037
Other products	1,188	2,472	3,660	4,346	9,043	13,389
Pulpwood	2,275	6,636	8,911	6,548	19,099	25,647
Fuelwood	13	258	271	18	507	525
All products	4,136	59,617	63,753	13,522	253,819	267,341
Logging residue	229	3,169	3,398	333	2,963	3,296
Land use change	2,531	34,382	36,913	5,289	88,285	93,574
Reserve withdrawals	1,750	12,744	14,494	5,690	30,300	35,990
Total removals	8,646	109,912	118,558	24,834	375,367	400,201

^aLogging residue does not include material from tree tops and limbs. Land use change includes timber removed from land converted to a nonforest use, average annual basis. Reserve withdrawals include land sufficiently productive to be classed as timberland (wilderness, parks, etc.) but withdrawn from production, average annual basis.

^bInternational 1/4-inch rule.

Table 48.--Volume of unused residues from primary manufacturing plants by softwoods and hardwoods, type of residue,^a and industry, West Virginia, 1987

(In thousands of cubic feet)

Species and type of residue	Lumber	Veneer	Other industries	All industries
Softwoods				
Coarse	1	0	0	1
Fine	0	0	0	0
Total	1	0	0	1
Hardwoods				
Coarse	1,275	2	4	1,281
Fine	2,454	9	4	2,467
Total	3,729	11	8	3,748
All species				
Coarse	1,276	2	4	1,282
Fine	2,454	9	4	2,467
Total	3,730	11	8	3,749

^aCoarse residues include slabs, edgings, trimmings, veneer cores, and other material suitable for chipping. Fine residues include sawdust, shavings, and other material unsuitable for chipping.

NORTHEASTERN UNIT



Table 49.--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/seedling	Non-stocked		
White pine	21.4	2.9	3.5	.0	27.8	42.0
Hemlock	26.0	.0	4.7	.0	30.7	40.8
Scotch pine	.0	3.7	.0	.0	3.7	100.0
White/red pine group	47.4	6.6	8.3	.0	62.2	27.7
Balsam fir	4.0	.0	.0	.0	4.0	100.0
Red spruce	30.3	9.7	3.2	.0	43.2	39.4
Spruce/fir group	34.3	9.7	3.2	.0	47.2	37.0
Shortleaf pine	4.1	6.2	.0	.0	10.3	72.2
Virginia pine	12.9	40.3	5.4	.0	58.6	29.3
Pitch pine	16.5	.0	.0	.0	16.5	58.5
Table mountain pine	3.9	4.6	.0	.0	8.5	70.9
Loblolly/shortleaf group	37.4	51.0	5.4	.0	93.9	23.2
Wh. pine/no.red oak/wh. ash	36.8	9.7	.0	.0	46.5	37.5
Eastern redcedar/hardwood	.0	.0	5.1	.0	5.1	72.3
Virginia pine/oak	39.9	20.3	18.7	.0	78.9	26.6
Loblolly pine/hardwood	.0	4.6	.0	.0	4.6	100.0
Other oak/pine	9.6	36.4	.0	.0	46.0	38.6
Oak/pine group	86.3	71.0	23.8	.0	181.0	15.1
Post. black, or bear oak	17.0	4.0	.0	.0	20.9	52.9
Chestnut oak	180.4	77.4	15.7	.0	273.6	12.9
White oak/red oak/hickory	185.5	76.9	45.5	.0	307.8	11.9
White oak	96.5	26.5	4.6	.0	127.7	18.0
Northern red oak	93.7	.0	4.8	.0	98.6	24.4
Y-poplar/wh. oak/no.red oak	139.1	35.9	1.9	.0	176.9	17.0
Black locust	31.3	24.2	40.3	.0	95.8	21.7
Black walnut	15.1	17.3	4.5	.0	36.9	38.0
Yellow-poplar	143.4	28.6	12.7	.0	184.8	16.0
Hawthorn/reverting field	.0	.0	49.3	.0	49.3	31.0
Scarlet oak	4.8	6.1	.0	.0	11.0	62.6
Sassafras/persimmon	.0	.0	11.9	.0	11.9	58.2
Red maple/central hardwood	20.4	16.9	10.8	.0	48.1	31.9
Mixed central hardwoods	1,119.8	364.7	79.5	.0	1,564.0	4.8
Oak/ hickory group	2,047.1	678.5	281.6	.0	3,007.1	2.5
Black ash/Amer. elm/red maple	15.9	12.0	.0	.0	28.0	41.4
Red maple(upland)	.0	.0	2.9	.0	2.9	100.0
River birch/sycamore	14.2	.0	4.0	.0	18.2	44.8
Sycamore/pecan/American elm	4.6	.0	2.3	.0	6.9	74.3
Elm/ash/red maple group	34.7	12.0	9.2	.0	55.9	27.4
Sugar maple/beech/yellow birch	359.1	82.3	28.9	.0	470.2	9.9
Black Cherry	103.9	40.0	23.8	.0	167.7	17.3
Red maple/northern hardwoods	103.4	42.6	3.6	.0	149.5	21.1
Pin cherry/reverting field	4.8	8.3	17.5	.0	30.7	40.8
Mixed northern hardwoods	124.2	42.4	5.7	.0	172.3	17.5
Northern hardwoods group	695.3	215.6	79.5	.0	990.5	6.5
Aspen	.0	.0	12.9	.0	12.9	70.7
Aspen/birch group	.0	.0	12.9	.0	12.9	70.7
All forest types	2,982.5	1,044.4	423.8	.0	4,450.7	.9
SE	2.3	6.1	10.4	.0	.9	

Table 50.--Area of timberland by forest type, forest-type group, and stand-size class (excludes all National Forest), Northeastern Unit, West Virginia, 1975

(In thousands of acres)

Forest type	Stand-size class				All classes	SE
	Saw-timber	Pole-timber	Sapling/seedling	Non-stocked		
Jack pine	.0	.0	9.2	.0	9.2	100.0
White pine	11.8	.0	.0	.0	11.8	100.0
Hemlock	.0	7.1	11.4	.0	18.5	72.6
White/red pine group	11.8	7.1	20.6	.0	39.5	50.9
Red spruce	11.1	.0	11.1	.0	22.3	70.7
Spruce/fir group	11.1	.0	11.1	.0	22.3	70.7
Virginia pine	18.8	29.7	31.3	.0	79.8	32.3
Pitch pine	.0	9.7	9.7	.0	19.5	69.5
Table mountain pine	9.4	.0	.0	.0	9.4	100.0
Loblolly/shortleaf group	28.3	39.4	41.0	.0	108.7	28.0
Virginia pine/oak	41.0	80.1	39.7	.0	160.8	23.9
Other oak/pine	11.5	20.4	.0	.0	31.9	57.9
Oak/pine group	52.5	100.5	39.7	.0	192.7	21.3
Post, black, or bear oak	16.5	19.0	.0	.0	35.5	50.3
Chestnut oak	136.7	59.7	21.2	.0	217.6	20.7
White oak/red oak/hickory	127.9	65.7	95.6	.0	289.2	18.3
White oak	63.3	39.3	75.7	.0	178.4	24.1
Northern red oak	47.1	18.8	.0	.0	66.0	37.3
Y-poplar/wh. oak/no.red oak	67.6	.0	11.1	.0	78.8	36.8
Black locust	.0	10.6	81.5	.0	92.1	35.7
Black walnut	9.6	.0	29.9	.0	39.5	53.3
Yellow-poplar	44.8	11.1	16.2	.0	72.1	40.9
Hawthorn/reverting field	.0	.0	9.2	.0	9.2	100.0
Scarlet oak	.0	9.4	.0	.0	9.4	100.0
Red maple/central hardwood	.0	22.6	.0	.0	22.6	70.7
Mixed central hardwoods	611.2	509.5	426.1	9.6	1,556.4	6.2
Oak/hickory group	1,124.7	765.8	766.5	9.6	2,666.7	3.3
Sweetbay/swamp tupelo/red mple	.0	.0	11.8	.0	11.8	100.0
Oak/gum/cypress group	.0	.0	11.8	.0	11.8	100.0
Black ash/Amer. elm/red maple	.0	.0	11.1	.0	11.1	100.0
Red maple(lowland)	.0	.0	18.6	.0	18.6	70.7
River birch/sycamore	9.4	9.2	9.4	.0	28.1	57.4
American elm/green ash	.0	.0	19.4	.0	19.4	70.7
Elm/ash/red maple group	9.4	9.2	58.6	.0	77.2	35.0
Sugar maple/beech/yellow birch	186.6	117.4	28.0	.0	332.0	17.5
Black Cherry	22.5	34.7	9.2	.0	66.5	40.8
Red maple/northern hardwoods	34.3	34.6	32.2	.0	101.1	33.0
Pin cherry/reverting field	.0	.0	4.0	.0	4.0	100.0
Mixed northern hardwoods	30.3	.0	.0	.0	30.3	59.0
Northern hardwoods group	273.7	186.8	73.4	.0	533.9	13.1
Aspen	.0	.0	18.5	.0	18.5	69.3
Aspen/birch group	.0	.0	18.5	.0	18.5	69.3
All forest types	1,511.6	1,108.9	1,041.2	9.6	3,671.4	1.4
SE	6.0	8.0	7.6	100.0	1.4	

Table 51.--Area of timberland by forest type, forest-type group, and stand-size class (excludes all National Forest), Northeastern Unit, West Virginia, 1989

(In thousands of acres)

Forest type	Stand-size class				All classes	SE
	Saw-timber	Pole-timber	Sapling/seedling	Non-stocked		
White pine	19.2	2.9	3.5	.0	25.6	42.2
Hemlock	16.3	.0	2.4	.0	18.7	53.3
Scotch pine	.0	3.6	.0	.0	3.6	100.0
White/red pine group	35.4	6.5	5.9	.0	47.9	30.7
Balsam fir	3.7	.0	.0	.0	3.7	100.1
Red spruce	5.9	8.6	3.0	.0	17.5	62.1
Spruce/fir group	9.6	8.6	3.0	.0	21.2	54.1
Shortleaf pine	.0	7.4	.0	.0	7.4	100.0
Virginia pine	12.2	39.2	.0	.0	51.4	30.8
Pitch pine	10.2	.0	.0	.0	10.2	70.8
Loblolly/shortleaf group	22.4	46.5	.0	.0	68.9	27.3
Wh. pine/no.red oak/wh. ash	33.5	8.6	.0	.0	42.1	38.3
Eastern redcedar/hardwood	.0	.0	4.8	.0	4.8	71.8
Virginia pine/oak	39.1	14.9	18.6	.0	72.6	27.7
Loblolly pine/hardwood	.0	3.8	.0	.0	3.8	100.0
Other oak/pine	9.7	36.7	.0	.0	46.4	38.5
Oak/pine group	82.3	64.1	23.4	.0	169.7	15.3
Post, black, or bear oak	9.1	.0	.0	.0	9.1	73.7
Chestnut oak	144.8	56.1	11.5	.0	212.3	14.5
White oak/red oak/hickory	169.4	72.6	34.1	.0	276.1	12.5
White oak	91.9	25.7	3.8	.0	121.4	18.8
Northern red oak	68.8	.0	4.8	.0	73.6	26.8
Y-poplar/wh. oak/no.red oak	113.1	35.9	.0	.0	149.1	18.2
Black locust	29.6	21.8	37.9	.0	89.2	22.2
Black walnut	15.0	17.2	3.7	.0	36.0	38.2
Yellow-poplar	135.3	28.6	12.7	.0	176.6	16.1
Hawthorn/reverting field	.0	.0	49.6	.0	49.6	31.1
Scarlet oak	4.8	5.6	.0	.0	10.4	65.1
Sassafras/persimmon	.0	.0	11.9	.0	11.9	58.2
Red maple/central hardwood	19.4	17.1	8.3	.0	44.9	32.4
Mixed central hardwoods	944.6	338.0	70.1	.0	1,352.6	4.9
Oak/hickory group	1,745.8	618.5	248.5	.0	2,612.8	2.6
Black ash/Amer. elm/red maple	15.9	12.0	.0	.0	27.9	41.6
Red maple(upland)	.0	.0	9.4	.0	9.4	17.0
River birch/sycamore	14.2	.0	3.4	.0	17.6	44.8
Sycamore/pecan/American elm	5.0	.0	2.3	.0	7.3	75.3
Elm/ash/red maple group	35.1	12.0	15.1	.0	62.3	24.4
Sugar maple/beech/yellow birch	250.5	71.9	22.3	.0	344.7	10.9
Black Cherry	68.8	33.9	7.4	.0	110.1	21.2
Red maple/northern hardwoods	58.8	31.7	3.7	.0	94.1	24.8
Pin cherry/reverting field	3.0	7.0	14.1	.0	24.2	42.8
Mixed northern hardwoods	66.6	29.6	9.3	.0	105.5	22.8
Northern hardwoods group	447.7	174.1	56.8	.0	678.6	7.6
Aspen	.0	.0	10.0	.0	10.0	72.1
Aspen/birch group	.0	.0	10.0	.0	10.0	72.1
All forest types	2,378.2	930.5	362.8	.0	3,671.4	1.2
SE	2.7	6.4	10.5	.0	1.2	

Table 52.--Number of growing-stock trees on timberland by species and diameter class, Northeastern Unit, West Virginia, 1989

(In thousands of trees)

Species	Diameter class (inches at breast height)							
	Seedlings	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
Eastern redcedar	8,955	0	0	343	115	40	0	6
Red spruce	231,619	12,539	3,777	822	1,020	1,074	909	897
White pine	85,021	10,478	4,692	3,638	1,455	966	681	447
Virginia pine	35,502	21,063	11,210	7,733	5,719	2,699	1,018	295
Other yellow pines	19,755	2,431	3,568	5,002	3,051	2,035	1,139	777
Hemlock	62,124	12,237	969	6,564	3,337	1,438	1,246	747
Other softwoods	1,212	2,412	404	33	84	31	28	0
Total softwoods	444,187	61,160	24,619	24,135	14,781	8,283	5,022	3,170
Red maple	1,237,319	134,886	71,121	33,801	20,179	10,884	6,585	4,387
Sugar maple	1,134,177	142,334	42,279	16,861	10,445	6,958	4,064	2,690
Yellow birch	45,942	27,639	13,435	7,543	5,437	3,066	1,218	436
Sweet birch	306,498	27,644	13,724	11,145	9,594	4,991	1,825	1,375
Hickory	268,082	23,481	18,990	13,403	8,634	6,933	3,724	2,006
Beech	786,392	74,153	16,840	10,229	5,238	3,663	2,711	1,614
Ash	335,049	7,970	5,989	4,616	3,055	2,322	1,585	995
Black walnut	6,736	1,308	722	1,260	1,081	669	320	377
Yellow-poplar	117,437	14,190	9,843	8,643	7,368	6,473	5,809	4,978
Cucumber tree	68,383	3,428	0	645	949	915	430	398
Black gum	209,789	78,595	23,063	5,102	1,930	748	340	375
Black cherry	750,011	24,430	10,717	7,022	5,416	4,111	3,289	2,244
Select white oaks	156,067	14,963	27,128	9,588	10,211	6,285	4,575	3,498
Select red oaks	325,457	20,979	11,860	10,220	7,453	6,189	5,445	4,367
Other white oaks	243,683	13,855	19,064	19,270	17,514	13,078	8,207	4,958
Other red oaks	421,657	18,246	12,091	7,239	7,448	5,959	3,577	2,748
Basswood	14,864	1,098	714	2,759	2,112	1,543	1,368	1,216
Other hardwoods	1,226,431	198,506	44,107	13,653	7,360	4,823	2,598	1,343
Total hardwoods	7,653,977	827,706	341,685	182,998	131,425	89,610	57,671	40,005
Total, all species	8,098,164	888,866	366,304	207,133	146,207	97,894	62,693	43,175
SE	3.8	4.5	6.1	2.9	2.8	2.6	2.5	2.9

Table 52.--continued

(In thousands of trees)

Species	Diameter class (inches at breast height)						All classes	SE
	15.0- 16.9	17.0- 18.9	19.0- 20.9	21.0- 28.9	29.0+	Total 5.0 and larger		
Eastern redcedar	0	0	0	0	0	504	9,459	42.4
Red spruce	814	451	202	89	0	6,279	254,213	38.2
White pine	339	243	159	160	5	8,094	108,285	31.9
Virginia pine	95	55	0	0	0	17,615	85,390	23.6
Other yellow pines	262	60	28	0	0	12,355	38,108	42.6
Hemlock	653	375	393	247	52	15,052	90,382	37.7
Other softwoods	0	0	0	0	0	175	4,203	71.5
Total softwoods	2,162	1,184	783	496	58	60,074	590,041	18.2
Red maple	2,271	999	573	585	19	80,283	1,523,609	8.9
Sugar maple	1,227	903	398	559	52	44,157	1,362,946	9.1
Yellow birch	237	103	73	200	25	18,338	105,353	20.2
Sweet birch	605	159	110	49	8	29,861	377,727	15.0
Hickory	1,038	386	237	160	5	36,526	347,079	8.5
Beech	1,112	825	416	403	31	26,241	903,626	9.4
Ash	665	298	91	125	0	13,753	362,761	11.2
Black walnut	178	146	38	30	0	4,097	12,863	32.6
Yellow-poplar	3,743	2,521	1,222	995	70	41,821	183,291	12.9
Cucumber tree	474	234	79	64	0	4,187	75,998	26.8
Blackgum	137	117	69	90	8	8,916	320,363	10.1
Black cherry	1,760	1,308	633	641	33	26,459	811,617	11.3
Select white oaks	1,987	1,175	585	579	91	38,574	236,733	11.7
Select red oaks	2,968	2,198	1,373	1,799	219	42,233	400,529	8.9
Other white oaks	3,641	1,623	1,016	1,084	83	70,474	347,077	12.7
Other red oaks	1,603	780	547	660	49	30,611	482,605	12.0
Basswood	1,014	360	318	234	10	10,937	27,613	19.5
Other hardwoods	991	616	255	291	27	31,957	1,501,000	7.3
Total hardwoods	25,653	14,749	8,031	8,549	731	559,424	9,382,791	3.2
Total, all species	27,816	15,932	8,814	9,045	789	619,498	9,972,832	3.1
SE	3.3	4.2	4.9	4.8	9.7	1.7	3.1	

Table 53.--Net dry weight of all live trees on timberland by species and diameter class, Northeastern Unit, West Virginia, 1989

(In millions of tons)

Species	Diameter class (inches at breast height)										All classes	SE
	1.0- 4.9	5.0- 6.9	7.0- 8.9	9.0- 10.9	11.0- 12.9	13.0- 14.9	15.0- 16.9	17.0- 18.9	19.0- 20.9	21.0+		
Eastern redcedar	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	42.6
Red spruce	.2	.1	.1	.2	.3	.4	.5	.4	.2	.1	2.4	28.8
White pine	.1	.2	.2	.2	.2	.2	.2	.2	.2	.3	2.0	20.9
Virginia pine	.4	.5	.8	.6	.4	.2	.1	.0	.0	.0	3.0	13.7
Other yellow pines	.1	.3	.4	.5	.4	.4	.2	.1	.0	.0	2.4	16.7
Hemlock	.1	.3	.4	.3	.4	.3	.4	.3	.4	.6	3.5	14.6
Other softwoods	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	79.1
Total softwoods	.9	1.5	1.9	1.8	1.7	1.4	1.3	1.0	.8	1.0	13.3	7.9
Red maple	3.1	2.7	3.4	3.0	2.9	2.7	2.1	1.0	.9	1.7	23.6	4.9
Sugar maple	5.1	3.3	3.9	4.6	4.1	3.6	2.3	2.1	1.2	3.7	33.9	7.3
Yellow birch	.7	.7	.9	.9	.5	.3	.3	.1	.1	.8	5.4	14.5
Sweet birch	.6	1.0	1.8	1.6	.9	1.0	.8	.2	.2	.3	8.2	9.7
Hickory	.8	1.3	1.8	2.5	2.3	1.9	1.4	.7	.6	.6	14.0	6.5
Beech	2.3	2.0	2.1	2.5	2.9	2.4	2.2	2.1	1.5	2.8	22.8	9.5
Ash	.5	.8	1.0	1.2	1.3	1.1	1.0	.5	.2	.4	8.0	8.8
Black walnut	.0	.1	.2	.2	.2	.3	.2	.2	.1	.1	1.6	18.4
Yellow-poplar	.4	.6	1.1	1.6	2.2	2.8	3.0	2.6	1.7	2.5	18.5	7.4
Cucumbertree	.0	.1	.2	.3	.2	.3	.4	.3	.2	.1	2.1	11.4
Blackgum	1.2	.5	.4	.2	.2	.3	.1	.2	.1	.4	3.6	10.0
Black cherry	.6	.6	1.0	1.3	1.6	1.5	1.6	1.6	1.1	1.9	13.0	9.3
Select white oaks	.9	.7	1.7	1.9	2.3	2.6	2.2	1.8	1.2	3.2	18.6	7.1
Select red oaks	.4	1.0	1.6	2.2	3.2	3.7	3.8	3.7	3.1	9.2	31.8	6.3
Other white oaks	.8	1.9	3.4	4.5	4.6	4.1	4.2	2.5	2.2	4.5	32.7	5.9
Other red oaks	.5	.7	1.4	2.0	1.9	2.2	1.7	1.1	1.0	2.3	14.8	7.2
Basswood	.0	.2	.4	.5	.7	.9	1.0	.5	.6	.9	5.6	12.4
Other commercial hardwoods	2.1	1.2	1.4	1.5	1.5	1.2	1.2	1.0	.7	1.4	13.2	6.7
Other noncommercial hardwoods	3.0	1.4	1.1	.8	.4	.2	.1	.1	.0	.1	7.2	7.5
Total hardwoods	23.0	20.7	28.9	33.4	34.0	33.1	29.8	22.3	16.5	36.8	278.4	1.8
Total, all species	23.9	22.2	30.8	35.2	35.6	34.5	31.1	23.3	17.3	37.7	291.7	1.6
SE	5.1	2.9	2.8	2.7	2.7	2.9	3.3	4.3	4.7	4.7	1.6	

Table 54.--Net dry weight of all trees on timberland by class of material and species group, Northeastern Unit, West Virginia, 1989

(In millions of tons)

Class of material	Weight ^a		All groups	SE
	Softwoods	Hardwoods		
Sawlog portion	6.0	97.7	103.7	2.3
Upper stem	.7	21.8	22.5	2.3
Total	6.7	119.5	126.2	2.3
Poletimber trees	2.2	54.2	56.5	2.4
All growing stock	9.0	173.7	182.6	1.8
Rough cull trees ^b	.1	9.2	9.3	5.6
Rotten cull trees ^b	.0	6.8	6.8	5.8
Salvable dead ^c	.7	5.1	5.8	16.0
Saplings ^d	.9	23.0	23.9	5.1
Tops - growing stock	3.2	60.3	63.5	1.7
Tops - rough and rotten	.1	5.4	5.5	4.1
All nongrowing stock	5.0	109.9	114.9	1.9
Total, all classes	14.0	283.5	297.5	1.6
SE	8.3	1.8	1.6	

^aIncludes bark and sound cull; excludes rotten cull.

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

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

^dIncludes entire tree aboveground.

Table 55.--Net volume of growing-stock trees on timberland by species and diameter class, Northeastern Unit, West Virginia, 1975

(In millions of cubic feet)

Species	Diameter class (inches at breast height)										All classes
	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	5.2	16.2	22.6	35.5	27.6	34.2	17.0	9.7	6.4	.0	174.4
White pine	5.4	12.3	6.5	5.2	3.9	1.9	3.6	6.3	6.1	5.5	56.9
Virginia pine	14.0	22.7	17.1	16.1	6.8	3.9	1.7	.0	.0	.0	82.2
Other yellow pines	3.9	22.1	22.2	17.5	17.1	4.8	1.9	2.1	.0	.0	91.6
Hemlock	14.5	11.0	6.2	8.4	9.8	9.6	9.8	8.7	9.5	.7	88.2
Other softwoods	.1	.6	.2	.5	.0	.0	.0	.0	.0	.0	1.4
Total softwoods	43.1	85.0	75.0	83.2	65.2	54.4	34.1	26.8	21.9	6.2	494.7
Red maple	77.5	96.9	90.9	90.7	50.5	20.7	16.2	4.4	20.1	1.0	469.0
Sugar maple	52.0	57.2	63.2	37.6	30.3	27.1	11.8	3.1	21.5	1.0	304.9
Yellow birch	33.1	35.2	23.6	7.3	2.6	8.1	2.6	8.3	16.8	.0	137.7
Sweet birch	50.9	40.4	36.6	19.0	21.4	9.4	3.1	3.7	.0	.0	184.4
Hickory	34.8	54.6	59.3	48.2	27.6	16.1	10.1	4.6	8.0	1.0	264.1
Beech	29.8	35.6	42.9	51.5	41.4	46.0	36.8	14.8	29.0	.0	327.7
Ash	13.4	18.9	13.9	20.1	17.6	17.0	12.1	4.6	3.6	.0	121.3
Black walnut	2.9	6.2	2.9	.9	6.7	4.2	.0	.0	2.4	.0	26.2
Yellow-poplar	50.1	66.3	79.3	87.7	107.6	103.3	51.0	27.6	38.8	2.5	614.1
Cucumbertree	8.5	7.3	6.7	11.6	7.3	8.2	2.4	1.1	1.8	.0	54.9
Blackgum	5.7	4.4	1.2	3.4	1.2	2.0	1.8	3.0	1.5	.0	24.2
Black cherry	21.1	29.2	48.7	49.6	75.1	42.2	27.3	24.8	13.3	.0	331.3
Select white oaks	37.2	48.4	57.7	64.7	58.2	39.8	24.6	18.6	17.5	7.9	374.6
Select red oaks	40.2	45.7	68.0	68.1	59.9	63.5	52.7	38.2	66.0	11.9	514.1
Other white oaks	63.2	74.3	100.3	75.9	73.4	47.3	46.0	23.8	34.6	4.8	543.4
Other red oaks	49.0	59.5	50.8	38.0	41.1	41.1	25.7	13.3	27.3	8.0	353.7
Basswood	5.1	12.8	28.1	23.6	16.3	15.3	6.8	8.3	16.9	.0	133.2
Other hardwoods	18.2	25.7	35.4	31.7	32.0	22.1	14.5	4.5	13.7	3.4	201.1
Total hardwoods	592.6	718.5	809.5	729.6	670.2	533.4	345.4	206.7	332.8	41.4	4,979.9
Total, all species	635.8	803.5	884.5	812.8	735.4	587.9	379.4	233.5	354.7	47.6	5,474.6

Table 56.--Net volume of growing-stock trees on timberland by species and diameter class, Northeastern Unit, West Virginia, 1989

(In millions of cubic feet)

Species	Diameter class (inches at breast height)										All classes	SE
	5.0- 6.9	7.0- 8.9	9.0- 10.9	11.0- 12.9	13.0- 14.9	15.0- 16.9	17.0- 18.9	19.0- 20.9	21.0- 28.9	29.0+		
Eastern redcedar	.7	.4	.2	.0	.1	.0	.0	.0	.0	.0	1.4	46.9
Red spruce	2.5	7.9	14.3	17.9	25.2	30.1	21.4	11.8	6.9	.0	138.0	30.2
White pine	9.2	8.7	10.7	12.1	11.4	12.7	11.8	9.9	14.9	.9	102.1	21.9
Virginia pine	19.3	34.5	27.2	14.5	6.1	2.6	1.9	.0	.0	.0	106.0	15.2
Other yellow pines	12.3	16.8	19.8	16.0	15.5	7.2	1.9	1.3	.0	.0	90.8	17.4
Hemlock	14.0	16.6	13.8	19.0	16.3	19.8	14.7	21.5	17.2	6.7	159.6	15.0
Other softwoods	.1	.6	.2	.5	.0	.0	.0	.0	.0	.0	1.4	100.0
Total softwoods	58.0	85.5	86.2	80.0	74.6	72.4	51.7	44.5	39.0	7.6	599.3	9.2
Red maple	80.3	120.8	113.8	114.6	104.5	70.2	40.7	28.1	37.4	1.7	712.2	5.8
Sugar maple	41.8	62.7	73.9	69.5	68.5	38.9	35.7	19.2	34.4	4.9	449.5	8.3
Yellow birch	19.4	31.4	30.7	18.2	9.0	6.1	3.5	2.8	12.5	2.1	135.7	15.9
Sweet birch	31.5	62.8	54.7	31.7	32.7	18.0	6.1	5.4	3.0	.6	246.5	11.6
Hickory	30.7	51.0	77.2	65.9	50.0	33.1	14.7	11.8	11.4	.7	346.7	6.7
Beech	23.9	28.6	39.0	48.1	38.7	35.7	32.4	21.3	25.4	4.7	297.8	10.3
Ash	10.9	18.9	23.9	27.7	24.7	21.5	11.5	5.1	9.3	.0	153.6	9.6
Black walnut	2.8	6.0	6.0	4.9	7.7	4.4	4.9	1.3	1.5	.0	39.6	18.7
Yellow-poplar	23.0	52.3	83.8	119.9	146.1	150.5	130.9	74.8	87.2	10.6	879.1	7.8
Cucumber tree	1.7	5.6	10.1	7.4	9.1	14.2	10.4	4.5	4.6	.0	67.5	11.8
Blackgum	10.9	10.3	7.4	5.1	8.3	3.6	4.2	3.2	5.5	1.5	60.0	11.7
Black cherry	20.1	34.2	47.8	63.2	58.1	61.7	59.1	33.7	45.4	3.6	427.1	9.8
Select white oaks	24.5	57.6	62.3	70.9	75.5	58.5	42.7	25.4	35.4	10.9	463.6	7.4
Select red oaks	28.5	46.0	67.6	90.7	101.9	93.5	89.8	66.6	126.0	27.4	737.9	6.5
Other white oaks	44.4	92.0	118.8	115.4	97.0	90.7	52.3	37.9	57.5	8.4	714.6	6.1
Other red oaks	20.3	46.1	62.0	57.3	64.1	45.8	29.4	24.2	40.7	5.4	395.3	7.5
Basswood	6.6	13.4	17.7	26.3	32.8	34.7	17.7	16.3	18.2	1.4	185.2	12.4
Other hardwoods	29.6	38.2	44.4	37.8	28.3	27.6	20.5	10.8	16.5	4.2	257.8	8.1
Total hardwoods	450.9	778.0	941.2	974.5	957.2	808.7	606.7	392.5	572.0	88.0	6,569.7	1.9
Total, all species	509.0	863.4	1,027.4	1,054.4	1,031.7	881.0	658.3	437.0	611.0	95.6	7,169.0	1.7
SE	3.2	3.0	2.7	2.7	3.0	3.5	4.7	5.3	5.3	10.1	1.7	

Table 57.--Net volume of sawtimber trees on timberland by species and diameter class, Northeastern Unit, West Virginia, 1975

(In millions of board feet)^a

Species	Diameter class (inches at breast height)								All classes
	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	72.4	136.0	116.0	146.3	80.1	49.2	31.7	.0	631.7
White pine	20.2	18.2	14.8	8.1	15.5	30.1	31.8	13.2	152.0
Virginia pine	27.8	30.7	14.3	9.2	3.9	.0	.0	.0	86.0
Other yellow pines	58.3	51.9	57.0	16.6	4.9	6.7	.0	.0	195.5
Hemlock	24.0	40.4	48.9	36.7	52.0	46.0	47.5	3.6	299.1
Other softwoods	.7	2.2	.0	.0	.0	.0	.0	.0	2.9
Total softwoods	203.5	279.5	251.1	216.8	156.5	132.0	111.1	16.8	1,367.2
Red maple	.0	349.7	213.1	88.6	71.5	20.8	92.0	5.2	840.9
Sugar maple	.0	203.1	173.5	159.9	71.0	18.9	134.0	5.5	766.0
Yellow birch	.0	27.8	13.7	48.0	14.3	53.9	80.8	.0	238.6
Sweet birch	.0	57.3	67.0	30.1	9.8	15.9	.0	.0	180.0
Hickory	.0	191.2	112.0	70.5	44.6	20.7	37.8	4.7	481.5
Beech	.0	203.9	196.7	237.1	209.1	86.2	155.1	.0	1,088.0
Ash	.0	71.7	69.1	70.0	47.1	19.2	15.0	.0	292.0
Black walnut	.0	4.1	32.4	21.0	.0	.0	11.8	.0	69.4
Yellow-poplar	.0	371.1	487.2	529.2	259.0	141.2	196.6	13.6	1,997.8
Cucumber tree	.0	56.3	36.2	43.8	13.1	6.1	11.1	.0	166.6
Black gum	.0	2.2	.8	1.3	1.3	2.1	1.1	.0	8.8
Black cherry	.0	173.5	308.3	184.4	117.8	117.5	58.7	.0	960.2
Select white oaks	.0	289.8	266.9	197.1	121.0	95.9	93.6	36.9	1,101.2
Select red oaks	.0	268.0	267.2	292.1	245.4	178.4	306.9	45.9	1,603.9
Other white oaks	.0	287.7	307.2	201.2	202.7	109.5	154.5	22.0	1,284.8
Other red oaks	.0	184.8	220.0	226.2	139.1	74.6	146.9	45.9	1,037.5
Basswood	.0	90.1	74.4	73.3	33.1	41.1	81.2	.0	393.2
Other hardwoods	.0	96.4	106.0	80.7	50.2	19.4	49.4	11.8	413.8
Total hardwoods	.0	2,928.6	2,951.8	2,554.5	1,650.1	1,021.3	1,626.5	191.4	12,924.2
Total, all species	203.5	3,208.1	3,202.8	2,771.3	1,806.6	1,153.3	1,737.5	208.2	14,291.4

^aInternational 1 1/4-inch rule.

Table 58.--Net volume of sawtimber trees on timberland by species and diameter class, Northeastern Unit, West Virginia, 1989

(In millions of board feet)^a

Species	Diameter class (inches at breast height)								All classes	SE
	9.0- 10.9	11.0- 12.9	13.0- 14.9	15.0- 16.9	17.0- 18.9	19.0- 20.9	21.0- 28.9	29.0+		
Eastern redcedar	.5	.0	.0	.0	.0	.0	.0	.0	.5	71.7
Red spruce	53.0	78.4	124.0	156.6	113.4	64.7	37.8	.0	628.0	30.5
White pine	33.0	47.0	49.6	60.7	61.1	48.6	81.4	4.4	385.7	22.6
Virginia pine	88.4	54.0	24.7	10.4	8.4	.0	.0	.0	185.9	18.6
Other yellow pines	63.8	59.5	62.7	30.0	9.3	5.5	.0	.0	230.7	18.5
Hemlock	41.6	67.8	64.4	84.2	70.6	100.1	90.2	40.8	559.8	16.4
Other softwoods	.7	2.2	.0	.0	.0	.0	.0	.0	2.9	100.0
Total softwoods	281.1	308.9	325.6	341.9	262.8	218.8	209.4	45.2	1,993.7	11.5
Red maple	.0	405.6	434.1	323.1	202.5	144.8	200.0	15.8	1,725.9	8.2
Sugar maple	.0	251.7	279.3	174.6	168.7	95.8	207.3	38.8	1,216.2	10.7
Yellow birch	.0	68.1	38.0	27.4	18.4	12.5	79.0	18.5	261.9	22.4
Sweet birch	.0	116.7	138.2	83.6	28.4	27.3	15.5	4.5	414.1	17.0
Hickory	.0	235.4	214.8	156.2	75.5	61.2	67.8	3.9	814.9	8.0
Beech	.0	182.0	171.0	170.3	176.3	119.2	167.9	34.0	1,020.6	11.6
Ash	.0	99.3	101.7	98.4	54.5	24.4	50.7	.0	429.0	11.9
Black walnut	.0	18.9	31.1	18.4	21.2	6.2	8.4	.0	104.1	23.7
Yellow-poplar	.0	432.2	597.6	679.6	640.0	391.5	500.5	71.5	3,312.7	8.3
Cucumbertree	.0	25.7	39.3	65.3	52.3	21.8	24.0	.0	228.5	15.7
Blackgum	.0	18.4	34.4	16.7	17.7	15.0	31.1	7.2	140.3	16.1
Black cherry	.0	236.5	249.3	290.2	294.7	185.4	282.5	26.5	1,565.1	11.5
Select white oaks	.0	265.3	319.3	274.3	212.3	124.7	211.4	73.2	1,480.5	8.7
Select red oaks	.0	311.5	402.7	408.1	412.8	333.3	686.1	171.0	2,725.5	7.3
Other white oaks	.0	399.0	371.2	381.1	228.5	181.6	307.5	52.5	1,921.4	7.1
Other red oaks	.0	198.4	263.0	204.7	139.3	122.7	224.7	35.5	1,188.4	9.4
Basswood	.0	95.3	139.5	164.6	87.8	89.1	105.2	8.3	689.7	14.1
Other hardwoods	.0	140.0	120.1	127.9	98.1	57.7	94.3	27.4	665.4	10.7
Total hardwoods	.0	3,499.9	3,944.4	3,664.3	2,929.0	2,014.2	3,264.0	588.5	19,904.2	2.7
Total, all species	281.1	3,808.8	4,270.0	4,006.1	3,191.7	2,233.1	3,473.4	633.7	21,897.9	2.5
SE	11.5	2.7	3.1	3.7	4.7	5.5	5.4	10.1	2.5	

^aInternational 1/4-inch rule.

Table 59.--Net volume of sawtimber trees on timberland by species and standard-lumber log grade, Northeastern Unit, West Virginia, 1975

(in millions of board feet)^a

Species	All size classes				All grades
	Grade 1	Grade 2	Grade 3	Grade 4	
White pine	11.3	33.4	92.1	15.1	152.0
Virginia pine	1.7	2.3	81.9	.0	86.0
Other yellow pines	11.1	14.2	170.1	.0	195.5
Other softwoods	933.7	.0	.0	.0	933.7
Total softwoods	957.8	49.9	344.1	15.1	1,367.2
Red maple	77.4	96.2	494.8	172.5	840.9
Sugar maple	64.4	98.3	473.0	130.2	766.0
Yellow birch	38.0	42.2	104.1	54.3	238.6
Sweet birch	13.2	33.9	106.8	26.1	180.0
Hickory	37.0	60.5	274.8	109.2	481.5
Beech	75.7	136.2	593.1	282.8	1,088.0
Ash	33.3	83.5	126.1	49.2	292.0
Black walnut	.0	7.5	54.4	7.5	69.4
Yellow-poplar	414.9	321.7	949.9	311.2	1,997.8
Cucumbertree	8.5	22.8	104.5	30.9	166.6
Blackgum	1.4	1.8	4.7	1.0	8.8
Black cherry	159.9	191.2	422.6	186.5	960.2
Select white oaks	74.2	160.4	712.3	154.3	1,101.2
Select red oaks	324.4	338.7	766.2	174.6	1,603.9
Other white oaks	146.8	202.7	675.1	260.3	1,284.8
Other red oaks	157.7	158.5	594.1	127.2	1,037.5
Basswood	65.1	92.7	181.4	54.0	393.2
Other hardwoods	33.0	57.1	248.8	75.0	413.8
Total hardwoods	1,724.9	2,105.9	6,886.7	2,206.8	12,924.2

^aInternational 1/4-inch rule.

Table 60.--Net volume of sawtimber trees on timberland by species, size class, and standard-lumber log grade, Northeastern Unit, West Virginia, 1989

(In millions of board feet)^a

Species	All size classes				All grades	>15" Diameter at breast height				All grades	SE
	Grade 1	Grade 2	Grade 3	Grade 4		Grade 1	Grade 2	Grade 3	Grade 4		
Eastern redcedar	.5	.0	.0	.0	.5	.0	.0	.0	.0	.0	.0
Red spruce	628.0	.0	.0	.0	628.0	372.5	.0	.0	.0	372.5	30.1
White pine	53.5	87.5	180.4	64.4	385.7	41.4	56.9	118.5	39.3	256.1	25.6
Virginia pine	6.8	9.9	169.2	.0	185.9	.0	.4	18.4	.0	18.8	49.5
Other yellow pines	14.8	27.4	188.6	.0	230.7	6.7	8.6	29.6	.0	44.8	23.8
Hemlock	559.6	.0	.0	.0	559.6	380.7	.0	.0	.0	380.7	18.9
Other softwoods	2.9	.0	.0	.0	2.9	.0	.0	.0	.0	.0	.0
Total softwoods	1,261.1	124.8	538.2	64.4	1,993.4	801.3	65.9	166.4	39.3	1,072.9	13.8
Red maple	41.0	154.1	841.6	689.2	1,725.9	39.1	88.4	429.4	329.3	886.2	10.1
Sugar maple	137.4	173.9	543.4	361.5	1,216.2	120.4	106.4	270.8	187.7	685.2	12.9
Yellow birch	8.9	27.6	161.2	64.2	261.9	7.6	20.5	91.4	36.3	155.8	29.0
Sweet birch	25.1	51.5	201.1	136.4	414.1	21.7	26.1	68.7	42.8	159.3	22.7
Hickory	43.4	162.1	324.4	285.0	814.9	39.9	107.3	116.7	100.7	364.6	10.4
Beech	9.2	23.3	509.6	478.5	1,020.6	7.3	19.4	316.8	324.1	667.6	13.5
Ash	55.3	120.2	174.3	79.2	429.0	49.9	75.1	71.6	31.4	228.0	15.1
Black walnut	12.1	27.2	54.4	10.5	104.1	12.1	19.0	19.8	3.3	54.2	36.2
Yellow-poplar	565.9	605.6	1,114.0	1,027.2	3,312.7	552.0	471.6	683.2	576.2	2,283.0	9.7
Cucumber tree	17.1	48.8	123.7	38.8	228.5	15.0	38.6	80.8	29.2	163.5	19.7
Blackgum	11.0	28.3	73.2	27.9	140.3	11.0	21.5	44.6	10.5	87.6	21.0
Black cherry	240.8	265.4	746.4	312.4	1,565.1	232.2	182.6	467.8	196.6	1,079.3	13.0
Select white oaks	152.7	278.4	584.1	465.3	1,480.5	148.8	193.6	280.7	272.9	895.9	10.5
Select red oaks	460.7	717.8	1,036.3	510.6	2,725.5	449.1	577.2	661.9	323.1	2,011.3	8.5
Other white oaks	173.9	360.5	848.0	539.0	1,921.4	173.0	247.0	415.1	316.2	1,151.2	8.3
Other red oaks	106.3	258.3	424.4	399.5	1,188.4	105.7	189.4	231.1	200.9	727.0	11.4
Basswood	99.3	149.0	330.3	111.1	689.7	92.0	103.7	190.6	68.6	454.9	16.7
Other hardwoods	29.6	77.7	358.0	200.1	665.4	29.6	56.6	198.1	120.9	405.3	12.9
Total hardwoods	2,189.7	3,529.7	8,448.4	5,736.4	19,904.2	2,106.2	2,543.9	4,639.2	3,170.7	12,459.9	3.5
SE	6.8	3.8	2.8	3.4	2.7	7.0	4.5	3.6	4.4	3.5	
Percent of hardwood in each grade	11	18	42	29	100	17	21	37	25	100	

^aInternational 1/4-inch rule.

Table 61.--Average annual net change of growing-stock volume on timberland by species and component,
Northeastern Unit, West Virginia, 1975-89

(In thousands of cubic feet)

Species	Ingrowth	Accretion	Gross growth	Mortality	Cull Decrement	Cull Increment	Net growth	Removals	Net change
Eastern redcedar	0	1	1	0	0	0	1	0	1
Red spruce	68	3,007	3,075	-1,017	0	-34	2,025	-4,312	-2,287
White pine	622	2,907	3,529	-58	96	-10	3,557	-402	3,154
Virginia pine	754	2,518	3,272	-1,025	425	-6	2,666	-1,148	1,518
Other yellow pines	309	851	1,160	-1,359	310	0	111	-152	-41
Hemlock	1,001	3,735	4,736	-209	949	-214	5,261	-704	4,558
Total softwoods	2,754	13,020	15,774	-3,668	1,780	-265	13,621	-6,718	6,903
Red maple	5,251	18,994	24,245	-1,230	3,451	-3,465	23,001	-6,124	16,877
Sugar maple	2,556	9,071	11,626	-628	2,420	-450	12,968	-2,897	10,071
Yellow birch	815	2,319	3,134	-704	996	-678	2,748	-2,585	162
Sweet birch	1,043	4,899	5,942	-701	730	-474	5,497	-1,275	4,222
Hickory	1,760	6,496	8,256	-1,636	591	-157	7,055	-1,239	5,815
Beech	462	3,892	4,354	-422	1,719	-2,075	3,576	-5,105	-1,529
Ash	551	2,499	3,050	-294	627	-70	3,312	-1,191	2,121
Black walnut	12	969	981	-222	295	-102	952	-34	917
Yellow-poplar	2,326	21,843	24,169	-1,376	371	-297	22,866	-4,382	18,484
Cucumbertree	113	1,398	1,511	-376	206	-234	1,108	-284	824
Blackgum	300	641	940	-82	1,773	-15	2,617	-176	2,441
Black cherry	1,548	10,497	12,045	-475	912	-914	11,569	-5,107	6,462
Select white oaks	1,152	7,067	8,219	-351	2,227	-389	9,707	-3,659	6,048
Select red oaks	1,749	17,654	19,403	-968	1,535	-376	19,595	-4,700	14,895
Other white oaks	2,088	10,102	12,189	-1,020	4,421	-313	15,278	-3,849	11,429
Other red oaks	1,361	7,106	8,467	-757	647	-20	8,337	-5,475	2,861
Basswood	380	4,020	4,400	-496	352	-239	4,018	-462	3,556
Other hardwoods	1,223	4,253	5,477	-1,065	1,632	-567	5,477	-1,572	3,905
Total hardwoods	24,691	133,719	158,410	-12,801	24,903	10,834	159,678	-50,116	109,562
Total, all species	27,445	146,739	174,184	-16,470	26,683	11,089	173,299	-56,834	116,465

Table 62.--Average annual net growth and average annual removals
of growing-stock volume on timberland by species,
Northeastern Unit, West Virginia, 1975-89

(In thousands of cubic feet)

Species	Growth	Removals
Eastern redcedar	1	0
Red spruce	2,025	-4,312
White pine	3,557	-402
Virginia pine	2,666	-1,148
Other yellow pines	111	-152
Hemlock	5,261	-704
Total softwoods	13,621	-6,718
Red maple	23,001	-6,124
Sugar maple	12,968	-2,897
Yellow birch	2,748	-2,585
Sweet birch	5,497	-1,275
Hickory	7,055	-1,239
Beech	3,576	-5,105
Ash	3,312	-1,191
Black walnut	952	-34
Yellow-poplar	22,866	-4,382
Cucumbertree	1,108	-284
Blackgum	2,617	-176
Black cherry	11,569	-5,107
Select white oaks	9,707	-3,659
Select red oaks	19,595	-4,700
Other white oaks	15,278	-3,849
Other red oaks	8,337	-5,475
Basswood	4,018	-462
Other hardwoods	5,477	-1,572
Total hardwoods	159,678	-50,116
Total, all species	173,299	-56,834

Table 63.--Average annual net growth and average annual removals of growing-stock volume on timberland by ownership class and species group, Northeastern Unit, West Virginia, 1975-89

(in thousands of cubic feet)

Ownership class	Growth			Removals		
	Softwoods	Hardwoods	All groups	Softwoods	Hardwoods	All groups
Public	2,705	31,708	34,413	-1,334	-9,952	-11,286
Private	10,916	127,970	138,886	-5,384	-40,164	-45,548
Total, all classes	13,621	159,678	173,299	-6,718	-50,116	-56,834

Table 64.--Average annual mortality of growing-stock and sawtimber
volume on timberland by species, Northeastern Unit,
West Virginia, 1975-89

Species	Growing stock	Sawtimber
	(In thousands of cubic feet)	(In thousands of board feet) ^a
Eastern redcedar	0	0
Red spruce	-1,017	-3,534
White pine	-58	0
Virginia pine	-1,025	-1,557
Other yellow pines	-1,359	-1,585
Hemlock	-209	-683
Total softwoods	-3,668	-7,359
Red maple	-1,230	-3,027
Sugar maple	-628	-1,294
Yellow birch	-704	0
Sweet birch	-701	-103
Hickory	-1,636	-3,910
Beech	-422	-1,401
Ash	-294	-181
Black walnut	-222	-791
Yellow-poplar	-1,376	-2,872
Cucumbertree	-376	-535
Blackgum	-82	-94
Black cherry	-475	-303
Select white oaks	-351	-333
Select red oaks	-968	-2,549
Other white oaks	-1,020	-1,719
Other red oaks	-757	-1,314
Basswood	-496	-344
Other hardwoods	-1,065	-908
Total hardwoods	-12,801	-21,676
Total, all species	-16,470	-29,035

^aInternational 1/4-inch rule.

Table 65.--Average annual net growth and average annual removals
of sawtimber volume on timberland by species,
Northeastern Unit, West Virginia, 1975-89

(In thousands of board feet)^a

Species	Growth	Removals
Eastern redcedar	0	0
Red spruce	14,394	-14,355
White pine	16,441	-159
Virginia pine	8,940	-2,543
Other yellow pines	2,968	-599
Hemlock	18,501	-2,240
Total softwoods	61,244	-19,896
Red maple	72,803	-13,206
Sugar maple	40,652	-8,906
Yellow birch	5,093	-3,259
Sweet birch	16,726	-1,309
Hickory	25,408	-2,317
Beech	15,347	-18,000
Ash	13,279	-4,103
Black walnut	2,526	-174
Yellow-poplar	110,986	-19,765
Cucumbertree	5,129	-1,110
Blackgum	9,564	-589
Black cherry	59,280	-18,393
Select white oaks	40,107	-14,555
Select red oaks	94,311	-19,558
Other white oaks	54,235	-11,825
Other red oaks	26,815	-16,744
Basswood	21,659	-1,658
Other hardwoods	20,369	-3,136
Total hardwoods	634,290	-158,616
Total, all species	695,533	-178,512

^aInternational 1/4-inch rule.

Table 66.--Average annual net growth and average annual removals of sawtimber volume on timberland by ownership class and species group, Northeastern Unit, West Virginia, 1975-89

(In thousands of board feet)^a

Ownership class	Growth			Removals		
	Softwoods	Hardwoods	All groups	Softwoods	Hardwoods	All groups
Public	12,162	125,954	138,116	-3,951	-31,497	-35,448
Private	49,082	508,336	557,417	-15,945	-127,119	-143,064
Total, all classes	61,244	634,290	695,533	-19,896	-158,616	-178,512

^aInternational 1/4-inch rule.

SOUTHERN UNIT

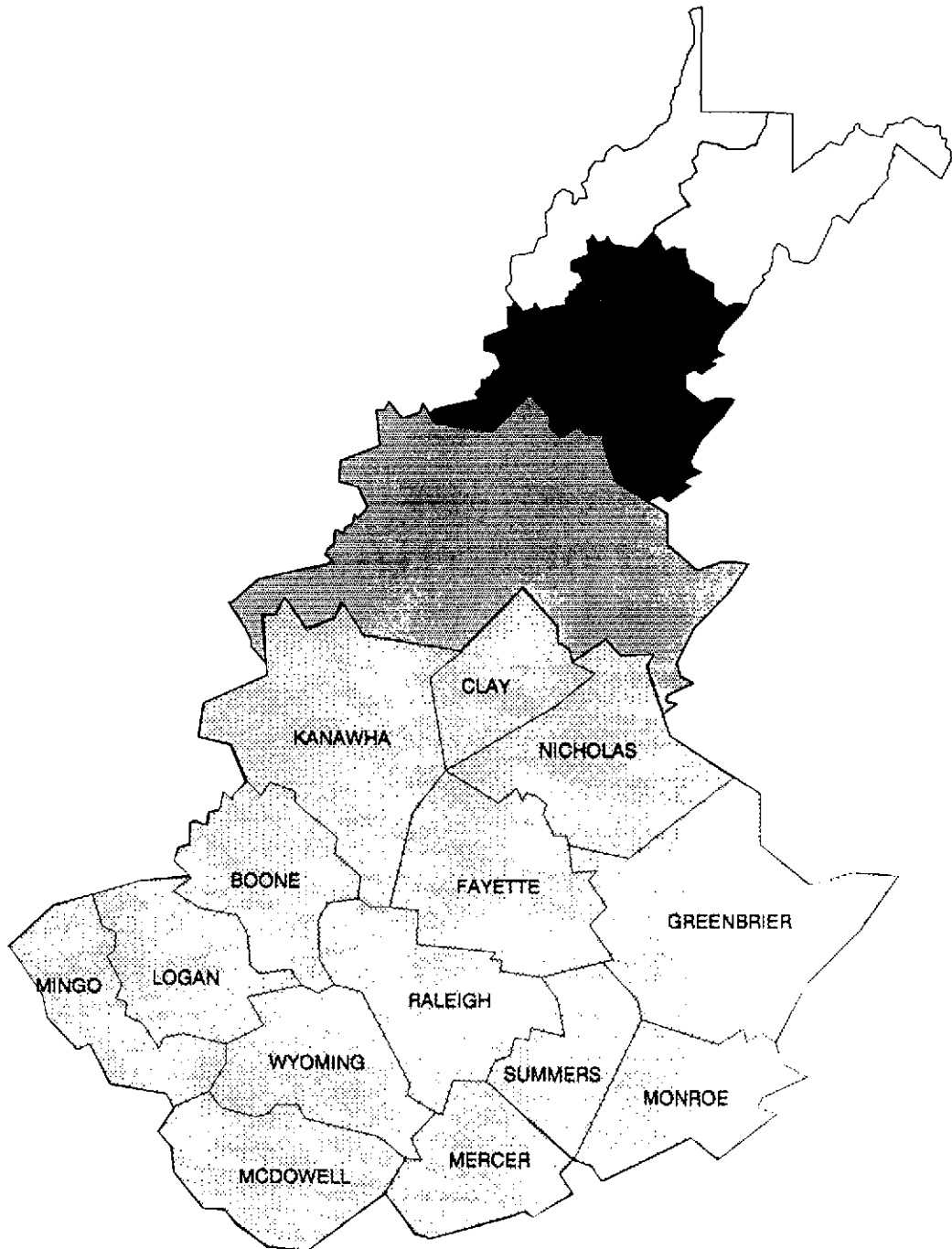


Table 67.--Area of timberland by forest type, forest-type group, and stand-size class, Southern Unit, West Virginia, 1989

(In thousands of acres)

Forest type	Stand-size class				All classes	SE
	Saw-timber	Pole-timber	Sapling/seedling	Non-stocked		
Red pine	3.7	.0	.0	.0	3.7	100.0
White pine	16.6	7.0	.0	.0	23.5	42.5
Hemlock	31.9	4.9	.0	.0	36.7	35.7
White/red pine group	52.1	11.8	.0	.0	64.0	26.4
Virginia pine	18.3	9.9	6.6	.0	34.8	40.7
Eastern redcedar	.0	.0	8.6	.0	8.6	70.7
Loblolly/shortleaf group	18.3	9.9	15.3	.0	43.5	35.5
Wh. pine/no.red oak/wh. ash	36.6	9.6	4.8	.0	51.0	34.5
Shortleaf pine/oak	.0	.0	7.3	.0	7.3	71.0
Virginia pine/oak	10.5	19.8	.0	.0	30.3	41.8
Other oak/pine	9.2	4.8	.0	.0	14.0	56.8
Oak/pine group	56.3	34.2	12.0	.0	102.5	22.3
Post, black, or bear oak	13.6	.0	3.1	.0	16.6	50.6
Chestnut oak	163.1	45.3	.0	.0	208.4	14.8
White oak/red oak/hickory	176.5	51.4	28.4	.0	256.3	13.1
White oak	24.7	20.3	.0	.0	44.9	33.3
Northern red oak	28.6	4.5	3.0	.0	36.1	35.8
Y-poplar/wh. oak/no.red oak	153.1	27.9	5.2	.0	186.1	15.7
Black locust	10.8	4.5	24.0	.0	39.2	31.7
Yellow-poplar	171.6	90.8	29.6	.0	292.0	12.6
Hawthorn/reverting field	.0	.0	37.7	2.6	40.3	34.9
Scarlet oak	21.8	12.2	.0	.0	34.0	39.9
Sassafras/persimmon	4.0	5.6	.0	.0	9.6	71.7
Red maple/central hardwood	13.1	10.9	3.7	.0	27.6	41.1
Mixed central hardwoods	1,491.4	645.5	142.5	.0	2,279.4	3.2
Oak/hickory group	2,272.2	918.9	277.1	2.6	3,470.7	1.6
Black ash/Amer. elm/red maple	.0	5.6	.0	.0	5.6	100.0
River birch/sycamore	8.0	.0	5.6	.0	13.6	59.0
Willow	.0	5.1	.0	.0	5.1	100.0
Elm/ash/red maple group	8.0	10.7	5.6	.0	24.4	45.1
Sugar maple/beech/yellow birch	211.9	25.6	8.4	.0	245.8	13.8
Black cherry	3.1	14.4	.0	.0	17.5	48.9
Red maple/northern hardwoods	4.8	.0	10.7	.0	15.5	51.1
Pin cherry/reverting field	2.0	.0	11.7	.0	13.7	52.3
Mixed northern hardwoods	100.0	35.8	5.9	.0	141.7	18.7
Northern hardwoods group	321.8	75.8	36.6	.0	434.2	10.1
All forest types	2,728.6	1,061.4	346.7	2.6	4,139.2	.7
SE	2.4	5.8	11.1	100.0	.7	

Table 68.--Area of timberland by forest type, forest-type group, and stand-size class (excludes all National Forest), Southern Unit, West Virginia, 1975

(In thousands of acres)

Forest type	Stand-size class				All classes	SE
	Saw-timber	Pole-timber	Sapling/seedling	Non-stocked		
White pine	.0	11.8	.0	.0	11.8	100.0
Hemlock	32.4	.0	.0	.0	32.4	57.7
White/red pine group	32.4	11.8	.0	.0	44.2	42.7
Balsam fir	.0	.0	12.9	.0	12.9	99.7
Spruce/fir group	.0	.0	12.9	.0	12.9	99.7
Virginia pine	10.3	10.2	.0	.0	20.5	70.7
Loblolly/shortleaf group	10.3	10.2	.0	.0	20.5	70.7
Wh. pine/no.red oak/wh. ash	9.6	10.2	.0	.0	19.8	70.7
Virginia pine/oak	10.2	10.2	18.7	.0	39.2	49.8
Oak/pine group	19.8	20.5	18.7	.0	59.0	40.5
Post, black, or bear oak	48.9	.0	10.3	.0	59.2	46.5
Chestnut oak	115.6	39.3	79.3	.0	234.2	22.3
White oak/red oak/hickory	155.0	116.0	111.8	.0	382.8	17.1
White oak	48.9	20.5	57.0	.0	126.4	30.7
Northern red oak	19.8	.0	.0	.0	19.8	70.7
Y-poplar/wh. oak/no.red oak	105.7	50.6	18.4	.0	174.7	25.2
Black locust	9.7	.0	33.3	.0	43.0	50.0
Yellow-poplar	30.1	40.4	67.2	.0	137.6	29.6
Scarlet oak	10.3	9.6	10.1	.0	30.0	57.8
Sassafras/persimmon	.0	.0	10.2	.0	10.2	100.0
Red maple/central hardwood	.0	.0	10.3	.0	10.3	100.0
Mixed central hardwoods	826.0	728.9	367.6	.0	1,922.5	5.7
Oak/hickory group	1,370.0	1,005.2	775.5	.0	3,150.7	2.6
Black ash/Amer. elm/red maple	.0	10.2	.0	.0	10.2	100.0
Elm/ash/red maple group	.0	10.2	.0	.0	10.2	100.0
Sugar maple/beech/yellow birch	223.0	60.9	40.4	.0	324.2	19.4
Black Cherry	10.3	.0	10.2	.0	20.5	70.7
Pin cherry/reverting field	.0	14.4	.0	.0	14.4	74.5
Mixed northern hardwoods	76.8	30.8	10.1	.0	117.7	32.8
Northern hardwoods group	310.1	106.0	60.7	.0	476.8	15.4
All forest types	1,742.5	1,164.0	867.8	.0	3,774.4	1.8
SE	5.5	8.2	9.3	.0	1.8	

Table 69.--Area of timberland by forest type, forest-type group, and stand-size class (excludes all National Forest), Southern Unit, West Virginia, 1989

(In thousands of acres)

Forest type	Stand-size class				All classes	SE
	Saw-timber	Pole-timber	Sapling/seedling	Non-stocked		
Red pine	2.9	.0	.0	.0	2.9	100.0
White pine	11.6	6.6	.0	.0	18.2	47.0
Hemlock	31.1	4.9	.0	.0	36.0	35.8
White/red pine group	45.7	11.5	.0	.0	57.2	27.5
Virginia pine	17.6	5.1	6.0	.0	28.7	44.8
Eastern redcedar	.0	.0	8.2	.0	8.2	70.7
Loblolly/shortleaf group	17.6	5.1	14.2	.0	37.0	38.2
Wh. pine/no.red oak/wh. ash	26.8	9.6	4.7	.0	41.2	39.1
Shortleaf pine/oak	.0	.0	7.3	.0	7.3	71.1
Virginia pine/oak	10.5	18.4	.0	.0	28.9	42.1
Other oak/pine	4.7	4.7	.0	.0	9.5	68.9
Oak/pine group	42.0	32.8	12.0	.0	86.8	24.3
Post, black, or bear oak	13.6	.0	2.4	.0	16.0	51.3
Chestnut oak	152.4	40.9	.0	.0	193.3	15.4
White oak/red oak/hickory	161.1	41.2	27.8	.0	230.2	13.8
White oak	24.6	20.4	.0	.0	45.1	33.3
Northern red oak	28.8	4.7	2.8	.0	36.3	35.9
Y-poplar/wh. oak/no.red oak	153.0	27.9	5.2	.0	186.1	15.7
Black locust	9.8	4.7	21.6	.0	36.1	31.8
Yellow-poplar	163.1	90.8	29.1	.0	283.0	12.9
Hawthorn/reverting field	.0	.0	36.6	2.6	39.1	35.1
Scarlet oak	21.8	12.2	.0	.0	34.0	40.0
Sassafras/persimmon	4.0	5.6	.0	.0	9.6	71.7
Red maple/central hardwood	13.2	10.8	3.6	.0	27.7	41.1
Mixed central hardwoods	1,482.6	628.2	128.3	.0	2,239.1	3.2
Oak/hickory group	2,228.1	887.4	257.5	2.6	3,375.6	1.7
Black ash/Amer. elm/red maple	.0	5.6	.0	.0	5.6	100.0
River birch/sycamore	8.0	.0	5.6	.0	13.6	59.0
Willow	.0	5.1	.0	.0	5.1	100.0
Elm/ash/red maple group	8.0	10.7	5.6	.0	24.4	45.1
Sugar maple/beech/yellow birch	195.5	26.9	8.4	.0	230.8	14.2
Black Cherry	2.4	12.5	.0	.0	14.9	48.9
Red maple/northern hardwoods	4.2	.0	10.9	.0	15.1	50.9
Pin cherry/reverting field	2.0	.0	11.7	.0	13.7	52.3
Mixed northern hardwoods	99.6	36.2	5.9	.0	141.7	18.7
Northern hardwoods group	303.7	75.6	36.9	.0	416.1	10.2
All forest types	2,645.1	1,023.1	326.2	2.6	3,997.0	.9
SE	2.5	5.9	11.3	100.2	.9	

Table 70.--Number of growing-stock trees on timberland by species and diameter class, Southern Unit, West Virginia, 1989

(In thousands of trees)

Species	Diameter class (inches at breast height)							
	Seedlings	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
Eastern redcedar	10,125	3,978	846	355	269	0	0	0
Red spruce	0	0	0	25	0	0	15	15
White pine	88,442	15,361	2,159	3,805	1,964	933	926	626
Virginia pine	16,796	3,563	4,317	2,654	3,240	2,272	1,072	374
Other yellow pines	8,648	2,778	4,006	1,265	1,286	798	472	179
Hemlock	93,533	27,473	15,763	4,774	2,126	1,061	764	661
Total softwoods	217,545	53,153	27,091	12,878	8,886	5,063	3,249	1,856
Red maple	2,108,326	256,941	59,167	28,078	12,915	7,757	3,726	1,956
Sugar maple	1,427,900	167,047	30,696	14,897	6,901	4,230	2,491	1,750
Yellow birch	35,281	13,235	906	2,301	1,422	953	277	159
Sweet birch	205,085	42,809	17,427	8,512	5,503	3,424	1,348	619
Hickory	387,601	49,029	28,842	15,725	10,685	6,411	5,016	3,235
Beech	719,949	99,879	19,795	8,428	4,386	2,960	2,045	1,679
Ash	467,911	22,522	4,965	2,520	1,998	1,848	876	546
Black walnut	3,122	1,921	1,611	438	426	559	405	57
Yellow-poplar	315,552	38,112	32,473	19,295	15,727	13,509	9,431	7,034
Cucumber tree	155,501	6,816	2,922	3,064	2,407	1,727	1,203	1,025
Blackgum	609,496	44,496	8,643	2,963	1,592	686	515	540
Black cherry	350,479	16,373	803	2,386	1,411	1,265	737	400
Select white oaks	194,361	20,531	20,723	13,929	10,893	7,672	3,827	2,931
Select red oaks	337,538	24,450	16,493	6,097	5,722	4,861	3,275	2,875
Other white oaks	434,838	23,098	16,233	19,560	17,683	9,742	6,001	4,811
Other red oaks	341,852	19,331	12,163	10,865	10,565	8,835	5,549	4,240
Basswood	78,164	16,952	5,782	4,557	3,595	2,232	2,238	1,589
Other hardwoods	2,145,470	245,483	67,060	13,443	8,300	4,957	2,202	1,052
Total hardwoods	10,318,427	1,109,027	346,704	177,058	122,130	83,630	51,162	36,499
Total, all species	10,535,912	1,162,180	373,795	189,936	131,016	88,693	54,411	38,355
SE	2.8	4.2	6.0	2.7	2.6	2.6	2.6	2.7

Table 70.-continued

(In thousands of trees)

Species	Diameter class (inches at breast height)						Total 5.0 and larger	All classes	SE
	15.0- 16.9	17.0- 18.9	19.0- 20.9	21.0- 28.9	29.0+				
Eastern redcedar	0	0	0	0	0	625	15,574	53.5	
Red spruce	13	0	0	0	0	67	67	73.1	
White pine	389	149	118	175	14	9,099	115,061	41.9	
Virginia pine	71	11	13	0	0	9,708	34,383	31.1	
Other yellow pines	111	12	21	0	0	4,144	19,576	32.4	
Hemlock	343	255	193	334	33	10,546	147,315	20.0	
Total softwoods	927	427	345	509	47	34,189	331,977	17.7	
Red maple	1,265	700	241	363	35	57,037	2,481,471	5.6	
Sugar maple	1,098	481	366	415	41	32,671	1,658,315	6.0	
Yellow birch	57	33	24	16	5	5,246	54,668	25.1	
Sweet birch	347	210	83	29	4	20,081	285,402	12.5	
Hickory	1,852	1,044	514	317	19	44,819	510,292	7.0	
Beech	991	891	609	736	128	22,854	862,476	7.9	
Ash	723	289	101	115	0	9,017	504,414	8.9	
Black walnut	152	31	28	30	0	2,126	8,780	30.4	
Yellow-poplar	5,024	2,967	1,515	1,158	101	75,761	461,897	8.6	
Cucumber tree	531	446	140	70	0	10,613	175,852	15.0	
Blackgum	382	256	166	156	0	7,257	669,892	9.4	
Black cherry	290	229	69	78	4	6,870	374,525	11.7	
Select white oaks	1,953	943	601	625	49	43,423	279,039	10.1	
Select red oaks	2,072	1,366	983	1,410	154	28,816	407,296	10.0	
Other white oaks	2,649	1,779	1,268	1,480	233	65,207	539,377	10.3	
Other red oaks	3,191	1,748	1,176	1,331	112	47,612	420,959	11.6	
Basswood	1,063	723	362	253	30	16,642	117,541	19.0	
Other hardwoods	779	258	167	142	37	31,339	2,489,354	5.0	
Total hardwoods	24,422	14,394	8,414	8,726	955	527,391	12,301,550	2.4	
Total, all species	25,349	14,821	8,759	9,236	1,002	561,580	12,633,527	2.4	
SE	3.1	3.7	4.6	4.7	9.2	1.6	2.4		

Table 71.--Net dry weight of all live trees on timberland by species and diameter class, Southern Unit, West Virginia, 1989

(In millions of tons)

Species	Diameter class (inches at breast height)										All classes	SE
	1.0- 4.9	5.0- 6.9	7.0- 8.9	9.0- 10.9	11.0- 12.9	13.0- 14.9	15.0- 16.9	17.0- 18.9	19.0- 20.9	21.0+		
Eastern redcedar	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	38.5
Red spruce	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	84.6
White pine	.1	.2	.2	.2	.3	.3	.2	.1	.1	.3	2.1	24.1
Virginia pine	.1	.2	.4	.5	.4	.2	.1	.0	.0	.0	1.8	21.2
Other yellow pines	.1	.1	.2	.2	.2	.1	.1	.0	.0	.0	.9	32.3
Hemlock	.6	.3	.2	.2	.3	.3	.2	.2	.2	.6	3.2	15.7
Total softwoods	1.0	.8	1.1	1.1	1.1	.9	.6	.4	.4	.9	8.2	10.7
Red maple	3.4	2.3	2.1	2.2	1.7	1.3	1.2	.8	.4	1.1	16.6	5.0
Sugar maple	3.5	3.0	2.8	2.8	2.5	2.3	2.0	1.1	1.1	2.5	23.7	7.0
Yellow birch	.1	.2	.3	.2	.1	.1	.0	.0	.0	.1	1.3	20.0
Sweet birch	.9	.7	1.1	1.1	.8	.5	.4	.3	.1	.1	6.0	8.4
Hickory	1.2	1.6	2.2	2.4	3.2	2.8	2.3	1.8	1.2	1.3	20.0	5.2
Beech	2.7	1.8	1.9	2.1	2.2	2.6	2.0	2.1	2.0	6.4	25.8	8.1
Ash	.4	.4	.6	1.0	.7	.6	1.1	.5	.3	.4	6.1	11.3
Black walnut	.0	.0	.1	.2	.2	.0	.2	.0	.0	.1	1.0	17.6
Yellow-poplar	.9	1.3	2.2	3.3	3.7	4.0	4.1	3.1	2.1	2.9	27.6	4.8
Cucumber tree	.2	.3	.4	.6	.6	.8	.5	.6	.2	.1	4.4	7.4
Blackgum	.5	.3	.3	.3	.3	.4	.4	.3	.3	.5	3.5	9.7
Black cherry	.1	.2	.3	.4	.4	.3	.4	.3	.1	.3	2.8	13.4
Select white oaks	.7	1.1	1.8	2.3	1.9	2.2	2.1	1.4	1.2	2.6	17.4	6.4
Select red oaks	.6	.6	1.2	1.8	1.9	2.5	2.7	2.4	2.3	6.8	22.8	5.1
Other white oaks	.6	1.8	3.4	3.4	3.3	3.9	3.0	2.8	2.6	6.9	31.6	5.9
Other red oaks	.6	1.0	2.0	2.9	2.9	3.3	3.5	2.5	2.3	4.7	25.7	5.4
Basswood	.3	.4	.6	.7	1.1	1.2	1.2	1.0	.7	1.0	8.1	9.5
Other commercial hardwoods	3.0	1.2	1.6	1.6	1.3	.9	1.0	.4	.3	.7	12.0	5.8
Other noncommercial hardwoods	3.7	2.0	1.6	.7	.4	.3	.2	.0	.0	.1	9.3	6.1
Total hardwoods	23.6	20.2	26.5	30.0	29.4	30.1	28.3	21.5	17.4	38.6	265.5	1.5
Total, all species	24.6	21.0	27.6	31.1	30.5	31.0	28.9	21.8	17.8	39.5	273.7	1.5
SE	4.6	2.6	2.5	2.6	2.6	2.8	3.1	3.7	4.7	4.7	1.5	

Table 72.--Net dry weight of all trees on timberland by class of material and species group, Southern Unit, West Virginia, 1989

(In millions of tons)

Class of material	Weight ^a		All groups	SE
	Softwoods	Hardwoods		
Sawlog portion	3.6	95.6	99.2	2.2
Upper stem	.4	20.9	21.3	2.1
Total	4.0	116.5	120.5	2.2
Poletimber trees	1.3	49.6	50.9	2.0
All growing stock	5.3	166.1	171.4	1.7
Rough cull trees ^b	.1	6.7	6.8	6.1
Rotten cull trees ^b	.0	6.9	6.9	6.8
Salvable dead ^c	.3	4.8	5.1	11.0
Saplings ^d	1.0	23.6	24.6	4.6
Tops - growing stock	1.8	57.4	59.2	1.5
Tops - rough and rotten	.0	4.8	4.8	4.4
All nongrowing stock	3.2	104.2	107.4	1.6
Total, all classes	8.5	270.3	278.8	1.5
SE	10.8	1.5	1.5	

^aIncludes bark and sound cull; excludes rotten cull.

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

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

^dIncludes entire tree aboveground.

Table 73.--Net volume of growing-stock trees on timberland by species and diameter class, Southern Unit, West Virginia, 1975

(In millions of cubic feet)

Species	Diameter class (inches at breast height)										All classes
	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	.1	.3	.4	.5	.4	.3	.1	.1	.0	2.2
White pine	7.9	9.8	3.6	6.2	2.2	2.4	4.4	3.2	4.3	.0	44.0
Virginia pine	11.1	16.1	15.0	11.1	5.6	3.8	1.9	.0	.0	.0	64.4
Other yellow pines	2.8	5.7	6.4	8.2	.0	8.9	.7	3.5	.0	.0	36.3
Hemlock	13.8	10.8	6.9	9.7	8.5	8.6	6.8	4.9	9.0	.0	79.0
Total softwoods	35.7	42.5	32.1	35.6	16.7	24.1	14.1	11.8	13.4	.0	225.9
Red maple	44.2	52.0	47.3	22.6	32.5	13.4	12.8	4.4	14.8	3.4	247.5
Sugar maple	43.4	42.9	34.5	20.0	20.1	10.0	9.8	11.0	22.9	5.4	220.1
Yellow birch	4.7	4.6	3.1	1.9	.6	.9	1.1	.6	1.6	.0	19.1
Sweet birch	32.9	25.8	25.6	10.8	5.8	.5	3.1	5.3	4.2	.0	114.1
Hickory	53.0	66.5	73.2	69.1	51.7	44.3	31.5	13.8	14.4	.0	417.4
Beech	25.9	21.6	27.0	32.8	29.0	33.6	13.7	10.7	22.5	8.8	225.5
Ash	8.9	4.4	9.5	19.6	20.3	10.8	4.8	.5	6.5	2.6	88.0
Black walnut	1.5	1.4	4.7	2.4	.6	2.8	3.0	.8	2.2	.0	19.4
Yellow-poplar	65.6	89.9	120.3	137.4	153.1	126.4	88.1	52.5	51.0	1.8	886.2
Cucumber tree	7.3	20.2	12.8	19.1	13.0	14.4	6.1	5.2	.0	.0	98.2
Blackgum	8.4	5.6	3.8	1.9	8.9	6.2	6.3	4.0	14.2	.0	59.3
Black cherry	5.1	3.5	5.2	7.0	9.5	6.3	2.7	2.5	2.7	.0	44.6
Select white oaks	41.4	50.2	51.6	57.5	49.3	46.8	36.1	21.7	24.0	4.6	383.2
Select red oaks	20.3	38.2	51.2	45.6	57.4	57.0	42.7	35.7	63.1	8.7	419.9
Other white oaks	72.8	66.4	60.9	53.7	61.8	49.5	44.0	38.3	60.0	10.6	518.0
Other red oaks	49.7	59.2	68.0	56.6	92.0	62.1	52.4	44.8	73.4	12.0	570.1
Basswood	42.5	21.2	38.2	26.3	16.1	22.9	4.2	5.9	19.5	.0	197.1
Other hardwoods	22.5	37.5	28.1	20.1	20.1	13.1	5.5	.9	8.3	.0	156.0
Total hardwoods	550.1	611.1	665.0	604.5	641.9	521.1	368.1	258.6	405.4	57.9	4,683.7
Total, all species	585.8	653.5	697.1	640.1	658.6	545.3	382.2	270.4	418.8	57.9	4,909.6

Table 74.--Net volume of growing-stock trees on timberland by species and diameter class, Southern Unit, West Virginia, 1989

(In millions of cubic feet)

Species	Diameter class (inches at breast height)										All classes	SE
	5.0-6.9	7.0-8.9	9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9	21.0-28.9	29.0+		
Eastern redcedar	.7	.8	.0	.0	.0	.0	.0	.0	.0	.0	1.5	43.7
Red spruce	.1	.0	.0	.4	.4	.5	.0	.0	.0	.0	1.4	93.2
White pine	10.2	11.7	9.7	15.9	15.7	13.3	6.9	6.5	13.5	2.0	105.3	23.9
Virginia pine	7.5	19.2	24.2	16.7	8.0	1.9	.5	.6	.0	.0	78.7	24.4
Other yellow pines	3.1	8.0	8.0	7.3	3.4	3.1	.4	1.1	.0	.0	34.5	36.3
Hemlock	13.2	12.8	11.0	12.5	15.6	11.3	10.4	10.6	23.5	3.6	124.5	16.7
Total softwoods	34.9	52.6	52.9	52.8	43.1	30.1	18.2	18.7	37.0	5.6	345.9	11.5
Red maple	70.9	82.6	92.3	65.6	49.8	42.8	28.7	12.5	23.1	4.2	472.5	5.9
Sugar maple	37.7	44.2	48.6	44.8	41.7	35.6	18.4	17.3	23.9	4.4	316.5	7.4
Yellow birch	5.5	9.5	11.2	5.2	3.7	1.3	1.1	1.0	1.4	.4	40.5	23.7
Sweet birch	24.5	37.0	40.1	23.5	15.1	10.3	8.6	3.3	1.6	.4	164.4	9.0
Hickory	39.4	66.0	72.3	92.3	80.2	64.7	44.5	29.2	21.1	2.3	512.1	5.4
Beech	18.4	25.7	32.8	34.7	44.3	33.8	37.1	28.6	48.3	15.1	318.7	9.5
Ash	6.6	12.1	20.3	15.8	14.4	23.4	13.3	5.3	8.8	.0	119.9	12.5
Black walnut	1.0	2.4	5.2	7.2	1.3	3.8	1.1	.9	1.9	.0	24.9	19.8
Yellow-poplar	51.5	115.9	180.5	204.7	221.2	210.4	158.0	104.2	101.9	15.0	1,363.1	5.1
Cucumbertree	8.1	14.5	18.7	20.1	25.3	17.3	19.2	6.8	3.7	.0	133.7	7.8
Blackgum	5.9	8.2	7.1	8.0	11.3	11.5	8.8	6.8	9.5	.0	77.1	10.1
Black cherry	7.0	9.8	14.4	13.0	11.4	10.9	10.6	4.2	5.7	.8	87.8	14.7
Select white oaks	36.3	63.5	78.2	61.9	67.6	60.9	36.8	28.1	41.6	6.0	481.0	6.6
Select red oaks	16.7	35.9	53.0	55.8	71.1	66.7	53.5	51.1	95.3	20.8	519.9	5.1
Other white oaks	45.6	97.7	94.8	89.1	96.7	68.8	57.0	48.8	83.8	21.6	704.1	5.7
Other red oaks	29.4	66.7	95.6	95.2	102.6	102.0	68.8	58.2	89.4	14.4	722.2	5.4
Basswood	12.0	24.9	28.3	43.7	45.2	41.0	32.6	21.1	19.1	3.4	271.1	9.8
Other hardwoods	29.6	44.3	48.6	32.8	23.0	20.2	9.7	6.8	8.9	3.8	227.8	6.8
Total hardwoods	445.9	761.0	941.9	913.5	925.8	825.4	608.0	434.3	589.0	112.6	6,557.3	1.7
Total, all species	480.8	813.6	994.8	966.4	968.9	855.5	626.2	453.0	626.0	118.2	6,903.2	1.6
SE	2.9	2.8	2.8	2.8	2.9	3.3	3.9	4.9	5.0	10.1	1.6	

Table 75.--Net volume of sawtimber trees on timberland by species and diameter class, Southern Unit, West Virginia, 1975

(In millions of board feet)^a

Species	Diameter class (inches at breast height)							All classes	
	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	.7	1.2	1.7	1.3	1.1	.6	.3	.0	6.9
White pine	8.8	17.4	6.5	8.4	15.3	11.7	13.7	.0	81.7
Virginia pine	37.8	32.2	17.8	12.2	7.6	.0	.0	.0	107.6
Other yellow pines	16.1	23.7	.0	29.0	1.3	11.2	.0	.0	81.3
Hemlock	26.7	44.2	40.9	43.3	36.0	28.0	51.3	.0	270.5
Total softwoods	90.1	118.8	66.9	94.2	61.4	51.4	65.3	.0	548.0
Red maple	.0	76.3	130.9	59.9	58.1	20.9	68.9	16.1	431.1
Sugar maple	.0	88.9	97.8	54.1	53.8	67.9	131.1	31.8	520.5
Yellow birch	.0	6.3	2.0	3.8	4.5	2.2	6.3	.0	25.1
Sweet birch	.0	59.2	36.3	3.0	27.5	41.2	32.8	.0	195.0
Hickory	.0	286.8	244.8	224.5	167.0	74.0	80.2	.0	1,077.4
Beech	.0	158.5	156.7	199.4	86.2	70.3	151.5	58.5	881.1
Ash	.0	64.5	74.7	43.5	18.6	1.6	29.3	12.7	244.8
Black walnut	.0	5.7	1.7	8.5	9.1	2.5	6.9	.0	34.4
Yellow-poplar	.0	487.8	613.6	556.9	402.3	248.3	243.5	7.7	2,560.1
Cucumber tree	.0	86.6	65.2	81.3	34.2	32.1	.0	.0	299.4
Blackgum	.0	7.2	40.2	32.6	32.7	21.4	76.3	.0	210.3
Black cherry	.0	25.2	39.5	29.3	13.4	13.4	13.1	.0	133.8
Select white oaks	.0	173.4	168.2	167.6	133.9	83.7	90.8	18.1	835.6
Select red oaks	.0	160.2	229.9	246.3	190.1	162.1	294.2	35.8	1,318.5
Other white oaks	.0	184.9	240.7	207.0	191.1	170.4	270.1	48.7	1,312.9
Other red oaks	.0	194.8	361.5	259.5	227.8	196.2	334.4	51.9	1,626.1
Basswood	.0	125.4	94.4	151.4	26.0	39.1	118.8	.0	555.2
Other hardwoods	.0	71.7	79.5	56.7	23.9	4.5	38.8	.0	275.2
Total hardwoods	.0	2,263.3	2,677.5	2,385.2	1,695.4	1,246.8	1,986.9	281.3	12,536.3
Total, all species	90.1	2,382.1	2,744.3	2,479.3	1,756.8	1,298.2	2,052.2	281.3	13,084.3

^aInternational 11/4-inch rule.

Table 76.--Net volume of sawtimber trees on timberland by species and diameter class, Southern Unit, West Virginia, 1989

(In millions of board feet)^a

Species	Diameter class (inches at breast height)								All classes	SE
	9.0-10.9	11.0-12.9	13.0-14.9	15.0-16.9	17.0-18.9	19.0-20.9	21.0-28.9	29.0+		
Red spruce	.0	1.9	2.0	2.7	.0	.0	.0	.0	6.6	100.0
White pine	29.8	63.6	70.5	64.0	35.4	33.4	75.8	12.4	384.9	24.2
Virginia pine	77.0	64.0	31.6	8.5	2.2	2.4	.0	.0	185.7	27.3
Other yellow pines	25.1	28.3	14.7	13.6	1.5	4.3	.0	.0	87.4	31.3
Hemlock	32.2	46.8	62.2	50.0	47.1	47.8	119.1	21.5	426.7	17.2
Total softwoods	164.1	204.4	180.9	138.8	86.2	87.9	195.0	33.8	1,091.2	12.1
Red maple	.0	236.4	206.8	199.6	140.5	59.3	140.8	30.3	1,013.8	8.0
Sugar maple	.0	164.6	175.0	161.9	92.3	91.9	150.6	37.3	873.7	10.0
Yellow birch	.0	21.1	16.7	5.5	6.0	3.8	6.7	2.8	62.7	26.9
Sweet birch	.0	91.8	61.7	44.4	42.8	19.4	9.5	1.9	271.5	12.6
Hickory	.0	341.5	346.2	308.6	229.0	148.6	136.7	17.2	1,527.9	7.1
Beech	.0	136.3	194.6	158.5	191.0	165.5	309.4	108.2	1,263.5	10.4
Ash	.0	62.1	61.5	110.0	62.0	28.8	46.3	.0	370.7	15.6
Black walnut	.0	23.7	4.6	17.4	4.4	5.0	10.7	.0	65.8	19.8
Yellow-poplar	.0	759.6	949.8	976.2	786.7	544.0	570.1	104.6	4,691.0	5.7
Cucumber tree	.0	74.4	107.0	81.9	96.7	38.7	23.8	.0	422.5	9.4
Blackgum	.0	26.9	46.9	54.0	44.0	34.8	56.6	.0	263.3	11.8
Black cherry	.0	49.4	45.9	49.6	50.9	23.5	38.0	5.1	262.4	17.0
Select white oaks	.0	238.1	288.5	276.8	176.9	144.8	225.8	42.4	1,393.4	7.7
Select red oaks	.0	198.9	291.1	287.2	254.5	239.4	525.3	121.3	1,917.6	5.9
Other white oaks	.0	302.2	373.5	287.7	250.3	229.4	420.7	121.8	1,985.6	6.9
Other red oaks	.0	334.6	412.8	444.9	322.2	281.6	478.6	83.6	2,358.2	6.0
Basswood	.0	159.4	190.7	188.6	162.8	109.3	114.9	27.8	953.6	10.9
Other hardwoods	.0	118.6	95.9	100.6	44.5	39.1	48.3	31.3	478.4	10.4
Total hardwoods	.0	3,339.7	3,869.3	3,753.4	2,957.4	2,207.1	3,313.1	735.6	20,175.5	2.3
Total, all species	164.1	3,544.1	4,050.2	3,892.2	3,043.6	2,295.0	3,508.0	769.4	21,266.7	2.2
SE	17.7	2.8	2.9	3.3	3.9	5.0	5.0	10.0	2.2	

^aInternational 1/4-inch rule.

Table 77.--Net volume of sawtimber trees on timberland by species and standard-lumber log grade, Southern Unit, West Virginia, 1975

(In millions of board feet)^a

Species	All size classes				All grades
	Grade 1	Grade 2	Grade 3	Grade 4	
White pine	4.8	15.5	41.2	20.2	81.7
Virginia pine	12.4	6.9	88.3	.0	107.6
Other yellow pines	5.9	9.1	66.3	.0	81.3
Other softwoods	277.4	.0	.0	.0	277.4
Total softwoods	300.5	31.5	195.8	20.2	548.0
Red maple	71.9	76.0	154.9	128.4	431.1
Sugar maple	105.5	117.2	167.6	130.2	520.5
Yellow birch	3.6	4.1	13.6	3.8	25.1
Sweet birch	37.5	40.7	66.7	50.1	195.0
Hickory	129.9	180.4	432.6	334.5	1,077.4
Beech	110.3	138.7	368.8	263.4	881.1
Ash	36.9	55.9	103.8	48.2	244.8
Black walnut	1.6	8.8	20.8	3.2	34.4
Yellow-poplar	638.3	552.2	905.0	464.6	2,560.1
Cucumbertree	33.8	64.0	128.5	73.0	299.4
Blackgum	44.6	64.3	75.2	26.1	210.3
Black cherry	23.9	28.1	48.0	33.8	133.8
Select white oaks	57.5	151.8	404.7	221.6	835.6
Select red oaks	382.5	279.7	484.3	171.9	1,318.5
Other white oaks	146.7	290.4	529.5	346.3	1,312.9
Other red oaks	291.0	303.4	644.5	387.1	1,626.1
Basswood	74.9	127.0	258.9	94.4	555.2
Other hardwoods	11.8	48.3	148.9	66.2	275.2
Total hardwoods	2,202.2	2,531.0	4,956.3	2,846.8	12,536.3

^aInternational 1/4-inch rule.

Table 78.--Net volume of sawtimber trees on timberland by species, size class, and standard-lumber log grade, Southern Unit, West Virginia, 1989

(In millions of board feet)^a

Species	All size classes				All grades	>15" Diameter at breast height				All grades	SE
	Grade 1	Grade 2	Grade 3	Grade 4		Grade 1	Grade 2	Grade 3	Grade 4		
Red spruce	6.6	.0	.0	.0	6.6	2.7	.0	.0	.0	2.7	100.0
White pine	19.8	108.6	186.1	70.4	384.9	19.8	53.7	102.3	45.2	221.0	28.5
Virginia pine	5.0	10.4	170.3	.0	185.7	1.0	1.8	10.4	.0	13.1	51.9
Other yellow pines	6.3	8.6	72.4	.0	87.4	2.7	2.1	14.5	.0	19.4	37.3
Hemlock	426.7	.0	.0	.0	426.7	285.5	.0	.0	.0	285.5	18.7
Total softwoods	464.4	127.6	428.8	70.4	1,091.2	311.8	57.6	127.2	45.2	541.7	15.2
Red maple	28.9	126.2	548.8	309.9	1,013.8	28.9	76.5	310.1	155.1	570.6	10.2
Sugar maple	115.4	135.2	342.4	280.6	873.7	100.3	106.5	177.3	149.9	534.0	12.2
Yellow birch	.5	12.0	36.6	13.7	62.7	.1	2.5	16.6	5.7	24.9	40.6
Sweet birch	4.2	21.6	154.6	91.1	271.5	2.5	5.8	69.4	40.3	118.0	17.8
Hickory	83.9	342.2	629.1	472.7	1,527.9	81.9	244.1	283.4	230.8	840.2	9.1
Beech	26.2	64.4	532.6	640.3	1,263.5	24.9	61.3	404.9	441.5	932.6	11.2
Ash	42.9	102.3	151.7	73.7	370.7	40.2	72.9	86.8	47.3	247.2	18.1
Black walnut	3.5	12.4	33.6	16.3	65.8	3.5	8.4	18.7	6.8	37.5	26.7
Yellow-poplar	458.8	835.7	1,593.2	1,803.4	4,691.0	431.4	612.9	954.3	983.0	2,981.6	6.6
Cucumbertree	44.0	78.0	188.6	111.9	422.5	42.5	47.5	97.6	53.5	241.1	13.3
Blackgum	22.1	45.4	143.5	52.3	263.3	22.1	36.5	96.8	34.1	189.5	12.9
Black cherry	48.7	44.5	123.8	45.4	262.4	45.4	28.2	71.5	22.0	167.1	21.0
Select white oaks	113.9	258.0	498.6	522.8	1,393.4	112.9	190.7	273.6	289.7	866.8	9.4
Select red oaks	318.9	415.1	714.8	468.8	1,917.6	312.0	339.4	444.2	332.0	1,427.6	7.1
Other white oaks	178.3	337.7	729.2	740.4	1,985.6	174.2	247.0	410.1	478.5	1,309.8	8.3
Other red oaks	148.7	323.3	708.2	1,178.0	2,358.2	148.7	263.2	484.2	714.8	1,610.9	7.0
Basswood	91.0	189.9	495.5	177.2	953.6	86.9	133.5	282.1	100.9	603.4	12.7
Other hardwoods	9.8	42.1	274.5	152.0	478.4	9.8	30.0	151.7	72.4	263.9	15.9
Total hardwoods	1,739.7	3,386.1	7,899.3	7,150.4	20,175.5	1,668.3	2,506.9	4,633.3	4,158.2	12,966.6	3.0
SE	6.2	3.4	2.5	2.8	2.3	6.3	4.1	3.3	3.7	3.0	
Percent of hardwood in each grade	9	17	39	35	100	13	19	36	32	100	

^aInternational 1/4-inch rule.

Table 79.--Average annual net change of growing-stock volume on timberland by species and component,
Southern Unit, West Virginia, 1975-89

(In thousands of cubic feet)

Species	Ingrowth	Accretion	Gross growth	Mortality	Cull Decrement	Cull Increment	Net growth	Removals	Net change
Eastern redcedar	0	7	7	0	0	0	7	0	7
Red spruce	0	61	61	-130	0	0	-69	0	-69
White pine	1,089	3,906	4,995	-592	0	-57	4,346	0	4,346
Virginia pine	356	1,438	1,794	-821	226	-74	1,126	0	1,126
Other yellow pines	76	259	334	-228	47	0	154	-299	-145
Hemlock	1,057	3,594	4,651	-92	98	0	4,657	-1,127	3,530
Total softwoods	2,578	9,266	11,843	-1,863	372	-131	10,221	-1,426	8,796
Red maple	5,044	14,706	19,750	-638	1,315	-461	19,967	-2,799	17,168
Sugar maple	1,508	8,019	9,527	-695	750	-597	8,984	-1,795	7,189
Yellow birch	312	1,304	1,616	-246	242	0	1,612	0	1,612
Sweet birch	1,170	3,642	4,812	-454	306	-225	4,439	-696	3,744
Hickory	1,281	10,283	11,564	-1,978	1,045	-432	10,199	-3,309	6,890
Beech	797	6,126	6,922	-465	3,092	-1,431	8,118	-1,418	6,700
Ash	400	2,676	3,076	-236	255	0	3,095	-631	2,464
Black walnut	41	433	474	-158	260	-84	492	-98	395
Yellow-poplar	6,972	36,653	43,625	-1,514	1,159	-208	43,062	-7,511	35,550
Cucumbertree	705	2,926	3,631	-269	129	-57	3,435	-859	2,576
Blackgum	308	940	1,248	-155	928	-232	1,790	-583	1,207
Black cherry	1,222	2,867	4,089	-240	0	0	3,848	-570	3,279
Select white oaks	1,297	11,463	12,760	-683	907	-239	12,744	-5,685	7,059
Select red oaks	1,034	14,115	15,149	-1,127	1,137	-283	14,875	-7,460	7,415
Other white oaks	1,562	14,081	15,643	-838	2,799	-503	17,100	-3,381	13,718
Other red oaks	1,382	16,992	18,373	-1,904	1,805	-484	17,791	-6,398	11,392
Basswood	354	6,586	6,940	-308	402	-98	6,936	-1,550	5,386
Other hardwoods	2,522	4,145	6,666	-840	1,275	-616	6,486	-1,105	5,381
Total hardwoods	27,910	157,955	185,865	-12,748	17,806	-5,950	184,974	-45,848	139,126
Total, all species	30,487	167,221	197,708	-14,611	18,178	-6,081	195,195	-47,273	147,922

Table 80.--Average annual net growth and average annual removals
of growing-stock volume on timberland by species,
Southern Unit, West Virginia, 1975-89

(In thousands of cubic feet)

Species	Growth	Removals
Eastern redcedar	7	0
Red spruce	-69	0
White pine	4,346	0
Virginia pine	1,126	0
Other yellow pines	154	-299
Hemlock	4,657	-1,127
Total softwoods	10,221	-1,426
Red maple	19,967	-2,799
Sugar maple	8,984	-1,795
Yellow birch	1,612	0
Sweet birch	4,439	-696
Hickory	10,199	-3,309
Beech	8,118	-1,418
Ash	3,095	-631
Black walnut	492	-98
Yellow-poplar	43,062	-7,511
Cucumber tree	3,435	-859
Blackgum	1,790	-583
Black cherry	3,848	-570
Select white oaks	12,744	-5,685
Select red oaks	14,875	-7,460
Other white oaks	17,100	-3,381
Other red oaks	17,791	-6,398
Basswood	6,936	-1,550
Other hardwoods	6,486	-1,105
Total hardwoods	184,974	-45,848
Total, all species	195,195	-47,273

Table 81.--Average annual net growth and average annual removals of growing-stock volume on timberland by ownership class and species group, Southern Unit, West Virginia, 1975-89

(In thousands of cubic feet)

Ownership class	Growth			Removals		
	Softwoods	Hardwoods	All groups	Softwoods	Hardwoods	All groups
Public	557	10,077	10,634	-78	-2,498	-2,575
Private	9,664	174,897	184,561	-1,348	-43,350	-44,698
Total, all classes	10,221	184,974	195,195	-1,426	-45,848	-47,273

Table 82.--Average annual mortality of growing-stock and sawtimber
volume on timberland by species, Southern Unit,
West Virginia, 1975-89

Species	Growing stock	Sawtimber
	(In thousands of cubic feet)	(In thousands of board feet) ^a
Eastern redcedar	0	0
Red spruce	-130	-485
White pine	-592	-2,369
Virginia pine	-821	-1,362
Other yellow pines	-228	-384
Hemlock	-92	0
Total softwoods	-1,863	-4,601
Red maple	-638	-768
Sugar maple	-695	-2,523
Yellow birch	-246	-485
Sweet birch	-454	-163
Hickory	-1,978	-4,598
Beech	-465	-1,549
Ash	-236	-945
Black walnut	-158	-478
Yellow-poplar	-1,514	-2,973
Cucumbertree	-269	-1,067
Blackgum	-155	-245
Black cherry	-240	-588
Select white oaks	-683	-1,092
Select red oaks	-1,127	-2,983
Other white oaks	-838	-1,870
Other red oaks	-1,904	-5,934
Basswood	-308	-222
Other hardwoods	-840	-820
Total hardwoods	-12,748	-29,303
Total, all species	-14,611	-33,903

^aInternational 1/4-inch rule.

Table 83.--Average annual net growth and average annual removals
of sawtimber volume on timberland by species,
Southern Unit, West Virginia, 1975-89

(In thousands of board feet)^a

Species	Growth	Removals
Eastern redcedar	0	0
Red spruce	-81	0
White pine	21,617	0
Virginia pine	6,130	0
Other yellow pines	940	-574
Hemlock	16,283	-4,583
Total softwoods	44,888	-5,157
Red maple	53,672	-8,400
Sugar maple	30,759	-4,606
Yellow birch	2,792	0
Sweet birch	7,181	-1,646
Hickory	45,960	-12,884
Beech	33,347	-5,727
Ash	12,335	-2,662
Black walnut	2,406	-120
Yellow-poplar	186,011	-26,944
Cucumbertree	11,355	-2,481
Blackgum	5,816	-2,256
Black cherry	11,709	2,142
Select white oaks	55,697	-14,922
Select red oaks	74,750	-30,428
Other white oaks	61,439	-11,122
Other red oaks	77,895	-22,857
Basswood	44,794	-5,727
Other hardwoods	16,516	-951
Total hardwoods	724,533	-155,674
Total, all species	769,422	-161,031

^aInternational 1/4-inch rule.

Table 84.--Average annual net growth and average annual removals of sawtimber
volume on timberland by ownership class and species group,
Southern Unit, West Virginia, 1975-89

(In thousands of board feet)^a

Ownership class	Growth			Removals		
	Softwoods	Hardwoods	All groups	Softwoods	Hardwoods	All groups
Public	2,445	39,472	41,917	-281	-8,492	-8,773
Private	42,443	685,061	727,505	-4,876	-147,382	-152,258
Total, all classes	44,888	724,533	769,422	-5,157	-155,874	-161,031

^aInternational 1/4-inch rule.

NORTHWESTERN UNIT

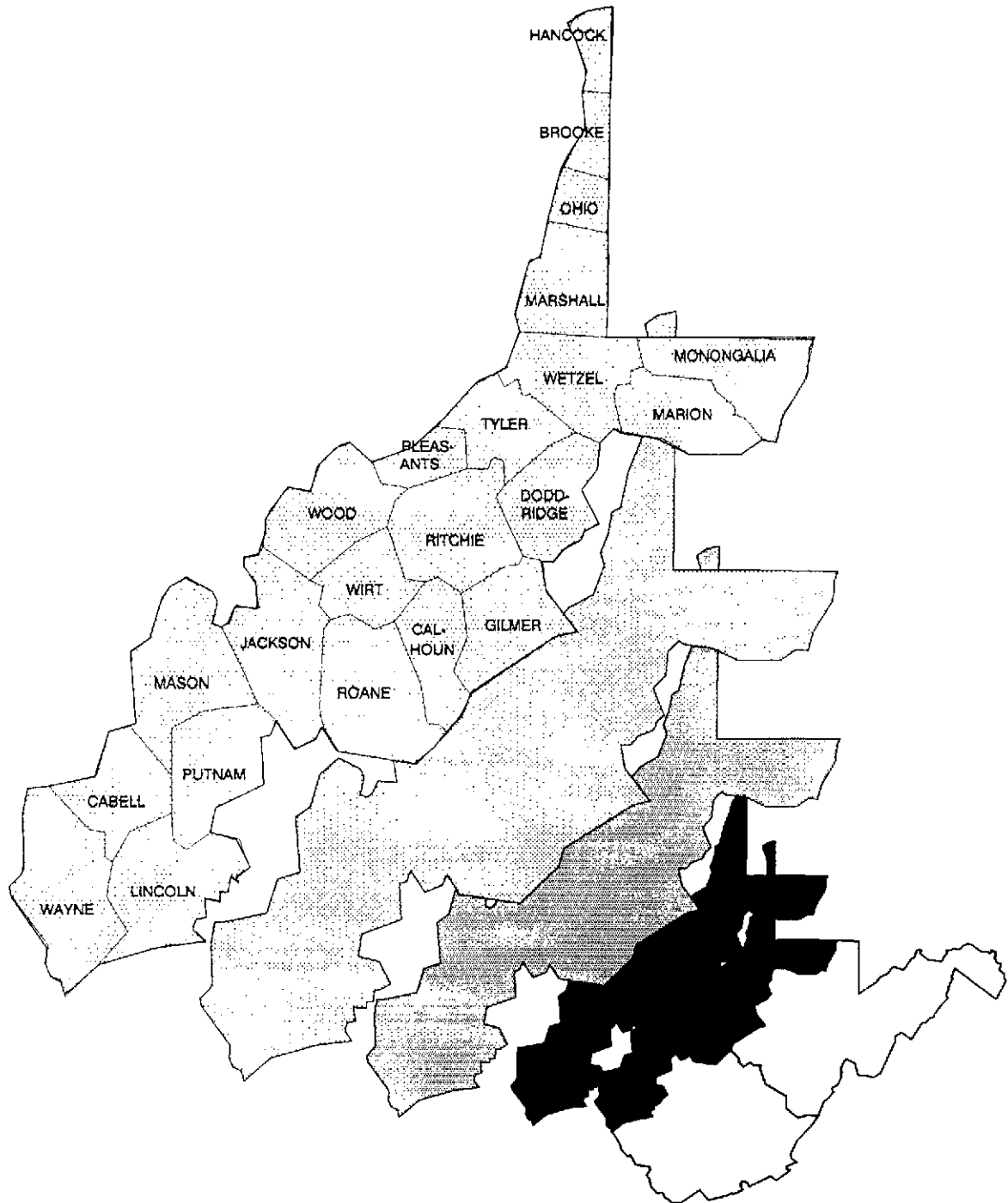


Table 85.--Area of timberland by forest type, forest-type group, and stand-size class, Northwestern Unit, West Virginia, 1989

(In thousands of acres)

Forest type	Stand-size class				All classes	SE
	Saw-timber	Pole-timber	Sapling/seedling	Non-stocked		
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	46.2	43.1	18.6	.0	107.9	21.9
Pitch pine	4.2	.0	.0	.0	4.2	100.0
Loblolly/shortleaf group	50.4	43.1	18.6	.0	112.1	21.4
Wh. pine/no.red oak/wh. ash	9.5	.0	8.6	.0	18.1	60.2
Virginia pine/oak	64.1	37.3	27.4	.0	128.8	18.7
Other oak/pine	4.9	.0	8.5	.0	13.4	58.4
Oak/pine group	78.6	37.3	44.5	.0	160.3	17.2
Post, black, or bear oak	18.9	.0	.0	.0	18.9	50.0
Chestnut oak	63.9	15.7	.0	.0	79.6	24.8
White oak/red oak/hickory	204.8	157.0	58.1	.0	419.9	10.2
White oak	97.8	72.8	35.6	.0	206.2	15.4
Northern red oak	19.4	.0	16.1	.0	35.5	38.1
Y-poplar/wh. oak/no.red oak	102.5	49.9	.0	.0	152.3	17.1
Black locust	24.3	19.0	20.7	.0	64.0	28.8
Black walnut	6.2	3.6	.0	.0	9.8	73.2
Yellow-poplar	67.9	95.0	16.5	.0	179.5	16.0
Hawthorn/reverting field	3.2	5.2	28.4	.0	36.9	36.6
Scarlet oak	18.3	15.8	.0	.0	34.1	37.8
Sassafras/persimmon	.0	.0	19.6	.0	19.6	50.2
Red maple/central hardwood	4.4	12.9	16.7	.0	34.1	38.2
Mixed central hardwoods	926.3	356.8	122.5	.0	1,405.6	4.4
Oak/hickory group	1,557.9	803.9	334.2	.0	2,696.0	2.0
Black ash/Amer. elm/red maple	16.4	25.9	5.1	.0	47.5	31.4
Red maple(upland)	1.8	.0	.0	.0	1.8	100.0
River birch/sycamore	9.8	4.6	5.0	.0	19.4	50.1
Sycamore/pecan/American elm	13.8	11.0	.0	.0	24.8	45.0
Elm/ash/red maple group	41.9	41.4	10.1	.0	93.4	22.2
Sugar maple/beech/yellow birch	73.2	23.6	4.5	.0	101.4	20.1
Black cherry	29.7	15.6	6.0	.0	51.3	31.0
Red maple/northern hardwoods	6.7	.0	.0	.0	6.7	100.0
Pin cherry/reverting field	3.8	4.5	4.4	.0	12.7	57.8
Mixed northern hardwoods	36.6	40.1	8.0	.0	84.8	23.3
Northern hardwoods group	150.1	83.9	22.9	.0	256.8	12.1
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	1,883.5	1,013.9	430.3	.0	3,327.7	1.0
SE	3.3	5.8	10.2	.0	1.0	

Table 86.--Area of timberland by forest type, forest-type group, and stand-size class (excludes all National Forest), Northwestern Unit, West Virginia, 1975

(In thousands of acres)

Forest type	Stand-size class				All classes	SE
	Saw-timber	Pole-timber	Sapling/seedling	Non-stocked		
Virginia pine	89.5	56.0	59.0	.0	204.5	16.5
Loblolly/shortleaf group	89.5	56.0	59.0	.0	204.5	16.5
Shortleaf pine/oak	.0	.0	10.8	.0	10.8	100.0
Virginia pine/oak	63.8	49.3	96.2	.0	209.3	21.8
Oak/pine group	63.8	49.3	107.0	.0	220.1	21.2
Post, black, or bear oak	42.0	.0	26.4	.0	68.4	41.1
Chestnut oak	40.9	21.5	.0	.0	62.4	40.7
White oak/red oak/hickory	103.9	96.9	144.2	.0	345.0	16.8
White oak	40.7	90.6	42.3	.0	173.7	24.5
Northern red oak	10.2	.0	10.8	.0	21.0	70.8
Y-poplar/wh. oak/no.red oak	41.6	10.2	42.2	.0	94.0	33.0
Black locust	.0	.0	58.3	.0	58.3	44.7
Black walnut	.0	10.7	10.7	.0	21.4	70.2
Yellow-poplar	21.5	21.0	32.2	.0	74.7	37.4
Scarlet oak	21.0	.0	.0	.0	21.0	70.8
Sassafras/persimmon	.0	.0	31.4	.0	31.4	69.7
Red maple/central hardwood	.0	10.7	10.8	.0	21.5	70.7
Mixed central hardwoods	662.6	433.2	343.0	.0	1,438.8	6.3
Oak/hickory group	984.3	694.7	752.4	.0	2,431.4	3.0
Black ash/Amer. elm/red maple	31.1	43.1	38.9	.0	113.1	31.6
Sycamore/pecan/American elm	.0	10.8	.0	.0	10.8	100.0
American elm/green ash	.0	.0	10.8	.0	10.8	100.0
Elm/ash/red maple group	31.1	53.9	49.7	.0	134.8	28.7
Sugar maple/beech/yellow birch	83.6	21.6	37.1	.0	142.3	27.4
Black Cherry	21.6	.0	10.6	.0	32.2	57.5
Northern hardwoods group	105.2	21.6	47.7	.0	174.5	24.6
All forest types	1,273.9	875.6	1,015.8	.0	3,165.3	1.9
SE	6.4	9.4	7.7	.0	1.9	

Table 87.--Area of timberland by forest type, forest-type group, and stand-size class (excludes all National Forest), Northwestern Unit, West Virginia, 1989

(in thousands of acres)

Forest type	Stand-size class				All classes	SE
	Saw-timber	Pole-timber	Sapling/seedling	Non-stocked		
Hemlock	4.6	.0	.0	.0	4.6	100.1
White/red pine group	4.6	.0	.0	.0	4.6	100.1
Virginia pine	46.2	43.0	18.6	.0	107.9	22.0
Pitch pine	4.2	.0	.0	.0	4.2	100.0
Loblolly/shortleaf group	50.4	43.0	18.6	.0	112.1	21.4
Wh. pine/no.red oak/wh. ash	9.5	.0	8.6	.0	18.1	60.3
Virginia pine/oak	64.1	37.3	27.4	.0	128.8	18.7
Other oak/pine	4.9	.0	8.5	.0	13.4	58.4
Oak/pine group	78.6	37.3	44.5	.0	160.3	17.2
Post, black, or bear oak	18.9	.0	.0	.0	18.9	50.1
Chestnut oak	63.9	15.7	.0	.0	79.6	24.8
White oak/red oak/hickory	204.8	157.0	58.1	.0	419.9	10.3
White oak	97.8	72.8	35.6	.0	206.2	15.4
Northern red oak	19.4	.0	16.1	.0	35.5	38.2
Y-poplar/wh. oak/no.red oak	102.5	49.9	.0	.0	152.3	17.2
Black locust	24.3	19.0	20.7	.0	64.0	28.9
Black walnut	6.2	3.6	.0	.0	9.8	73.3
Yellow-poplar	67.9	95.0	16.5	.0	179.5	16.0
Hawthorn/reverting field	3.2	5.2	28.4	.0	36.9	36.6
Scarlet oak	18.3	15.8	.0	.0	34.1	37.9
Sassafras/persimmon	.0	.0	19.6	.0	19.6	50.2
Red maple/central hardwood	4.4	12.9	16.7	.0	34.1	38.2
Mixed central hardwoods	926.3	356.8	122.5	.0	1,405.6	4.5
Oak/hickory group	1,557.9	803.9	334.2	.0	2,696.0	2.1
Black ash/Amer. elm/red maple	16.4	25.9	5.1	.0	47.5	31.5
Red maple(upland)	1.8	.0	.0	.0	1.8	100.0
River birch/sycamore	9.8	4.6	5.0	.0	19.4	50.1
Sycamore/pecan/American elm	13.8	11.0	.0	.0	24.8	45.0
Elm/ash/red maple group	41.9	41.4	10.1	.0	93.4	22.3
Sugar maple/beech/yellow birch	73.2	23.6	4.5	.0	101.4	20.1
Black Cherry	29.7	15.6	6.0	.0	51.3	31.1
Red maple/northern hardwoods	6.7	.0	.0	.0	6.7	100.1
Pin cherry/reverting field	3.8	4.5	4.4	.0	12.7	58.0
Mixed northern hardwoods	36.6	40.1	8.0	.0	84.7	23.3
Northern hardwoods group	150.1	83.9	22.9	.0	256.8	12.1
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	1,883.4	1,013.9	430.3	.0	3,327.7	1.3
SE	3.4	5.9	10.2	.0	1.3	

Table 88.--Number of growing-stock trees on timberland by species and diameter class, Northwestern Unit, West Virginia, 1989

(In thousands of trees)

Species	Diameter class (inches at breast height)							
	Seedlings	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
Eastern redcedar	7,608	3,910	0	0	0	30	0	42
White pine	2,023	6,059	1,595	530	489	168	16	15
Virginia pine	51,460	14,219	11,213	6,590	8,558	5,668	2,686	1,173
Other yellow pines	1,050	0	0	302	214	511	259	165
Hemlock	8,715	0	0	281	42	75	49	49
Total softwoods	70,856	24,188	12,809	7,703	9,304	6,452	3,010	1,444
Red maple	1,976,031	148,189	45,911	17,317	7,824	4,293	1,947	958
Sugar maple	818,707	141,761	32,663	11,917	7,774	4,236	2,226	1,284
Yellow birch	2,394	0	0	33	0	0	0	0
Sweet birch	25,847	2,754	929	390	209	157	112	15
Hickory	598,127	51,540	29,471	22,037	13,672	8,799	3,793	1,680
Beech	325,593	30,545	9,262	3,033	1,985	1,931	841	850
Ash	1,175,879	53,164	14,075	7,005	3,708	2,505	983	795
Black walnut	33,260	846	1,029	2,435	1,624	1,180	640	663
Yellow-poplar	199,827	19,371	10,873	11,703	9,234	8,083	5,898	3,701
Cucumber tree	23,176	1,774	1,663	473	609	504	225	114
Blackgum	400,638	33,578	13,080	3,668	1,320	569	223	148
Black cherry	495,029	18,024	5,162	4,409	2,231	1,817	911	652
Select white oaks	481,199	26,009	8,018	14,911	11,985	9,396	6,585	4,784
Select red oaks	373,816	15,946	9,163	2,858	3,027	2,120	1,975	1,671
Other white oaks	247,616	6,630	5,817	6,370	5,340	5,442	3,838	2,428
Other red oaks	346,962	8,251	11,263	5,174	5,954	5,343	4,793	3,386
Basswood	20,789	1,054	895	1,067	1,057	636	712	493
Other hardwoods	2,839,925	232,430	59,139	16,982	9,131	5,676	3,146	1,748
Total hardwoods	10,394,815	791,866	258,413	131,784	86,685	62,687	38,847	25,370
Total, all species	10,465,671	816,054	271,222	139,487	95,989	69,139	41,857	26,814
SE	3.1	4.7	6.7	3.2	3.2	2.9	3.0	3.2

Table 88.-continued

(In thousands of trees)

Species	Diameter class (inches at breast height)					Total 5.0 and larger	All classes	SE
	15.0- 16.9	17.0- 18.9	19.0- 20.9	21.0- 28.9	29.0+			
Eastern redcedar	0	9	0	0	0	81	11,599	46.8
White pine	26	49	22	64	0	1,381	11,058	52.4
Virginia pine	329	101	33	0	0	25,138	102,031	17.4
Other yellow pines	99	37	10	0	0	1,598	2,648	41.9
Hemlock	15	12	11	26	0	561	9,276	59.6
Total softwoods	469	209	76	91	0	28,758	136,611	14.5
Red maple	568	222	106	108	0	33,342	2,203,473	6.1
Sugar maple	715	346	213	237	26	28,975	1,022,106	8.3
Yellow birch	0	0	0	0	0	33	2,427	63.7
Sweet birch	40	0	0	0	0	924	30,454	42.2
Hickory	974	294	156	96	0	51,502	730,639	6.5
Beech	432	394	314	508	18	10,306	375,706	11.1
Ash	595	323	153	196	27	16,290	1,259,408	7.6
Black walnut	193	95	57	3	7	6,897	42,032	42.4
Yellow-poplar	2,366	1,375	779	696	37	43,873	273,943	13.5
Cucumber tree	109	55	11	30	7	2,138	28,750	29.6
Blackgum	193	15	35	23	0	6,196	453,493	10.8
Black cherry	386	130	111	96	10	10,753	528,968	11.7
Select white oaks	2,976	1,595	843	958	146	54,179	569,405	9.5
Select red oaks	1,113	921	645	811	168	15,311	414,236	8.0
Other white oaks	1,680	968	427	524	52	27,069	287,132	14.2
Other red oaks	2,642	1,531	951	939	109	30,823	397,299	8.4
Basswood	267	105	58	45	0	4,441	27,179	25.5
Other hardwoods	713	536	230	264	26	38,453	3,179,946	5.3
Total hardwoods	15,963	8,907	5,090	5,536	633	381,503	11,826,597	2.9
Total, all species	16,433	9,116	5,166	5,627	633	410,262	11,963,208	2.8
SE	3.8	4.7	5.7	5.5	12.5	1.9	2.8	

Table 89.--Net dry weight of all live trees on timberland by species and diameter class, Northwestern Unit, West Virginia, 1989

(In millions of tons)

Species	Diameter class (inches at breast height)										All classes	SE
	1.0- 4.9	5.0- 6.9	7.0- 8.9	9.0- 10.9	11.0- 12.9	13.0- 14.9	15.0- 16.9	17.0- 18.9	19.0- 20.9	21.0+		
Eastern redcedar	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	46.4
White pine	.1	.0	.1	.0	.0	.0	.0	.0	.0	.1	.4	37.1
Virginia pine	.4	.5	1.2	1.4	1.0	.6	.2	.1	.0	.0	5.6	10.7
Other yellow pines	.0	.0	.0	.1	.1	.1	.1	.0	.0	.0	.5	25.1
Hemlock	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	62.0
Total softwoods	.5	.6	1.3	1.6	1.1	.8	.3	.2	.1	.1	6.6	9.7
Red maple	2.1	1.5	1.3	1.3	.9	.6	.6	.3	.1	.3	9.2	7.2
Sugar maple	3.4	2.4	2.9	2.8	2.2	1.7	1.4	.8	.7	1.3	19.7	7.3
Yellow birch	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0
Sweet birch	.1	.0	.0	.1	.1	.0	.0	.0	.0	.0	.3	28.5
Hickory	1.2	2.2	2.9	3.4	2.4	1.6	1.3	.5	.4	.3	16.3	4.9
Beech	.9	.7	.8	1.4	.9	1.2	.9	1.1	1.1	3.0	11.9	10.2
Ash	1.4	1.2	1.2	1.4	.8	.8	.8	.6	.4	.9	9.6	7.2
Black walnut	.0	.2	.3	.4	.3	.5	.2	.1	.1	.0	2.1	10.9
Yellow-poplar	.5	.8	1.3	2.0	2.3	2.1	1.9	1.5	1.1	1.8	15.4	6.3
Cucumbertree	.1	.0	.1	.2	.1	.1	.1	.1	.0	.1	.9	17.7
Blackgum	.7	.3	.2	.2	.1	.1	.2	.0	.1	.1	2.0	12.8
Black cherry	.2	.4	.5	.6	.5	.5	.4	.2	.2	.3	3.8	11.2
Select white oaks	.3	1.2	2.0	2.9	3.4	3.5	3.3	2.3	1.7	4.3	25.0	5.0
Select red oaks	.3	.3	.6	.8	1.2	1.5	1.4	1.6	1.5	4.8	14.1	7.6
Other white oaks	.3	.6	1.1	1.9	2.1	2.0	1.9	1.6	.9	2.3	14.7	7.9
Other red oaks	.4	.5	1.2	1.8	2.6	2.6	2.9	2.2	1.8	3.7	19.7	6.1
Basswood	.0	.1	.2	.2	.4	.3	.3	.2	.1	.2	2.0	14.1
Other commercial hardwoods	2.9	1.6	1.8	1.9	1.7	1.4	.8	.7	.5	1.0	14.2	6.1
Other noncommercial hardwoods	2.7	1.5	1.1	.5	.3	.2	.1	.1	.1	.0	6.6	7.7
Total hardwoods	17.7	15.7	19.7	23.5	22.2	20.9	18.6	13.9	10.7	24.5	187.5	1.8
Total, all species	18.1	16.3	21.1	25.1	23.4	21.7	18.9	14.1	10.7	24.6	194.1	1.7
SE	5.4	3.2	3.0	2.9	3.0	3.2	3.8	4.8	5.6	5.7	1.7	

Table 90.--Net dry weight of all trees on timberland by class of material and species group, Northwestern Unit, West Virginia, 1989

(In millions of tons)

Class of material	Weight ^a		All groups	SE
	Softwoods	Hardwoods		
Sawlog portion	2.8	65.0	67.8	2.6
Upper stem	.4	14.5	14.9	2.5
Total	3.2	79.5	82.6	2.6
Pole/timber trees	1.3	38.4	39.6	2.4
All growing stock	4.4	117.9	122.3	1.9
Rough cull trees ^b	.1	5.2	5.3	6.8
Rotten cull trees ^b	.0	2.8	2.8	8.8
Salvable dead ^c	.1	2.3	2.4	14.1
Saplings ^d	.5	17.7	18.1	5.4
Tops - growing stock	1.6	41.1	42.7	1.8
Tops - rough and rotten	.0	2.9	2.9	5.4
All nongrowing stock	2.3	71.9	74.2	1.9
Total, all classes	6.7	189.8	196.5	1.7
SE	9.6	1.8	1.7	

^aIncludes bark and sound cull; excludes rotten cull.

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

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

^dIncludes entire tree aboveground.

Table 91.--Net volume of growing-stock trees on timberland by species and diameter class, Northwestern Unit, West Virginia, 1975

(In millions of cubic feet)

Species	Diameter class (inches at breast height)										All classes
	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+	
Redcedar	.0	.0	.2	.0	.8	.0	.0	.0	.0	.0	.6
White pine	.0	.0	.0	.0	.0	.0	.0	4.2	5.0	.0	9.2
Virginia pine	27.4	52.5	59.9	51.1	30.1	11.3	3.1	.0	.0	.0	235.3
Other yellow pines	2.0	2.7	5.9	5.6	3.0	4.1	1.0	.0	.0	.0	24.3
Hemlock	.4	.1	.4	.6	.5	.0	.0	.0	1.4	.0	3.3
Total softwoods	29.7	55.2	66.2	58.0	33.6	15.4	4.0	4.2	6.3	.0	272.7
Red maple	34.6	17.6	22.1	7.8	9.3	7.4	3.3	2.8	.9	.0	105.7
Sugar maple	23.3	19.5	31.3	17.6	16.8	11.2	7.1	3.7	10.3	.8	141.5
Yellow birch	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1
Sweet birch	2.4	2.9	1.1	.0	.0	.0	.0	.0	.0	.0	6.4
Hickory	88.7	66.9	52.7	29.8	31.4	16.6	8.8	5.2	3.6	.0	303.8
Beech	6.5	10.1	14.6	13.6	11.1	21.3	12.3	9.1	11.5	.9	110.9
Ash	16.7	22.3	10.5	19.8	12.8	15.9	7.3	4.9	8.2	.0	118.4
Black walnut	5.7	6.0	9.4	9.7	8.5	3.5	1.7	1.7	1.8	.0	48.0
Yellow-poplar	46.3	61.5	61.2	75.3	64.5	53.8	45.6	18.4	17.0	2.5	446.1
Cucumber tree	.7	3.6	2.9	5.7	1.1	1.4	2.5	1.2	.0	.0	19.2
Blackgum	4.8	2.6	.7	4.0	4.3	1.7	3.7	.9	3.3	.0	25.8
Black cherry	8.6	13.4	12.6	14.2	21.8	10.3	7.1	5.9	7.9	.0	101.1
Select white oaks	51.3	77.8	91.1	75.8	73.4	51.2	35.9	28.9	25.6	7.3	518.3
Select red oaks	16.9	15.5	26.2	24.7	29.5	37.2	28.9	22.7	58.6	15.4	275.7
Other white oaks	20.9	41.3	42.4	38.5	41.0	30.6	21.7	21.3	27.3	3.3	288.4
Other red oaks	30.0	40.4	54.4	51.2	75.8	69.1	55.0	28.6	47.9	10.3	462.5
Basswood	2.4	2.2	8.4	8.4	3.0	.7	4.4	1.7	3.4	.0	34.8
Other hardwoods	38.2	52.2	37.5	32.7	18.7	19.4	13.5	16.5	7.9	2.3	238.9
Total hardwoods	398.0	455.8	479.1	428.8	423.0	351.3	258.5	173.6	235.1	42.7	3,245.8
Total, all species	427.7	511.0	545.3	486.8	456.6	366.7	262.5	177.8	241.4	42.7	3,518.5

Table 92.--Net volume of growing-stock trees on timberland by species and diameter class, Northwestern Unit, West Virginia, 1989

(In millions of cubic feet)

Species	Diameter class (inches at breast height)										All classes	SE
	5.0- 6.9	7.0- 8.9	9.0- 10.9	11.0- 12.9	13.0- 14.9	15.0- 16.9	17.0- 18.9	19.0- 20.9	21.0- 28.9	29.0+		
Eastern redcedar	.0	.0	.2	.0	.8	.0	.2	.0	.0	.0	1.1	64.9
White pine	1.4	2.5	2.1	.3	.4	1.1	2.3	1.4	6.1	.0	17.7	39.0
Virginia pine	20.8	54.3	63.1	44.9	27.0	9.9	4.2	1.7	.0	.0	225.9	11.0
Other yellow pines	1.1	1.3	5.9	4.7	4.2	3.0	1.5	.6	.0	.0	22.2	24.9
Hemlock	.6	.2	.7	.8	1.0	.5	.4	.6	1.9	.0	6.8	71.3
Total softwoods	23.9	58.4	71.9	50.7	33.3	14.5	8.5	4.3	8.0	.0	273.6	10.2
Red maple	45.7	50.8	50.1	34.8	23.6	18.8	10.7	5.4	8.2	.0	248.1	7.9
Sugar maple	32.6	48.2	49.5	41.5	32.1	24.1	14.4	10.6	16.0	2.8	271.9	7.8
Yellow birch	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	100.0
Sweet birch	1.3	1.4	1.7	1.6	.3	1.0	.0	.0	.0	.0	7.4	26.1
Hickory	57.1	92.3	107.1	75.1	45.4	34.9	14.2	8.5	6.9	.0	441.4	5.4
Beech	6.5	11.0	23.5	16.8	20.5	15.2	18.2	17.5	42.0	1.9	173.1	11.5
Ash	18.9	24.3	27.5	17.5	21.6	20.2	14.3	8.0	14.2	3.1	169.6	7.7
Black walnut	6.2	9.1	12.1	9.7	15.4	5.7	3.8	2.2	.3	.3	64.9	11.9
Yellow-poplar	34.4	70.7	109.9	128.5	116.6	100.9	73.9	50.0	64.2	5.7	754.7	6.3
Cucumber tree	1.1	3.4	5.0	3.9	2.8	3.2	2.5	.3	2.7	.5	25.4	17.8
Blackgum	9.1	7.5	6.5	3.8	3.5	6.6	.6	1.9	1.4	.0	40.9	11.3
Black cherry	10.8	14.3	20.2	16.9	16.2	13.4	6.4	6.1	6.2	1.0	111.3	11.6
Select white oaks	41.0	74.4	104.7	115.1	116.2	95.9	65.7	42.8	63.7	17.2	736.8	5.2
Select red oaks	7.8	20.0	24.6	36.1	42.0	38.1	38.9	33.4	58.4	24.2	323.5	7.0
Other white oaks	16.1	33.4	56.2	60.0	53.7	48.3	34.0	18.1	30.4	5.4	355.7	7.8
Other red oaks	15.3	41.7	62.1	85.1	87.4	91.6	65.1	49.5	67.0	13.8	578.4	6.4
Basswood	3.1	8.1	8.7	15.9	14.3	9.7	5.1	3.0	3.9	.0	71.7	14.2
Other hardwoods	39.7	53.0	59.8	51.2	40.4	21.6	22.1	11.7	17.7	3.3	320.4	7.2
Total hardwoods	346.7	563.5	729.3	713.4	652.0	549.1	389.8	269.2	403.0	79.3	4,695.4	1.9
Total, all species	370.6	621.9	801.2	764.1	685.3	563.6	398.4	273.5	411.0	79.3	4,969.0	1.8
SE	3.4	3.3	3.0	3.0	3.3	3.9	4.8	5.8	5.8	13.4	1.8	

Table 93.--Net volume of sawtimber trees on timberland by species and diameter class, Northwestern Unit, West Virginia, 1975

(In millions of board feet)^a

Species	Diameter class (inches at breast height)								All classes
	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+	
Eastern redcedar	.0	1.5	.0	.0	.0	.0	.0	.0	1.5
White pine	.0	.0	.0	.0	.0	15.5	16.7	.0	32.2
Virginia pine	159.4	155.6	102.6	40.5	11.5	.0	.0	.0	469.6
Other yellow pines	20.5	22.2	13.0	18.6	5.4	.0	.0	.0	79.8
Hemlock	4.5	3.1	.0	.0	.0	15.3	.0	.0	22.9
Total softwoods	184.5	182.3	115.6	59.2	16.9	30.9	16.7	.0	606.0
Red maple	.0	35.7	47.9	40.1	19.2	15.8	5.8	.0	164.5
Sugar maple	.0	57.7	61.8	43.0	28.4	15.0	42.8	3.2	251.9
Sweet birch	.0	4.2	1.0	4.2	.0	.0	.0	.0	9.3
Hickory	.0	118.0	138.7	74.1	40.9	24.4	17.5	.0	413.5
Beech	.0	58.0	53.3	106.3	64.2	49.8	63.4	5.5	400.4
Ash	.0	73.8	52.7	68.3	32.4	22.0	38.6	.0	287.8
Black walnut	.0	27.7	27.2	11.4	6.0	6.4	6.4	.0	85.1
Yellow-poplar	.0	265.2	254.6	215.5	191.7	76.2	72.7	12.1	1,088.0
Cucumber tree	.0	24.7	5.2	6.5	13.0	6.7	.0	.0	56.0
Blackgum	.0	11.2	12.8	5.5	12.2	3.1	12.2	.0	57.1
Black cherry	.0	46.1	81.3	38.7	28.4	22.4	29.2	.0	246.3
Select white oaks	.0	315.5	339.0	240.3	176.4	141.4	127.7	37.1	1,377.5
Select red oaks	.0	99.0	128.8	171.3	135.2	108.6	286.5	76.1	1,005.5
Other white oaks	.0	134.9	157.3	122.4	88.1	89.7	117.3	15.1	724.8
Other red oaks	.0	195.3	316.3	302.5	248.4	129.0	219.8	47.3	1,458.7
Basswood	.0	19.9	8.3	2.2	12.3	4.9	9.8	.0	57.5
Other hardwoods	.0	118.7	75.2	81.4	59.4	74.7	35.6	10.2	455.3
Total hardwoods	.0	1,605.7	1,761.4	1,533.7	1,156.2	790.0	1,085.3	206.6	8,139.4
Total, all species	184.5	1,788.0	1,877.0	1,592.9	1,173.1	820.9	1,102.0	206.6	8,745.4

^aInternational 1/4-inch rule.

Table 94.--Net volume of sawtimber trees on timberland by species and diameter class, Northwestern Unit, West Virginia, 1989

(In millions of board feet)^a

Species	Diameter class (inches at breast height)								All classes	SE
	9.0- 10.9	11.0- 12.9	13.0- 14.9	15.0- 16.9	17.0- 18.9	19.0- 20.9	21.0- 28.9	29.0+		
Eastern redcedar	.3	.0	2.6	.0	.6	.0	.0	.0	3.4	62.0
White pine	6.9	1.0	1.7	5.1	10.7	6.8	33.2	.0	65.6	40.8
Virginia pine	205.2	167.7	108.4	41.2	18.5	7.3	.0	.0	548.4	11.1
Other yellow pines	19.4	18.7	16.3	14.1	6.6	3.0	.0	.0	78.1	27.1
Hemlock	1.3	1.8	3.4	2.1	1.8	2.4	8.5	.0	21.4	71.3
Total softwoods	233.1	189.2	132.4	62.7	38.2	19.5	41.8	.0	716.9	10.6
Red maple	.0	132.4	100.0	88.2	51.8	29.7	43.4	.0	445.6	12.2
Sugar maple	.0	160.8	137.3	113.8	70.4	56.0	91.2	21.0	650.5	10.2
Sweet birch	.0	5.8	1.4	5.9	.0	.0	.0	.0	13.1	38.9
Hickory	.0	282.6	188.1	159.1	70.5	43.2	38.6	.0	782.2	7.5
Beech	.0	63.4	90.2	73.0	90.7	97.5	255.5	14.1	684.4	13.0
Ash	.0	69.6	92.5	88.6	69.8	40.1	80.7	15.8	457.1	10.3
Black walnut	.0	36.4	63.5	25.2	17.4	10.7	1.6	4.0	158.8	14.2
Yellow-poplar	.0	481.2	505.4	468.2	368.1	264.2	360.8	42.4	2,490.2	6.7
Cucumbertree	.0	14.2	12.1	17.5	12.4	2.7	13.3	4.4	76.6	23.0
Blackgum	.0	14.1	14.3	29.8	3.1	8.9	9.4	.0	79.7	18.7
Black cherry	.0	65.2	73.1	61.6	32.2	35.7	38.3	8.7	314.9	14.9
Select white oaks	.0	430.4	489.8	443.7	318.2	219.2	360.3	106.4	2,368.0	5.6
Select red oaks	.0	126.9	170.6	164.0	184.6	167.1	318.5	141.5	1,273.4	7.9
Other white oaks	.0	211.4	207.5	202.2	153.6	86.3	160.3	29.2	1,050.5	8.7
Other red oaks	.0	307.8	349.8	397.6	305.4	241.7	359.8	88.8	2,050.9	6.9
Basswood	.0	61.2	61.8	43.9	25.2	17.5	21.6	.0	231.3	15.5
Other hardwoods	.0	194.5	176.2	97.4	108.3	60.6	98.6	16.7	752.3	9.4
Total hardwoods	.0	2,657.9	2,733.7	2,479.7	1,881.7	1,381.3	2,252.1	493.1	13,879.5	2.6
Total, all species	233.1	2,847.1	2,866.1	2,542.4	1,919.9	1,400.7	2,293.9	493.1	14,596.3	2.5
SE	14.0	3.0	3.3	3.9	4.8	5.8	5.7	12.8	2.5	

^aInternational 1/4-inch rule.

Table 95.--Net volume of sawtimber trees on timberland by species and standard-lumber log grade, Northwestern Unit, West Virginia, 1975

(In millions of board feet)^a

Species	All size classes				All grades
	Grade 1	Grade 2	Grade 3	Grade 4	
White pine	.0	8.0	9.8	14.4	32.2
Virginia pine	3.8	12.9	452.9	.0	469.6
Other yellow pines	5.1	3.7	71.1	.0	79.8
Other softwoods	24.4	.0	.0	.0	24.4
Total softwoods	33.3	24.6	533.8	14.4	606.0
Red maple	9.0	16.7	81.9	56.9	164.5
Sugar maple	26.7	37.6	102.5	85.1	251.9
Hickory	22.6	36.4	195.8	158.7	413.5
Beech	13.7	41.2	172.6	172.9	400.4
Ash	39.7	54.1	134.8	59.3	287.8
Black walnut	1.9	6.3	51.3	25.7	85.1
Yellow-poplar	85.4	158.3	468.1	376.2	1,088.0
Cucumber tree	4.3	10.3	36.7	4.7	56.0
Blackgum	9.4	13.4	24.6	9.7	57.1
Black cherry	4.7	40.2	125.4	76.0	246.3
Select white oaks	93.9	212.2	613.4	458.0	1,377.5
Select red oaks	192.1	256.6	384.3	172.5	1,005.5
Other white oaks	65.1	136.1	331.0	192.5	724.8
Other red oaks	152.7	187.9	572.7	540.3	1,453.6
Basswood	3.9	12.3	31.9	9.4	57.5
Other hardwoods ^b	22.4	53.3	259.4	129.4	464.6
Total hardwoods	752.5	1,272.9	3,586.4	2,527.3	8,139.4

^aInternational 1/4-inch rule.

^bIncludes 9.3 million board feet of sweet birch.

Table 96.--Net volume of sawtimber trees on timberland by species, size class, and standard-lumber log grade, Northwestern Unit, West Virginia, 1989

(In millions of board feet)^a

Species	All size classes				All grades	>15" Diameter at breast height				All grades	SE
	Grade 1	Grade 2	Grade 3	Grade 4		Grade 1	Grade 2	Grade 3	Grade 4		
Eastern redcedar	3.4	.0	.0	.0	3.4	.6	.0	.0	.0	.6	100.0
White pine	.0	16.3	33.1	16.2	65.6	.0	16.0	27.5	12.5	55.9	41.6
Virginia pine	5.0	18.9	524.5	.0	548.4	2.1	5.4	59.5	.0	67.0	21.3
Other yellow pines	9.5	9.6	59.0	.0	78.1	3.9	2.4	17.4	.0	23.7	48.2
Hemlock	21.4	.0	.0	.0	21.4	14.9	.0	.0	.0	14.9	75.8
Total softwoods	39.3	44.8	616.6	16.2	716.9	21.5	23.8	104.3	12.5	162.1	22.5
Red maple	17.1	35.0	181.9	211.7	445.6	17.1	24.5	94.1	77.5	213.2	17.2
Sugar maple	53.7	82.2	219.7	294.9	650.5	42.2	63.3	111.8	135.1	352.4	12.1
Sweet birch	.1	2.8	5.9	4.3	13.1	.0	1.8	2.2	1.9	5.9	57.5
Hickory	29.0	147.6	297.0	308.6	782.2	24.4	87.5	107.8	91.7	311.4	10.4
Beech	21.2	18.0	213.2	432.0	684.4	21.0	16.5	182.5	310.9	530.8	14.6
Ash	49.2	144.0	159.0	104.9	457.1	44.8	100.2	93.8	56.2	295.0	13.7
Black walnut	8.2	29.2	73.0	48.3	158.8	5.0	14.4	25.0	14.6	59.0	21.3
Yellow-poplar	265.7	396.5	733.2	1,094.9	2,490.2	253.1	304.7	445.4	500.4	1,503.6	8.0
Cucumber tree	18.0	18.2	27.5	12.8	76.6	18.0	14.6	11.2	6.5	50.3	30.9
Blackgum	8.9	17.8	34.2	18.7	79.7	8.9	12.3	20.3	9.7	51.2	24.2
Black cherry	12.1	40.6	179.5	82.7	314.9	9.3	22.0	111.8	33.5	176.6	19.7
Select white oaks	231.0	376.8	748.2	1,012.1	2,368.0	219.8	259.2	401.4	567.4	1,447.8	6.9
Select red oaks	222.6	238.7	421.3	390.7	1,273.4	219.7	198.6	299.0	258.5	975.8	9.2
Other white oaks	71.8	196.4	398.6	383.8	1,050.5	68.2	140.9	194.3	228.1	631.6	10.8
Other red oaks	167.6	271.6	576.8	1,035.0	2,050.9	162.2	224.9	383.5	622.7	1,393.3	8.0
Basswood	26.7	51.9	113.4	39.3	231.3	21.8	27.1	47.2	12.2	108.3	18.8
Other hardwoods	52.1	92.3	328.1	279.8	752.3	49.1	65.6	144.8	122.1	381.6	13.4
Total hardwoods	1,255.0	2,159.6	4,710.5	5,754.4	13,879.5	1,184.6	1,578.2	2,676.1	3,049.0	8,487.9	3.5
SE	6.8	4.2	3.1	2.9	2.6	7.0	4.8	4.1	4.0	3.5	
Percent of hardwood in each grade	9	16	34	41	100	14	19	31	36	100	

^aInternational 1/4-inch rule.

Table 97.--Average annual net change of growing-stock volume on timberland by species and component.
Northwestern Unit, West Virginia, 1975-89

(In thousands of cubic feet)

Species	Ingrowth	Accretion	Gross growth	Mortality	Cull Decrement	Cull Increment	Net growth	Removals	Net change
Eastern redcedar	28	4	32	0	0	0	32	0	32
Red spruce	0	0	0	0	0	0	0	0	0
White pine	202	363	565	0	0	0	565	0	565
Virginia pine	680	3,966	4,646	-2,273	141	0	2,514	-3,200	-686
Other yellow pines	0	238	238	-246	0	0	-8	-143	-151
Hemlock	60	172	232	0	0	0	232	0	232
Total softwoods	970	4,742	5,712	-2,519	141	0	3,335	-3,343	-8
Red maple	3,444	6,328	9,772	-323	957	-310	10,096	-211	9,884
Sugar maple	2,223	8,278	10,501	-391	674	196	10,587	-1,542	9,046
Yellow birch	0	6	6	0	0	0	6	0	6
Sweet birch	52	146	198	-112	0	-19	68	0	68
Hickory	2,455	10,557	13,012	-1,606	867	-342	11,932	-2,306	9,626
Beech	259	3,300	3,558	-429	1,898	-381	4,646	-326	4,320
Ash	1,477	3,552	5,029	-844	795	-35	4,945	-1,404	3,540
Black walnut	745	1,411	2,156	-292	370	-168	2,066	-909	1,157
Yellow poplar	3,170	22,829	25,999	-1,324	1,168	-347	25,495	-3,721	21,773
Cucumber tree	61	611	672	-102	0	-37	533	-116	416
Blackgum	550	621	1,171	0	210	-18	1,363	-309	1,054
Black cherry	567	1,471	2,038	-305	448	101	2,080	-1,324	757
Select white oaks	2,010	16,467	18,477	-1,150	1,391	-207	18,532	-3,388	15,143
Select red oaks	730	7,636	8,366	-1,203	360	-172	7,351	-3,986	3,365
Other white oaks	971	6,723	7,695	-969	636	-321	7,040	-2,307	4,734
Other red oaks	1,174	13,425	14,599	-2,082	1,088	-493	13,112	-4,951	8,160
Boxwood	601	2,241	2,842	-254	288	0	2,877	-306	2,571
Other hardwoods	3,276	5,582	8,858	-1,794	1,633	-268	8,430	-2,761	5,669
Total hardwoods	23,665	111,207	134,869	-13,180	12,785	-3,414	131,158	-29,867	101,291
Total all species	24,635	115,949	140,589	-15,698	12,926	-3,414	134,492	-33,210	101,282

Table 98.--Average annual net growth and average annual removals
of growing-stock volume on timberland by species,
Northwestern Unit, West Virginia, 1975-89

(In thousands of cubic feet)

Species	Growth	Removals
Eastern redcedar	32	0
Red spruce	0	0
White pine	565	0
Virginia pine	2,514	-3,200
Other yellow pines	-8	-143
Hemlock	232	0
Total softwoods	3,335	-3,343
Red maple	10,096	-211
Sugar maple	10,587	-1,542
Yellow birch	6	0
Sweet birch	68	0
Hickory	11,932	-2,306
Beech	4,646	-326
Ash	4,945	-1,404
Black walnut	2,066	-909
Yellow-poplar	25,495	-3,721
Cucumber tree	533	-116
Blackgum	1,363	-309
Black cherry	2,080	-1,324
Select white oaks	18,532	-3,388
Select red oaks	7,351	-3,986
Other white oaks	7,040	-2,307
Other red oaks	13,112	-4,951
Basswood	2,877	-306
Other hardwoods	8,430	-2,761
Total hardwoods	131,158	-29,867
Total, all species	134,492	-33,210

Table 99.--Average annual net growth and average annual removals of growing-stock volume on timberland by ownership class and species group, Northwestern Unit, West Virginia, 1975-89

(In thousands of cubic feet)

Ownership class	Growth			Removals		
	Softwoods	Hardwoods	All groups	Softwoods	Hardwoods	All groups
Public	63	2,495	2,558	-64	-568	-632
Private	3,272	128,663	131,934	-3,279	-29,299	-32,578
Total, all classes	3,335	131,158	134,492	-3,343	-29,867	-33,210

Table 100.--Average annual mortality of growing-stock and sawtimber
volume on timberland by species, Northwestern Unit,
West Virginia, 1975-89

Species	Growing stock	Sawtimber
	(In thousands of cubic feet)	(In thousands of board feet) ^a
Eastern redcedar	0	0
Red spruce	0	0
White pine	0	0
Virginia pine	-2,273	-4,352
Other yellow pines	-246	-776
Hemlock	0	0
Total softwoods	-2,519	-5,128
Red maple	-323	-830
Sugar maple	-391	-1,066
Yellow birch	0	0
Sweet birch	-112	0
Hickory	-1,606	-2,868
Beech	-429	-2,307
Ash	-844	-1,785
Black walnut	-292	-333
Yellow-poplar	-1,324	-4,129
Cucumber-tree	-102	-462
Blackgum	0	0
Black cherry	-305	-504
Select white oaks	-1,150	-2,331
Select red oaks	-1,203	-5,267
Other white oaks	-969	-2,687
Other red oaks	-2,082	-5,335
Basswood	-254	-333
Other hardwoods	-1,794	-3,447
Total hardwoods	-13,180	-33,683
Total, all species	-15,698	-38,811

^aInternational 1/4-inch rule.

Table 101.--Average annual net growth and average annual removals
of sawtimber volume on timberland by species.
Northwestern Unit, West Virginia, 1975-89

(In thousands of board feet)^a

Species	Growth	Removals
Eastern redcedar	139	0
Red spruce	0	0
White pine	2,231	0
Virginia pine	12,610	-7,164
Other yellow pines	253	-396
Hemlock	-103	0
Total softwoods	15,130	-7,560
Red maple	20,522	-816
Sugar maple	32,723	-3,043
Yellow birch	0	0
Sweet birch	265	0
Hickory	28,576	-2,923
Beech	21,170	-3,448
Ash	16,647	-4,902
Black walnut	6,871	1,323
Yellow-poplar	111,595	-12,510
Cucumber tree	1,913	-556
Blackgum	2,083	-579
Black cherry	9,042	-4,202
Select white oaks	79,876	-11,187
Select red oaks	35,543	16,714
Other white oaks	30,149	-7,374
Other red oaks	64,041	-22,133
Basswood	14,301	3,752
Other hardwoods	23,557	-3,893
Total hardwoods	497,971	-61,513
Total, all species	513,101	-69,073

^aInternational 1/4 inch rule

Table 102.--Average annual net growth and average annual removals of sawtimber volume on timberland by ownership class and species group.
Northwestern Unit, West Virginia, 1975-89

(In thousands of board feet)^a

Ownership class	Growth			Removals		
	Softwoods	Hardwoods	All groups	Softwoods	Hardwoods	All groups
Public	288	9,472	9,760	-144	-1,844	-1,987
Private	14,842	488,499	503,341	-7,416	-95,079	-102,496
Total, all classes	15,130	497,971	513,101	-7,560	-96,923	-104,483

^aInternational 1/4-inch rule.

COUNTY TABLES

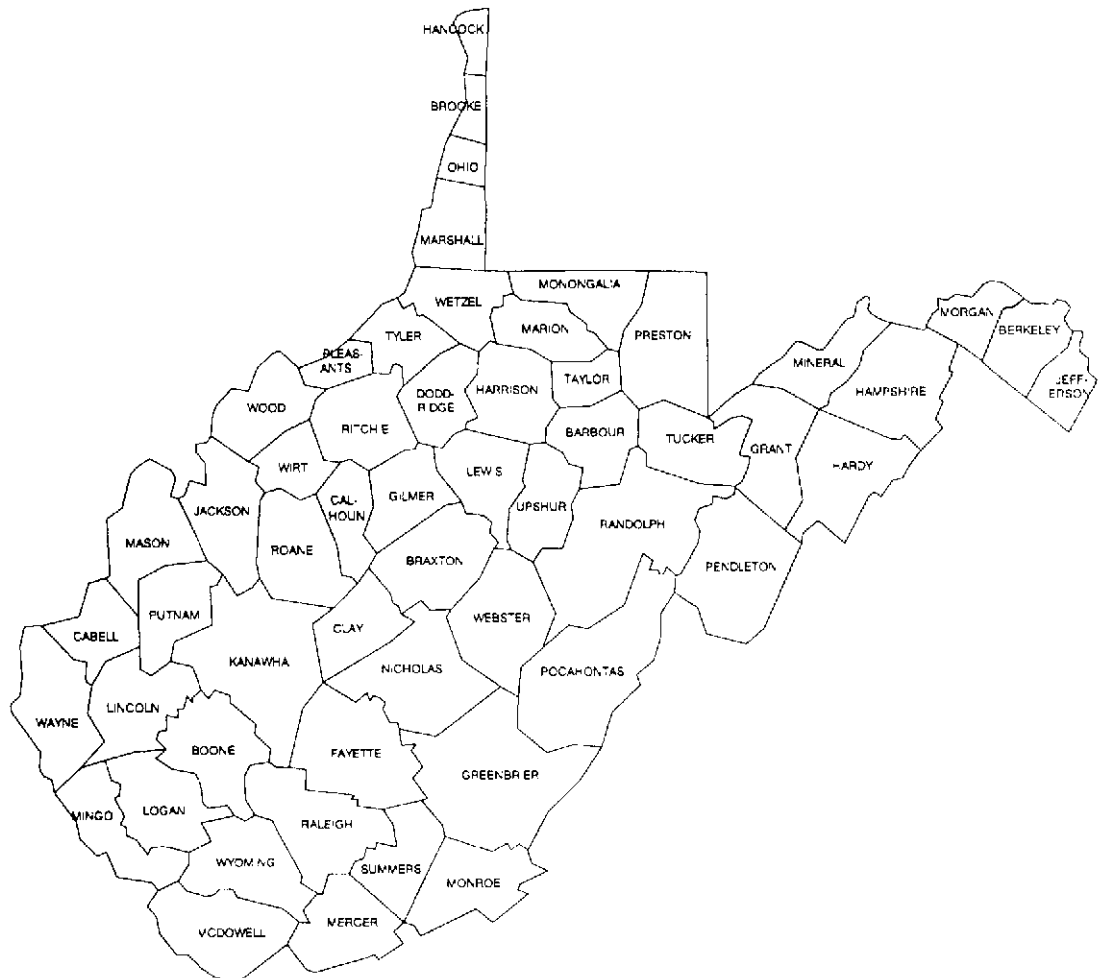


Table 103.-- Land area by county and land class, West Virginia, 1989

(In thousands of acres)

Counties	Land class				All classes ^b
	Timberland	Woodland ^a	Reserved	Nonforest land	
Braxton	269.6	.0	.0	58.7	328.2
Grant	235.6	.0	.6	71.2	307.4
Hampshire	330.0	.0	.0	82.4	412.4
Hardy	287.0	.0	3.8	83.3	374.1
Harrison	153.9	.0	1.4	111.3	266.6
Lewis	188.9	.0	.1	59.7	248.7
Mineral	148.8	.0	.7	61.3	210.8
Morgan	101.3	.0	6.1	39.6	147.0
Pendleton	349.3	14.6	.5	82.4	446.8
Pocahontas	484.4	.0	43.6	74.6	602.6
Preston	299.8	.0	.1	116.7	416.6
Randolph	553.0	.0	26.8	85.8	665.6
Tucker	198.9	12.4	20.8	37.3	269.4
Upshur	166.1	.0	.3	60.6	227.0
Webster	320.7	.0	11.8	23.4	355.9
Barbour/Taylor	215.6	.0	1.2	113.8	330.6
Berkeley/Jefferson	147.9	.0	2.0	189.8	339.7
Northeastern Unit	4,450.7	27.0	119.8	1,351.9	5,949.6
Boone	287.9	.0	.0	34.1	322.0
Clay	198.5	.0	.0	23.2	221.7
Fayette	342.3	.0	16.9	67.5	426.6
Greenbrier	493.5	.3	b	162.0	655.8
Kanawha	509.7	.0	.0	67.1	576.8
Logan	261.7	.0	3.3	26.6	291.6
McDowell	312.9	.0	.0	29.5	342.4
Mercer	192.9	.0	.5	75.7	269.1
Mingo	238.4	.0	.0	32.9	271.3
Monroe	203.7	.0	.6	98.5	302.8
Nicholas	341.8	.4	.0	73.8	415.9
Raleigh	300.4	.0	14.4	74.3	389.1
Summers	171.4	.0	8.4	46.3	226.1
Wyoming	284.1	.0	3.8	33.3	321.2
Southern Unit	4,139.2	.7	47.9	844.7	5,032.5
Cabell	131.4	.0	.3	48.9	180.6
Calhoun	144.5	.0	.1	34.8	179.5
Doddridge	180.5	.0	.0	24.7	205.2
Gilmer	173.0	.0	2.4	42.0	217.4
Jackson	209.3	.0	1.8	86.0	297.0
Lincoln	246.5	.0	.0	34.5	281.0
Marion	135.9	.0	1.2	62.3	199.4
Marshall	134.3	.0	c	61.0	195.3
Mason	169.0	.0	c	107.9	276.9
Monongalia	151.3	.0	.1	80.7	232.1
Putnam	161.9	.0	.0	59.8	221.6
Richie	227.2	.0	1.7	61.5	290.4
Roane	244.9	.0	2.3	62.6	309.7
Wayne	274.9	.0	1.1	48.9	324.9
Wetzel	190.9	.0	.0	38.7	229.6
Wirt	110.7	.0	c	39.7	150.4
Wood	140.1	.0	1.6	93.4	235.1
Brooke/Hancock/Ohio	103.9	.0	1.5	73.9	179.3
Pleasant/Tyler	197.5	.0	c	51.1	248.5
Northwestern Unit	3,327.7	.0	14.1	1,112.2	4,453.9
Total, all counties	11,917.7	27.7	181.1	3,308.8	15,436.0

^aIncludes 2,618 acres of reserved woodland.^bSource: 1981 United States Department of Commerce, Bureau of Census.^cLess than 100 acres.

Table 104.--Area of timberland by county and ownership class, West Virginia, 1989

(In thousands of acres)

Counties	Ownership class							All ownerships	SE	
	National Forest	Miscellaneous federal	State	County and municipal	Forest industry	Farmer	Corporate			Individual
Braxton	.0	12.0	6.6	.2	7.7	46.0	3.5	193.6	269.6	3.1
Grant	19.0	.0	.0	.0	8.0	34.3	50.7	123.6	235.6	4.0
Hampshire	2.2	.0	17.4	.0	16.3	32.7	23.9	237.5	330.0	3.3
Hardy	49.3	.0	.4	.0	4.1	43.9	41.6	147.7	287.0	3.3
Harrison	.0	.0	.0	.2	.0	17.7	22.0	114.0	153.9	7.6
Lewis	.0	.3	.4	.0	.0	.0	18.6	169.6	188.9	4.0
Mineral	0	.0	.0	.4	.0	3.7	25.6	119.1	148.8	6.1
Morgan	0	0	.4	.0	.0	8.3	8.3	84.3	101.3	5.7
Pendleton	127.0	0	.0	.0	9.2	11.6	13.5	188.0	349.3	3.9
Pocahontas	269.2	.6	22.5	.2	16.6	36.1	20.2	119.0	484.4	1.8
Preston	3.9	.0	1.0	.3	7.3	13.3	59.1	214.9	299.8	3.1
Randolph	171.6	.0	12.7	.0	109.1	.0	75.2	184.4	553.0	1.7
Tucker	75.2	.0	.0	.0	.0	.0	87.1	36.6	198.9	4.9
Upshur	.0	.0	.1	.4	27.1	13.6	17.2	107.7	166.1	4.9
Webster	62.0	.0	3	.1	100.9	8.1	32.5	116.8	320.7	1.9
Barbour/Taylor	.0	2.6	1.7	1	.0	4.2	34.3	172.7	215.6	4.4
Berkeley/Jefferson	0	.0	23.5	.0	.0	7.1	29.4	87.9	147.9	6.2
Northeastern Unit	779.4	15.5	87.0	1.9	306.2	280.4	562.8	2,417.4	4,450.7	.9
Boone	0	.0	9.0	.0	.0	.0	210.2	68.7	287.9	3.6
Clay	.0	.0	1.0	.0	4.4	.0	73.3	119.8	198.5	3.6
Fayette	.0	.0	2.9	.0	.0	.0	181.0	158.4	342.3	2.0
Greenbrier	190.1	.0	5.0	0	171.2	35.6	48.5	133.1	493.5	2.2
Kanawha	0	0	9.0	.0	.0	.0	181.2	319.5	509.7	2.0
Logan	0	.0	.0	0	17.5	.0	179.4	64.8	261.7	1.1
McDowell	0	0	8.2	.0	5.6	.0	217.3	81.8	312.9	1.7
Mercer	0	1	5.9	.0	.0	.0	26.9	160.0	192.9	3.4
Mingo	0	0	12.8	0	61.8	.0	81.0	82.8	238.4	3.1
Monroe	18.7	.0	1	0	13.5	31.6	34.8	104.4	203.7	3.5
Nicholas	21.1	0	0	.4	36.6	27.9	96.6	156.9	341.8	2.8

Table 104.-continued

(In thousands of acres)

Counties	Ownership class								All ownerships	SE
	National Forest	Miscellaneous federal	State	County and municipal	Forest industry	Farmer	Corporate	Individual		
Raleigh	.0	.0	.5	.0	.0	7.7	171.1	121.1	300.4	2.5
Summers	.0	10.8	17.0	.0	.0	.0	2.0	141.6	171.4	3.6
Wyoming	.0	.0	a	.0	.0	.0	214.8	69.3	284.1	2.3
Southern Unit	142.3	11.4	71.4	.4	310.6	102.8	1,718.3	1,782.0	4,139.2	.7
Cabell	.0	.0	.7	.0	.0	.0	13.9	116.8	131.4	6.9
Calhoun	.0	.0	.2	.0	30.4	4.6	.0	109.3	144.5	5.5
Doddridge	.0	.0	.1	.0	.0	.0	5.1	175.3	180.5	3.7
Gilmer	.0	.0	.3	.0	9.3	5.2	9.3	148.9	173.0	4.6
Jackson	.0	.0	c	.3	10.5	.0	7.1	191.4	209.3	5.4
Lincoln	.0	.0	7.0	.0	.0	.0	5.5	234.0	246.5	2.9
Marion	.0	.0	.0	1.1	.0	18.8	21.8	94.2	135.9	2.8
Marshall	.0	.0	c	.0	.0	27.0	16.1	91.2	134.3	4.9
Mason	.0	.0	13.0	.0	.0	4.2	3.5	148.3	169.0	3.5
Monongalia	.0	.1	13.5	.0	13.5	20.2	26.9	77.1	151.3	5.5
Putnam	.0	.0	.0	.0	.0	3.3	12.5	146.1	161.9	5.2
Richie	.0	.0	.0	c	35.6	.0	18.5	173.1	227.2	5.0
Roane	.0	.0	1.4	.5	4.8	19.1	.0	219.1	244.9	2.4
Wayne	.0	10.3	.0	.0	.0	10.1	14.8	239.7	274.9	2.4
Wetzel	.0	.0	11.3	.0	14.3	22.1	9.4	133.8	190.9	3.9
Wirt	.0	.0	.0	.0	49.0	.0	.0	61.7	110.7	7.9
Wood	.0	.0	.0	.3	14.8	4.2	.0	120.8	140.1	5.6
Brooke/Hancock/Ohio	.0	.0	.3	.0	.0	29.6	6.4	67.6	103.9	5.8
Pleasant/Tyler	.0	.0	2.7	.2	4.4	6.1	6.2	177.9	197.5	4.8
Northwestern Unit	.0	10.5	50.4	2.4	186.6	174.5	176.8	2,726.5	3,327.7	1.0
Total, all counties	921.7	37.4	208.8	4.7	803.4	557.7	2,457.9	6,925.9	11,917.6	2.6
SE	6.7	18.8	14.5	32.0	7.6	9.0	3.5	1.7	.5	

Table 105.--Area of timberland by county and forest-type group, West Virginia, 1989

(In thousands of acres)

Counties	Forest-type group									All groups	SE
	White/ red pine	Spruce/ fir	Loblolly/ shortleaf	Oak/ pine	Oak/ hickory	Oak/gum/ cypress	Elm/ash/ red maple	Northern hardwoods	Aspen/ birch		
Braxton	3.5	.0	.0	3.6	247.2	.0	3.5	11.8	.0	269.6	3.1
Grant	.0	0	11.2	3.1	173.5	.0	.0	41.4	6.5	235.6	4.0
Hampshire	5.2	.0	8.8	72.2	237.8	.0	6.0	.0	.0	330.0	3.3
Hardy	4.6	.0	24.9	49.8	192.1	.0	.0	15.6	.0	287.0	3.3
Harrison	.0	.0	.0	.0	111.7	.0	20.6	21.5	.0	153.9	7.6
Lewis	.0	.0	.0	.0	188.9	.0	.0	.0	.0	188.9	4.0
Mineral	.0	0	8.6	.0	124.2	.0	3.7	12.3	.0	148.8	6.1
Morgan	.0	0	4.7	7.9	73.8	.0	.0	14.9	.0	101.3	5.7
Pendleton	16.8	.0	29.8	12.4	226.3	.0	4.6	59.5	.0	349.3	3.9
Pocahontas	4.7	19.4	.0	23.1	266.7	.0	.0	170.5	.0	484.4	1.8
Preston	6.6	.0	.0	.0	219.5	.0	.0	73.7	.0	299.8	3.1
Randolph	.0	23.8	.0	.0	253.3	.0	4.0	272.0	.0	553.0	1.7
Tucker	20.7	4.0	.0	.0	71.3	.0	.0	96.4	6.5	198.9	4.9
Upshur	.0	.0	.0	.0	130.0	.0	3.5	32.6	.0	166.1	4.9
Webster	.0	.0	.0	.0	204.4	.0	2.9	113.4	.0	320.7	1.9
Barbour/Taylor	.0	0	.0	.0	178.2	.0	3.7	33.7	.0	215.6	4.4
Berkeley/Jefferson	.0	.0	5.8	9.0	108.4	.0	3.5	21.1	.0	147.9	6.2
Northeastern Unit	62.2	47.2	93.9	181.0	3,007.1	.0	55.9	990.5	12.9	4,450.7	.9
Boone	.0	.0	.0	3.3	249.5	.0	3.3	31.8	.0	287.9	3.6
Clay	.0	0	.0	.0	166.1	.0	.0	32.4	.0	198.5	3.6
Fayette	7.9	.0	.0	.0	284.8	.0	4.7	44.9	.0	342.3	2.0
Greenbrier	19.1	.0	9.6	23.2	334.6	.0	.0	106.9	.0	493.5	2.2
Kanawha	.0	.0	4.7	12.7	479.3	.0	5.1	8.0	.0	509.7	2.0
Logan	.0	.0	.0	.0	230.8	.0	.0	30.9	.0	261.7	1.1
McDowell	.0	.0	.0	.0	292.9	.0	.0	20.0	.0	312.9	1.7
Mercer	10.2	.0	7.3	3.1	158.9	.0	.0	13.3	.0	192.9	3.4
Mingo	0	.0	.0	.0	219.7	.0	.0	18.7	.0	238.4	3.1
Monroe	6.8	0	11.1	32.3	144.0	.0	.0	9.5	.0	203.7	3.5
Nicholas	3.7	0	.0	.0	277.0	.0	.0	61.2	.0	341.8	2.8

Table 105.-continued

(In thousands of acres)

Counties	Forest-type group									All groups	SE
	White/ red pine	Spruce/ fir	Loblolly/ shortleaf	Oak/ pine	Oak/ hickory	Oak/gum/ cypress	Elm/ash/ red maple	Northern hardwoods	Aspen/ birch		
Raleigh	4.9	.0	.0	6.1	250.3	.0	11.3	27.9	.0	300.4	2.5
Summers	.0	.0	10.7	21.8	115.7	.0	.0	23.2	.0	171.4	3.6
Wyoming	11.4	.0	.0	.0	267.1	.0	.0	5.6	.0	284.1	2.3
Southern Unit	64.0	.0	43.5	102.5	3,470.7	.0	24.4	434.2	.0	4,139.2	.7
Cabell	.0	.0	11.3	5.0	101.7	.0	9.0	4.4	.0	131.4	6.9
Calhoun	.0	.0	.0	.0	127.7	.0	4.6	12.3	.0	144.5	5.5
Doddridge	.0	.0	.0	.0	156.0	.0	.0	24.6	.0	180.5	3.7
Gilmer	.0	.0	5.3	5.0	157.8	.0	5.0	.0	.0	173.0	4.6
Jackson	.0	.0	17.6	15.0	176.6	.0	.0	.0	.0	209.3	5.4
Lincoln	.0	.0	13.8	7.2	220.2	.0	.0	5.3	.0	246.5	2.9
Marion	.0	.0	.0	.0	96.8	.0	6.3	32.8	.0	135.9	2.8
Marshall	.0	.0	.0	.0	54.5	.0	19.8	60.1	.0	134.3	4.9
Mason	.0	.0	7.4	21.1	125.3	.0	.0	15.3	.0	169.0	3.5
Monongalia	.0	.0	.0	.0	128.9	.0	.0	22.4	.0	151.3	5.5
Putnam	.0	.0	12.5	8.1	135.5	.0	5.8	.0	.0	161.9	5.2
Richie	4.6	.0	10.2	32.1	180.3	.0	.0	.0	.0	227.2	5.0
Roane	.0	.0	8.7	21.3	209.4	.0	5.6	.0	.0	244.9	2.4
Wayne	.0	.0	4.9	9.3	251.1	.0	5.2	4.4	.0	274.9	2.4
Wetzel	.0	.0	.0	.0	145.2	.0	4.5	36.8	4.5	190.9	3.9
Wirt	.0	.0	8.3	6.4	91.2	.0	4.9	.0	.0	110.7	7.9
Wood	.0	.0	10.4	17.7	107.1	.0	4.9	.0	.0	140.1	5.6
Brooke/Hancock/Ohio	.0	.0	.0	.0	60.7	.0	13.5	29.7	.0	103.9	5.8
Pleasant/Tyler	.0	.0	1.7	12.2	170.3	.0	4.4	8.8	.0	197.5	4.8
Northwestern Unit	4.6	.0	112.1	160.3	2,696.0	.0	93.4	256.8	4.5	3,327.7	1.0
Total, all counties	130.8	47.2	249.4	443.8	9,173.9	.0	173.7	1,681.5	17.4	11,917.7	.5
SE	18.8	37.0	14.4	10.2	1.2	.0	16.1	5.0	58.5	.5	

Table 106.--Area of timberland by county and stand-size class, West Virginia, 1989

(In thousands of acres)

Counties	Stand-size class				All classes	SE
	Sawtimber	Poletimber	Sapling and seedling	Nonstocked		
Braxton	186.1	64.4	19.1	.0	269.6	3.1
Grant	114.7	89.2	31.8	.0	235.6	4.0
Hampshire	219.9	87.8	22.3	.0	330.0	3.3
Hardy	167.7	101.3	18.1	.0	287.0	3.3
Harrison	91.2	51.6	11.1	.0	153.9	7.6
Lewis	111.8	51.6	25.5	.0	188.9	4.0
Mineral	73.4	55.9	19.5	.0	148.8	6.1
Morgan	66.2	19.8	15.3	.0	101.3	5.7
Pendleton	240.5	81.1	27.8	.0	349.3	3.9
Pocahontas	353.1	95.6	35.6	.0	484.4	1.8
Preston	209.7	67.2	22.9	.0	299.8	3.1
Randolph	395.8	88.1	69.1	.0	553.0	1.7
Tucker	155.0	27.9	16.0	.0	198.9	4.9
Upshur	114.6	39.1	12.5	.0	166.1	4.9
Webster	268.0	31.7	21.0	.0	320.7	1.9
Barbour/Taylor	132.1	54.0	29.5	.0	215.6	4.4
Berkeley/Jefferson	82.8	38.2	26.9	.0	147.9	6.2
Northeastern Unit	2,982.5	1,044.4	423.8	.0	4,450.7	.9
Boone	229.3	37.8	18.3	2.6	287.9	3.6
Clay	138.4	55.8	4.4	.0	198.5	3.6
Fayette	242.7	70.8	28.8	.0	342.3	2.0
Greenbrier	294.2	146.3	53.0	.0	493.5	2.2
Kanawha	344.8	121.3	43.7	.0	509.7	2.0
Logan	168.2	68.6	24.9	.0	261.7	1.1
McDowell	206.9	87.0	19.0	.0	312.9	1.7
Mercer	85.4	88.1	19.4	.0	192.9	3.4
Mingo	170.9	52.5	15.0	.0	238.4	3.1
Monroe	74.6	86.1	43.0	.0	203.7	3.5
Nicholas	256.9	65.7	19.2	.0	341.8	2.8
Raleigh	223.6	59.4	17.3	.0	300.4	2.5
Summers	94.8	59.4	17.3	.0	171.4	3.6
Wyoming	197.9	62.6	23.5	.0	284.1	2.3
Southern Unit	2,728.6	1,061.4	346.7	2.6	4,139.2	.7
Cabell	81.8	25.0	24.6	.0	131.4	6.9
Calhoun	65.6	71.5	7.5	.0	144.5	5.5
Doddridge	103.4	59.1	18.1	.0	180.5	3.7
Gilmer	82.0	70.8	20.2	.0	173.0	4.6
Jackson	94.5	66.0	48.7	.0	209.3	5.4
Lincoln	103.9	127.0	15.6	.0	246.5	2.9
Marion	95.8	16.9	23.1	.0	135.9	2.8
Marshall	90.7	35.5	8.1	.0	134.3	4.9
Mason	89.7	37.1	42.2	.0	169.0	3.5
Monongalia	83.6	49.8	17.9	.0	151.3	5.5
Putnam	113.2	24.6	24.0	.0	161.9	5.2
Richie	152.4	55.7	19.1	.0	227.2	5.0
Roane	124.7	79.4	40.7	.0	244.9	2.4
Wayne	148.4	88.6	37.9	.0	274.9	2.4
Wetzel	135.2	46.3	9.4	.0	190.9	3.9
Wirt	68.2	24.5	18.1	.0	110.7	7.9
Wood	81.5	37.5	21.1	.0	140.1	5.6
Brooke/Hancock/Ohio	53.8	45.2	4.9	.0	103.9	5.8
Pleasant/Tyler	114.9	53.3	29.2	.0	197.5	4.8
Northwestern Unit	1,883.5	1,013.9	430.3	.0	3,327.7	1.0
Total, all counties	7,594.6	3,119.7	1,200.9	2.6	11,917.7	.5
SE	1.5	3.4	6.1	100.0	.5	

Table 107.--Area of Timberland by county and cubic-foot stand-volume class, West Virginia, 1989

(In thousands of acres)

Counties	Stand-volume class (cubic feet per acre)						All classes	SE
	0-499	500-999	1000-1499	1500-1999	2000-2499	2500+		
Braxton	15.5	36.9	40.1	63.5	51.2	62.4	269.6	3.1
Grant	38.2	54.6	71.2	29.0	28.7	13.9	235.6	4.0
Hampshire	47.4	59.3	112.2	69.9	32.4	8.8	330.0	3.3
Hardy	31.7	44.0	108.9	40.0	28.4	33.9	287.0	3.3
Harrison	27.7	15.6	66.8	27.5	11.3	5.0	153.9	7.6
Lewis	28.9	15.2	56.7	54.3	23.1	10.7	188.9	4.0
Mineral	4.8	59.6	25.6	19.6	19.6	19.6	148.8	6.1
Morgan	10.2	11.5	21.3	34.6	11.1	12.6	101.3	5.7
Pendleton	34.1	70.6	66.9	71.5	54.5	51.7	349.3	3.9
Pocahontas	30.2	24.9	65.7	111.5	84.5	167.5	484.4	1.8
Preston	23.0	19.0	54.0	52.4	67.1	84.3	299.8	3.1
Randolph	40.8	62.5	136.4	105.4	98.8	109.2	553.0	1.7
Tucker	30.6	4.0	29.3	54.6	37.2	43.2	198.9	4.9
Upshur	16.0	25.4	14.5	67.8	26.3	16.2	166.1	4.9
Webster	19.3	18.5	23.3	37.0	73.4	149.3	320.7	1.9
Barbour/Taylor	37.5	24.6	57.6	26.6	40.0	29.4	215.6	4.4
Berkeley/Jefferson	24.9	28.5	43.4	26.7	9.4	15.0	147.9	6.2
Northeastern Unit	460.7	574.6	994.0	891.9	696.8	832.8	4,450.7	.9
Boone	8.1	40.1	79.9	63.2	56.6	39.9	287.9	3.6
Clay	6.1	4.4	24.0	74.4	52.2	37.3	198.5	3.6
Fayette	24.1	13.5	93.4	65.9	75.0	70.4	342.3	2.0
Greenbrier	40.8	46.4	114.6	153.1	60.5	78.0	493.5	2.2
Kanawha	29.3	69.8	125.6	122.0	116.5	46.6	509.7	2.0
Logan	13.5	78.8	59.8	61.7	31.9	16.0	261.7	1.1
McDowell	24.7	27.8	40.1	100.4	62.0	58.0	312.9	1.7
Mercer	15.8	21.0	38.5	45.1	36.0	36.4	192.9	3.4
Mingo	9.9	33.7	76.9	56.1	37.9	23.9	238.4	3.1
Monroe	22.0	36.9	59.0	41.2	39.9	4.8	203.7	3.5
Nicholas	26.5	20.0	54.6	60.9	71.8	108.0	341.8	2.8
Raleigh	17.3	37.4	46.5	74.4	41.1	83.6	300.4	2.5
Summers	19.2	5.9	39.8	40.3	23.5	42.7	171.4	3.6
Wyoming	5.7	32.1	65.0	78.9	34.0	68.3	284.1	2.3
Southern Unit	263.1	467.9	917.5	1,037.8	739.0	713.9	4,139.2	.7
Cabell	4.4	29.1	30.0	44.3	19.0	4.7	131.4	6.9
Calhoun	1.5	19.5	32.1	41.3	30.4	19.7	144.5	5.5
Doddridge	6.2	19.3	30.0	64.3	40.6	20.1	180.5	3.7
Gilmer	25.4	5.0	55.9	46.3	23.5	16.8	173.0	4.6
Jackson	38.7	36.1	38.7	36.9	27.9	31.1	209.3	5.4
Lincoln	7.1	41.9	80.4	89.7	27.3	.0	246.5	2.9
Marion	9.7	13.5	45.0	30.9	13.5	23.3	135.9	2.8
Marshall	6.9	37.9	33.9	19.0	27.8	8.8	134.3	4.9
Mason	22.7	31.0	26.9	56.4	26.8	5.1	169.0	3.5
Monongalia	17.9	25.1	24.7	29.8	26.9	26.8	151.3	5.5
Putnam	5.0	28.1	26.4	63.5	19.5	19.3	161.9	5.2
Richie	14.4	13.5	35.7	50.7	88.2	24.7	227.2	5.0
Roane	21.0	52.3	54.0	52.4	35.0	30.2	244.9	2.4
Wayne	18.0	56.6	59.6	92.3	24.1	24.4	274.9	2.4
Wetzel	10.2	22.1	42.8	34.3	52.6	29.0	190.9	3.9
Wirt	.0	27.9	24.5	22.6	29.4	6.4	110.7	7.9
Wood	8.7	27.3	36.5	41.0	22.4	4.2	140.1	5.6
Brooke/Hancock/Ohio	11.2	19.0	36.8	26.0	10.7	.0	103.9	5.8
Pleasant/Tyler	28.5	15.7	63.9	39.4	25.4	24.5	197.5	4.8
Northwestern Unit	257.6	520.9	777.9	881.3	571.0	319.0	3,327.7	1.0
Total, all counties	981.4	1,563.4	2,689.4	2,810.9	2,006.7	1,865.8	11,917.7	.5
SE	6.3	5.1	3.7	3.7	4.6	4.7	5	

Table 108.--Area of timberland by county and green ton stand-volume class, West Virginia, 1989

(In thousands of acres)

Counties	Stand-volume class (green tons per acre)									All classes	SE
	0-24	25-49	50-74	75-99	100-124	125-149	150-174	175-199	200+		
Braxton	10.8	11.3	18.9	65.9	55.7	57.0	20.6	21.7	7.7	269.6	3.1
Grant	25.8	15.3	40.5	53.9	34.7	26.3	19.0	14.2	5.9	235.6	4.0
Hampshire	37.4	31.6	56.9	80.2	61.5	40.4	13.2	3.6	5.2	330.0	3.3
Hardy	13.0	30.2	41.2	63.0	54.1	46.8	23.8	14.9	.0	287.0	3.3
Harrison	8.8	21.8	38.3	38.8	27.1	7.9	6.2	.0	5.0	153.9	7.6
Lewis	25.5	14.1	26.7	39.7	46.4	30.2	6.3	.0	.0	188.9	4.0
Mineral	.0	17.1	47.4	30.3	12.3	19.6	17.1	5.0	.0	148.8	6.1
Morgan	10.2	.0	11.1	34.7	25.9	16.2	3.2	.0	.0	101.3	5.7
Pendleton	9.3	38.8	67.8	42.9	57.4	70.7	14.5	24.1	23.7	349.3	3.9
Pocahontas	18.9	11.3	33.1	81.9	101.6	132.7	44.1	47.9	13.0	484.4	1.8
Preston	17.1	5.9	39.0	61.2	51.1	66.4	30.2	19.3	9.6	299.8	3.1
Randolph	25.9	10.5	99.0	118.8	145.8	57.3	53.9	27.7	14.1	553.0	1.7
Tucker	6.5	12.1	35.3	37.9	35.3	38.6	18.6	4.6	10.0	198.9	4.9
Upshur	8.4	19.3	13.7	40.6	22.6	38.0	23.4	.0	.0	166.1	4.9
Webster	6.9	19.6	17.9	28.8	87.0	81.4	58.6	11.0	9.5	320.7	1.9
Barbour/Taylor	29.5	15.5	34.3	17.0	84.2	25.7	11.0	.0	.0	215.6	4.4
Berkeley/Jefferson	11.5	28.5	13.3	42.0	22.3	18.7	5.7	5.8	.0	147.9	6.2
Northeastern Unit	265.5	301.3	634.4	877.7	924.8	773.8	369.5	199.8	103.8	4,450.7	.9
Boone	5.8	5.6	38.4	57.3	79.0	62.5	28.2	11.2	.0	287.9	3.6
Clay	.0	6.1	17.9	62.7	57.8	44.7	5.0	5.0	4.4	198.5	3.6
Fayette	11.7	21.3	35.9	70.0	60.6	72.9	36.8	23.9	9.4	342.3	2.0
Greenbrier	26.8	27.8	94.9	61.0	133.2	94.4	44.8	10.6	.0	493.5	2.2
Kanawha	12.8	38.6	77.0	132.5	121.1	86.4	42.2	9.1	.0	509.7	2.0
Legan	2.7	39.6	45.0	60.3	57.4	24.7	16.0	10.6	5.3	261.7	1.1
McDowell	10.1	14.5	25.5	66.8	99.9	47.1	37.9	.0	11.0	312.9	1.7
Mercer	8.5	10.8	14.0	52.5	27.0	48.2	12.6	12.6	6.7	192.9	3.4
Mingo	.0	9.4	62.8	52.0	67.0	42.6	.0	4.7	.0	238.4	3.1
Monroe	16.2	37.7	32.7	40.4	42.0	19.0	20.9	4.8	.0	203.7	3.5
Nicholas	21.3	12.6	37.2	44.6	70.9	85.4	50.1	13.8	.0	341.8	2.8

Table 108.--continued

(In thousands of acres)

Counties	Stand-volume class (green tons per acre)									All classes	SE
	0-24	25-49	50-74	75-99	100-124	125-149	150-174	175-199	200+		
Raleigh	7.2	9.4	58.3	52.6	46.8	66.3	31.8	28.0	.0	300.4	2.5
Summers	4.9	14.3	27.0	35.9	42.0	8.5	13.0	4.0	21.8	171.4	3.6
Wyoming	.0	17.2	45.8	76.7	39.4	62.6	22.9	14.0	5.6	284.1	2.3
Southern Unit	128.1	244.9	607.3	865.2	950.1	765.4	362.0	152.0	64.1	4,139.2	.7
Cabell	4.4	15.3	9.3	37.5	46.0	4.7	14.3	.0	.0	131.4	6.9
Calhoun	.0	6.1	19.5	41.3	50.3	15.3	4.6	.0	7.5	144.5	5.5
Doddridge	.0	19.5	36.4	41.0	38.0	33.7	11.8	.0	.0	180.5	3.7
Gilmer	15.2	14.8	18.9	37.4	42.0	30.7	9.3	.0	4.6	173.0	4.6
Jackson	22.3	14.4	55.4	42.1	34.8	24.7	5.2	10.4	.0	209.3	5.4
Lincoln	4.2	12.6	44.3	77.8	58.5	43.6	5.5	.0	.0	246.5	2.9
Marion	.0	18.7	14.9	45.6	24.2	8.1	15.5	.0	9.0	135.9	2.8
Marshall	.0	12.0	28.3	40.6	35.1	8.8	5.1	4.4	.0	134.3	4.9
Mason	18.6	8.4	32.0	48.6	37.0	19.4	5.1	.0	.0	169.0	3.5
Monongalia	11.2	11.2	29.7	36.5	24.7	15.7	6.7	13.5	2.2	151.3	5.5
Putnam	5.0	10.8	26.4	44.7	47.5	17.8	.0	9.6	.0	161.9	5.2
Richie	.0	20.0	40.4	46.1	54.0	44.9	17.1	4.6	.0	227.2	5.0
Roane	7.7	34.8	35.6	57.2	47.7	33.3	28.6	.0	.0	244.9	2.4
Wayne	7.9	24.9	36.9	79.3	72.8	38.6	4.9	9.6	.0	274.9	2.4
Wetzel	.0	27.8	33.0	29.0	57.9	33.4	9.8	.0	.0	190.9	3.9
Wirt	.0	18.1	14.7	21.1	45.6	9.8	1.5	.0	.0	110.7	7.9
Wood	4.4	11.7	43.8	48.0	19.4	12.7	.0	.0	.0	140.1	5.6
Brooke/Hancock/Ohio	4.9	12.7	12.7	40.3	19.0	7.2	7.2	.0	.0	103.9	5.8
Pleasant/Tyler	16.4	5.8	54.2	71.1	16.6	24.5	4.4	4.4	.0	197.5	4.8
Northwestern Unit	122.2	299.7	586.4	885.1	771.4	426.8	156.4	56.5	23.2	3,327.7	1.0
Total, all counties	515.9	845.9	1,828.1	2,628.0	2,646.3	1,966.0	888.0	408.3	191.1	11,917.7	.5
SE	8.7	7.5	4.8	3.8	3.9	4.7	7.5	11.3	17.2	.5	

Table 109.--Area of timberland by county and stocking class of growing-stock trees, West Virginia, 1989

(In thousands of acres)

Counties	Stocking class					All classes	SE
	Nonstocked	Poorly stocked	Moderately stocked	Fully stocked	Over-stocked		
Braxton	.0	23.0	46.9	100.0	99.7	269.6	3.1
Grant	5.5	30.1	55.9	78.0	66.1	235.6	4.0
Hampshire	.0	32.6	87.5	79.1	130.9	330.0	3.3
Hardy	.0	10.0	34.2	100.2	142.7	287.0	3.3
Harrison	.0	23.1	77.0	34.5	19.2	153.9	7.6
Lewis	.0	25.5	41.7	56.9	64.8	188.9	4.0
Mineral	.0	.0	60.8	46.4	41.6	148.8	6.1
Morgan	.0	5.1	5.1	47.2	44.0	101.3	5.7
Pendleton	.0	21.3	126.5	91.9	109.6	349.3	3.9
Pocahontas	.0	7.8	83.6	267.5	125.4	484.4	1.8
Preston	.0	10.2	48.4	107.3	133.8	299.8	3.1
Randolph	.0	25.2	115.6	216.0	196.3	553.0	1.7
Tucker	.0	10.7	38.6	92.4	57.2	198.9	4.9
Upshur	.0	7.6	29.7	51.2	77.6	166.1	4.9
Webster	.0	.0	47.0	66.8	206.9	320.7	1.9
Barbour/Taylor	3.8	18.4	38.2	87.2	68.0	215.6	4.4
Berkeley/Jefferson	.0	21.9	49.6	30.1	46.3	147.9	6.2
Northeastern Unit	9.3	272.5	986.1	1,552.8	1,630.1	4,450.7	.9
Boone	2.6	11.4	64.7	152.4	56.9	287.9	3.6
Clay	.0	.0	48.8	96.3	53.4	198.5	3.6
Fayette	.0	13.0	130.6	128.4	70.3	342.3	2.0
Greenbrier	.0	22.2	109.2	201.4	160.7	493.5	2.2
Kanawha	.0	31.9	157.7	243.4	76.8	509.7	2.0
Logan	2.7	16.0	113.3	97.8	31.9	261.7	1.1
McDowell	.0	14.6	55.6	143.7	98.9	312.9	1.7
Mercer	.0	5.0	36.7	79.1	72.1	192.9	3.4
Mingo	.0	4.7	76.3	133.5	23.9	238.4	3.1
Monroe	.0	21.5	34.3	97.5	50.4	203.7	3.5
Nicholas	.0	25.1	65.1	116.4	135.3	341.8	2.8
Raleigh	4.0	8.8	56.3	142.1	89.2	300.4	2.5
Summers	.0	.0	33.8	66.0	71.6	171.4	3.6
Wyoming	.0	14.3	68.4	139.4	62.0	284.1	2.3
Southern Unit	9.3	188.4	1,050.8	1,837.4	1,053.4	4,139.2	.7
Cabell	.0	.0	42.9	55.6	33.0	131.4	6.9
Calhoun	.0	12.0	38.2	71.5	22.8	144.5	5.5
Doddridge	.0	20.9	62.7	74.1	22.8	180.5	3.7
Gilmer	.0	30.0	18.9	87.5	36.5	173.0	4.6
Jackson	.0	34.6	75.8	71.0	27.9	209.3	5.4
Lincoln	.0	3.0	85.1	112.0	46.4	246.5	2.9
Marion	.0	.0	68.8	36.6	30.5	135.9	2.8
Marshall	.0	12.4	43.3	53.0	25.6	134.3	4.9
Mason	.0	7.4	65.8	67.6	28.2	169.0	3.5
Monongalia	.0	17.9	32.0	45.3	56.1	151.3	5.5
Putnam	.0	5.8	40.3	66.3	49.5	161.9	5.2
Richie	.0	.0	65.6	116.6	45.1	227.2	5.0
Roane	.0	19.7	83.0	81.0	61.2	244.9	2.4
Wayne	.0	9.8	103.9	86.9	74.3	274.9	2.4
Wetzel	.0	18.1	53.0	105.6	14.3	190.9	3.9
Wirt	.0	9.8	53.9	45.6	1.5	110.7	7.9
Wood	.0	9.4	44.2	71.8	14.6	140.1	5.6
Brooke/Hancock/Ohio	.0	11.2	46.9	35.1	10.7	103.9	5.8
Pleasant/Tyler	.0	22.0	73.0	84.9	17.6	197.5	4.8
Northwestern Unit	.0	244.1	1,097.1	1,368.0	618.5	3,327.7	1.0
Total, all counties	18.6	705.0	3,134.0	4,758.2	3,301.9	11,917.7	.5
SE	46.5	8.0	3.4	2.6	3.3	.5	

Table 110.--Area of timberland by county and site productivity class, West Virginia, 1989

(In thousands of acres)

Counties	Site productivity class				All classes	SE
	Very good (120+)	Good (85-119)	Fair (50- 84)	Poor (20- 49)		
Braxton	12.9	88.7	80.5	87.5	269.6	3.1
Grant	20.1	16.9	36.8	161.8	235.6	4.0
Hampshire	11.2	12.4	50.5	255.9	330.0	3.3
Hardy	11.5	38.3	73.8	163.5	287.0	3.3
Harrison	25.0	55.2	52.1	21.7	153.9	7.6
Lewis	47.0	56.1	51.4	34.4	188.9	4.0
Mineral	5.0	28.0	20.8	95.1	148.8	6.1
Morgan	4.7	4.7	12.6	79.3	101.3	5.7
Pendleton	32.4	14.0	52.6	250.4	349.3	3.9
Pocahontas	11.5	11.5	62.8	398.5	484.4	1.8
Preston	34.7	83.4	125.4	56.3	299.8	3.1
Randolph	41.1	78.8	193.1	240.0	553.0	1.7
Tucker	23.9	19.3	33.2	122.4	198.9	4.9
Upshur	21.7	51.6	39.9	52.9	166.1	4.9
Webster	8.1	77.7	116.8	118.1	320.7	1.9
Barbour/Taylor	28.1	63.5	68.1	56.0	215.6	4.4
Berkeley/Jefferson	.0	12.7	64.1	71.1	147.9	6.2
Northeastern Unit	338.9	712.8	1,134.3	2,264.8	4,450.7	.9
Boone	32.1	111.3	107.0	37.5	287.9	3.6
Clay	14.9	63.9	81.4	38.3	198.5	3.6
Fayette	45.8	100.4	109.1	87.0	342.3	2.0
Greenbrier	73.0	104.3	97.8	218.5	493.5	2.2
Kanawha	26.0	171.4	170.5	141.9	509.7	2.0
Logan	69.6	80.1	38.8	73.1	261.7	1.1
McDowell	55.7	141.0	69.4	46.8	312.9	1.7
Mercer	17.1	36.4	65.1	74.3	192.9	3.4
Mingo	56.6	95.1	67.0	19.7	238.4	3.1
Monroe	16.1	55.7	45.7	86.1	203.7	3.5
Nicholas	48.6	88.8	105.5	99.0	341.8	2.8
Raleigh	45.8	105.9	65.6	83.2	300.4	2.5
Summers	4.0	46.8	51.2	69.5	171.4	3.6
Wyoming	50.7	116.7	67.1	49.6	284.1	2.3
Southern Unit	555.9	1,317.7	1,141.1	1,124.4	4,139.2	.7
Cabell	.0	44.6	38.6	48.2	131.4	6.9
Calhoun	.0	41.1	66.9	36.5	144.5	5.5
Doddridge	11.0	36.7	79.8	53.0	180.5	3.7
Gilmer	5.0	27.3	69.6	71.1	173.0	4.6
Jackson	.0	44.1	81.7	83.5	209.3	5.4
Lincoln	13.8	86.2	117.6	28.9	246.5	2.9
Marion	11.5	33.9	58.4	32.1	135.9	2.8
Marshall	26.8	18.6	28.1	60.8	134.3	4.9
Mason	10.2	28.7	82.3	47.8	169.0	3.5
Monongalia	36.5	22.5	22.3	69.9	151.3	5.5
Putnam	31.3	27.2	55.8	47.6	161.9	5.2
Richie	9.4	50.7	98.5	68.6	227.2	5.0
Roane	22.8	42.9	85.0	94.2	244.9	2.4
Wayne	13.8	43.3	122.6	95.3	274.9	2.4
Wetzel	17.8	61.9	42.2	69.0	190.9	3.9
Wirt	18.1	26.0	42.2	24.5	110.7	7.9
Wood	16.6	40.3	60.5	22.8	140.1	5.6
Brooke/Hancock/Ohio	22.7	13.4	32.4	35.3	103.9	5.8
Pleasant/Tyler	16.7	75.8	50.8	54.1	197.5	4.8
Northwestern Unit	283.9	765.2	1,235.3	1,043.3	3,327.7	1.0
Total, all counties	1,178.7	2,795.7	3,510.7	4,432.5	11,917.7	.5
SE	6.2	3.6	3.1	2.5	.5	

Table 111.--Net volume of growing-stock trees on timberland by county and forest-type group, West Virginia, 1989

(In millions of cubic feet)

Counties	Forest-type group									All groups	SE
	White/ red pine	Spruce/ fir	Loblolly/ shortleaf	Oak/ pine	Oak/ hickory	Oak/gum/ cypress	Elm/ash/ red maple	Northern hardwoods	Aspen/ birch		
Braxton	.8	.0	.0	6.9	455.3	.0	8.6	13.9	.0	485.4	8.6
Grant	.0	.0	9.9	.6	209.6	.0	.0	67.1	.0	287.1	9.1
Hampshire	12.7	.0	14.4	53.0	319.1	.0	3.8	.0	.0	403.0	5.8
Hardy	3.3	.0	24.2	82.4	261.9	.0	.0	22.0	.0	393.7	6.6
Harrison	.0	.0	.0	.0	137.9	.0	24.1	17.2	.0	179.1	10.5
Lewis	.0	.0	.0	.0	250.8	.0	.0	.0	.0	250.8	7.3
Mineral	.0	.0	6.5	.0	164.0	.0	6.0	24.5	.0	201.1	10.6
Morgan	.0	.0	12.2	11.8	110.7	.0	.0	16.9	.0	151.6	9.7
Pendleton	32.9	.0	33.1	15.9	333.1	.0	3.7	100.9	.0	519.7	6.4
Pocahontas	3.1	58.2	.0	31.5	495.2	.0	.0	386.7	.0	974.7	4.6
Preston	6.9	.0	.0	.0	423.9	.0	.0	153.0	.0	583.8	5.6
Randolph	.0	42.5	.0	.0	405.8	.0	.3	479.9	.0	928.5	5.0
Tucker	44.0	2.8	.0	.0	140.3	.0	.0	159.6	.0	346.8	6.3
Upshur	.0	.0	.0	.0	187.8	.0	3.0	61.2	.0	252.0	6.8
Webster	.0	.0	.0	.0	487.8	.0	.0	239.2	.0	727.0	6.5
Barbour/Taylor	.0	.0	.0	.0	258.0	.0	6.6	35.7	.0	300.2	7.5
Berkeley/Jefferson	.0	.0	8.7	9.5	141.8	.0	4.1	20.5	.0	184.6	12.2
Northeastern Unit	103.8	103.5	109.0	211.6	4,782.9	.0	60.1	1,798.1	.0	7,169.0	1.7
Boone	.0	.0	.0	2.9	388.2	.0	4.8	65.5	.0	461.4	6.3
Clay	.0	.0	.0	.0	325.3	.0	.0	57.5	.0	382.8	5.4
Payette	15.6	.0	.0	.0	506.0	.0	6.8	68.3	.0	596.6	5.6
Greenbrier	54.6	.0	14.7	44.2	492.7	.0	.0	191.9	.0	798.1	4.8
Kanawha	.0	.0	13.4	9.2	761.5	.0	1.4	6.1	.0	791.5	4.3
Logan	.0	.0	.0	.0	302.8	.0	.0	49.8	.0	352.6	7.1
McDowell	.0	.0	.0	.0	508.7	.0	.0	41.7	.0	550.4	5.0
Mercer	23.4	.0	6.6	6.9	278.6	.0	.0	15.6	.0	331.1	6.0
Mingo	.0	.0	.0	.0	334.7	.0	.0	26.1	.0	360.7	7.2
Monroe	5.9	.0	8.1	41.9	197.8	.0	.0	13.5	.0	267.1	6.3
Nicholas	9.6	.0	.0	.0	522.6	.0	.0	119.7	.0	651.8	5.5

Table 111.--continued

(In millions of cubic feet)

Counties	Forest-type group									All groups	SE
	White/ red pine	Spruce/ fir	Loblolly/ shortleaf	Oak/ pine	Oak/ hickory	Oak/gum/ cypress	Elm/ash/ red maple	Northern hardwoods	Aspen/ birch		
Raleigh	2.7	.0	.0	19.5	466.1	.0	10.5	55.5	.0	554.2	6.4
Summers	.0	.0	17.6	49.5	197.0	.0	.0	39.4	.0	303.4	8.7
Wyoming	24.4	.0	.0	.0	466.7	.0	.0	10.3	.0	501.3	6.5
Southern Unit	136.0	.0	60.3	174.1	5,748.5	.0	23.5	760.7	.0	6,903.2	1.6
Cabell	.0	.0	12.8	6.4	157.8	.0	8.5	.0	.0	185.5	8.0
Calhoun	.0	.0	.0	.0	212.8	.0	6.2	26.9	.0	245.9	10.1
Doddridge	.0	.0	.0	.0	262.9	.0	.0	30.6	.0	293.5	5.0
Gilmer	.0	.0	.3	.3	249.1	.0	3.9	.0	.0	253.6	6.8
Jackson	.0	.0	16.5	18.1	254.6	.0	.0	.0	.0	289.2	8.6
Lincoln	.0	.0	19.3	4.7	300.0	.0	.0	7.4	.0	331.4	5.0
Marion	.0	.0	.0	.0	161.8	.0	9.7	51.5	.0	223.0	9.7
Marshall	.0	.0	.0	.0	75.5	.0	19.4	89.0	.0	183.9	8.7
Mason	.0	.0	17.1	30.4	157.1	.0	.0	16.2	.0	220.7	9.9
Monongalia	.0	.0	.0	.0	202.5	.0	.0	36.4	.0	238.9	10.2
Putnam	.0	.0	20.0	6.4	227.8	.0	.9	.0	.0	255.1	7.9
Richie	16.4	.0	10.2	37.9	350.5	.0	.0	.0	.0	415.1	6.9
Roane	.0	.0	12.6	20.8	325.9	.0	2.5	.0	.0	361.8	6.2
Wayne	.0	.0	8.6	13.9	350.4	.0	8.2	7.3	.0	388.4	6.2
Wetzel	.0	.0	.0	.0	250.9	.0	5.8	51.2	6.2	314.1	6.4
Wirt	.0	.0	4.3	15.3	143.9	.0	7.1	.0	.0	170.6	9.0
Wood	.0	.0	12.9	32.6	147.3	.0	2.2	.0	.0	195.1	8.5
Brooke/Hancock/Ohio	.0	.0	.0	.0	70.6	.0	17.3	36.0	.0	123.9	9.3
Pleasant/Tyler	.0	.0	3.6	18.1	236.0	.0	4.2	17.5	.0	279.4	8.4
Northwestern Unit	16.4	.0	138.1	205.0	4,137.3	.0	95.9	370.1	6.2	4,969.0	1.8
Total, all counties	256.2	103.5	307.5	590.7	14,668.7	.0	179.6	2,928.9	6.2	19,041.3	1.0
SE	21.9	43.1	16.0	13.0	1.6	.0	18.5	5.8	100.0	1.0	

Table 112.--Net volume of growing-stock trees on timberland by county and stand-size class, West Virginia, 1989

(In millions of cubic feet)

Counties	Stand-size class				All classes	SE
	Sawtimber	Poletimber	Sapling and seedling	Nonstocked		
Braxton	388.9	91.0	5.5	.0	485.4	8.6
Grant	187.5	94.4	5.2	.0	287.1	9.1
Hampshire	327.0	72.9	3.2	.0	403.0	5.8
Hardy	268.0	120.4	5.3	.0	393.7	6.6
Harrison	126.8	51.5	.9	.0	179.1	10.5
Lewis	196.3	54.0	.5	.0	250.8	7.3
Mineral	142.3	48.3	10.6	.0	201.1	10.6
Morgan	110.7	30.4	10.5	.0	151.6	9.7
Pendleton	432.9	78.5	8.3	.0	519.7	6.4
Pocahontas	785.2	177.4	12.1	.0	974.7	4.6
Preston	481.2	95.6	7.0	.0	583.8	5.6
Randolph	781.3	114.6	32.6	.0	928.5	5.0
Tucker	315.6	29.6	1.5	.0	346.8	6.3
Upshur	208.7	41.7	1.6	.0	252.0	6.8
Webster	682.7	36.7	7.5	.0	727.0	6.5
Barbour/Taylor	234.0	64.8	1.5	.0	300.2	7.5
Berkeley/Jefferson	142.3	37.9	4.4	.0	184.6	12.2
Northeastern Unit	5,811.5	1,239.6	118.0	.0	7,169.0	1.7
Boone	384.8	57.7	18.9	.0	461.4	6.3
Clay	284.2	94.3	4.3	.0	382.8	5.4
Fayette	478.4	100.2	18.0	.0	596.6	5.6
Greenbrier	569.5	202.3	26.4	.0	798.1	4.8
Kanawha	612.8	153.2	25.5	.0	791.5	4.3
Logan	264.8	75.2	12.6	.0	352.6	7.1
McDowell	410.5	133.3	6.6	.0	550.4	5.0
Mercer	194.5	130.8	5.7	.0	331.1	6.0
Mingo	280.5	72.3	7.9	.0	360.7	7.2
Monroe	118.7	121.4	26.9	.0	267.1	6.3
Nicholas	554.2	92.2	5.4	.0	651.8	5.5
Raleigh	478.8	72.0	3.4	.0	554.2	6.4
Summers	207.0	92.7	3.7	.0	303.4	8.7
Wyoming	403.9	78.5	18.9	.0	501.3	6.5
Southern Unit	5,242.8	1,476.0	184.4	.0	6,903.2	1.6
Cabell	143.6	27.5	14.4	.0	185.5	8.0
Calhoun	130.1	111.1	4.7	.0	245.9	10.1
Doddridge	187.1	91.8	14.6	.0	293.5	5.0
Gilmer	151.1	96.2	6.3	.0	253.6	6.8
Jackson	175.0	90.5	23.7	.0	289.2	8.6
Lincoln	162.7	159.9	8.8	.0	331.4	5.0
Marion	188.0	22.6	12.3	.0	223.0	9.7
Marshall	138.7	39.8	5.5	.0	183.9	8.7
Mason	159.3	35.9	25.6	.0	220.7	9.9
Monongalia	176.7	60.4	1.8	.0	238.9	10.2
Putnam	204.9	29.4	20.8	.0	255.1	7.9
Richie	317.7	86.3	11.1	.0	415.1	6.9
Roane	249.5	88.9	23.4	.0	361.8	6.2
Wayne	259.4	110.0	19.0	.0	388.4	6.2
Wetzel	255.0	52.8	6.3	.0	314.1	6.4
Wirt	136.0	23.5	11.0	.0	170.6	9.0
Wood	128.9	55.2	11.0	.0	195.1	8.5
Brooke/Hancock/Ohio	82.2	41.7	.0	.0	123.9	9.3
Pleasant/Tyler	190.0	75.6	13.8	.0	279.4	8.4
Northwestern Unit	3,435.6	1,299.3	234.2	.0	4,969.0	1.8
Total, all counties	14,489.9	4,014.8	536.6	.0	19,041.3	1.0
SE	1.7	3.9	9.1	.0	1.0	

Table 113.--continued

(In millions of cubic feet)

Counties	Species					
	Hickory	Beech	Ash	Black walnut	Yellow-poplar	Cucumber-tree
Braxton	53.1	21.7	11.0	9.3	112.7	3.4
Grant	18.0	2.8	4.8	.8	.0	1.0
Hampshire	23.5	.0	7.0	7.5	9.3	1.6
Hardy	9.7	.0	1.2	2.7	11.1	.0
Harrison	16.4	1.0	14.0	2.0	49.7	.4
Lewis	38.6	5.7	5.6	2.0	73.2	.1
Mineral	11.9	3.2	8.0	.8	12.0	.9
Morgan	2.8	.0	1.9	.7	10.7	.6
Pendleton	16.6	7.9	11.9	3.2	.8	.2
Pocahontas	31.1	78.8	19.8	2.7	4.4	19.8
Preston	23.0	22.9	8.6	.0	116.2	5.5
Randolph	24.1	73.8	13.6	.0	73.2	8.8
Tucker	6.6	17.0	10.3	.0	63.5	2.8
Upshur	9.0	8.9	3.6	.3	60.1	1.2
Webster	14.4	45.6	6.4	.0	158.6	20.7
Barbour/Taylor	30.6	6.8	11.1	1.0	94.9	.5
Berkeley/Jefferson	17.4	1.7	15.1	6.5	28.7	.0
Northeastern Unit	346.7	297.8	153.6	39.6	879.1	67.5
Boone	46.4	30.1	7.5	2.3	83.2	14.6
Clay	23.6	26.6	1.8	2.2	88.0	5.3
Fayette	41.0	17.9	5.5	.9	129.1	7.3
Greenbrier	44.1	64.3	10.4	.8	76.4	10.4
Kanawha	70.6	17.6	19.0	8.4	184.2	10.5
Logan	44.8	6.5	11.7	.0	81.5	12.8
McDowell	39.4	25.1	8.9	.6	137.0	13.9
Mercer	17.0	7.2	6.9	1.4	52.0	4.9
Mingo	33.3	21.6	7.0	3.4	91.3	13.1
Monroe	26.3	4.3	1.9	2.2	27.1	1.9
Nicholas	41.6	49.7	6.8	.8	117.4	6.3
Raleigh	25.9	22.0	10.4	.4	115.4	21.4
Summers	15.3	1.2	19.0	.3	37.8	2.4
Wyoming	42.6	24.6	3.0	1.4	142.5	9.1
Southern Unit	512.1	318.7	119.9	24.9	1,363.1	133.7
Cabell	16.1	4.4	5.3	2.6	14.3	.1
Calhoun	25.9	2.0	9.5	5.2	46.6	1.4
Doddridge	45.1	18.5	10.9	6.1	34.0	1.5
Gilmer	22.3	8.3	3.5	1.6	46.1	3.4
Jackson	23.6	.5	9.4	4.4	28.1	1.3
Lincoln	37.6	14.1	9.4	2.0	54.0	.6
Marion	13.1	2.2	7.8	1.2	52.6	1.6
Marshall	10.0	10.3	16.4	7.4	19.9	.0
Mason	17.4	1.3	6.1	1.0	23.8	.0
Monongalia	11.0	.3	6.4	2.2	48.5	.2
Putnam	20.6	7.1	7.2	3.3	41.6	.5
Richie	30.7	26.0	5.0	2.5	53.8	1.4
Roane	48.0	18.8	8.5	4.3	68.1	2.6
Wayne	36.0	12.2	11.4	2.1	49.5	5.7
Wetzel	31.0	26.7	14.4	3.1	61.6	4.8
Wirt	10.1	4.4	4.7	1.7	29.8	.5
Wood	13.6	2.0	7.4	5.0	34.9	.0
Brooke/Hancock/Ohio	2.4	.4	7.4	4.8	.7	.0
Pleasant/Tyler	26.8	13.5	18.9	4.3	46.9	.0
Northwestern Unit	441.4	173.1	169.6	64.9	754.7	25.4
Total, all counties	1,300.2	789.6	443.1	129.4	2,996.9	226.6
SE	3.3	6.0	5.6	9.1	3.6	6.1

Table 113.--continued

(In millions of cubic feet)

Counties	Species					
	Blackgum	Black cherry	Select w. oaks	Select r. oaks	Other w. oaks	Other r. oaks
Braxton	4.8	1.0	54.7	35.9	51.7	39.7
Grant	4.8	18.9	13.6	43.0	55.0	18.6
Hampshire	6.7	2.0	78.4	37.9	95.0	44.5
Hardy	10.2	3.2	57.3	45.5	87.9	40.0
Harrison	.8	13.7	6.5	5.3	9.6	2.8
Lewis	2.2	3.9	16.3	8.8	15.7	26.4
Mineral	1.4	5.8	25.9	26.6	25.8	26.4
Morgan	1.6	1.6	29.2	12.9	24.8	21.5
Pendleton	9.4	17.2	24.1	81.0	77.3	46.0
Pocahontas	.7	54.7	45.3	116.4	67.1	36.0
Preston	2.6	58.0	17.7	85.0	41.7	11.2
Randolph	3.5	116.9	25.9	85.0	65.3	25.1
Tucker	.0	30.8	7.3	23.2	7.3	5.5
Upshur	1.9	4.8	10.6	16.0	28.2	10.2
Webster	3.0	63.1	8.8	90.8	47.0	8.8
Barbour/Taylor	2.4	25.1	19.6	13.2	7.7	4.7
Berkeley/Jefferson	4.0	6.5	22.4	11.7	7.4	27.8
Northeastern Unit	60.0	427.1	463.6	737.9	714.6	395.3
Boone	6.2	3.8	33.9	26.9	50.7	44.7
Clay	6.4	.6	31.6	13.1	45.5	54.3
Fayette	6.0	7.3	35.6	57.7	47.5	66.7
Greenbrier	8.5	34.2	63.2	80.7	74.9	43.2
Kanawha	5.9	5.4	90.1	41.4	89.2	136.3
Logan	4.1	.8	16.3	35.3	38.6	27.6
McDowell	2.9	.0	30.2	42.1	57.7	78.3
Mercer	1.0	5.0	30.9	29.5	43.1	34.3
Mingo	3.1	.0	28.1	20.7	34.6	40.5
Monroe	.4	4.4	18.0	25.4	37.5	25.6
Nicholas	11.2	10.5	33.0	48.5	53.3	43.7
Raleigh	11.6	7.6	19.1	38.4	60.4	47.1
Summers	4.4	3.6	29.0	21.9	39.8	27.3
Wyoming	5.1	4.7	22.1	38.1	31.6	52.7
Southern Unit	77.1	87.8	481.0	519.9	704.1	722.2
Cabell	.0	.6	41.5	14.6	25.3	21.2
Calhoun	1.0	.4	29.4	19.8	16.6	38.4
Doddridge	1.2	4.5	31.7	20.4	21.3	32.7
Gilmer	1.2	1.7	35.1	11.1	32.2	55.8
Jackson	2.9	.3	78.3	18.9	20.9	44.9
Lincoln	2.2	1.1	60.4	34.3	33.6	36.4
Marion	2.1	17.0	18.6	6.7	10.5	14.7
Marshall	1.3	14.4	7.2	8.6	.2	5.6
Mason	2.1	1.3	47.5	17.1	14.6	23.8
Monongalia	.2	18.0	10.6	19.8	15.3	23.7
Putnam	3.0	2.3	47.9	16.9	13.9	40.0
Richie	5.1	4.2	74.7	25.2	31.9	60.4
Roane	5.3	2.1	59.8	22.4	17.4	49.7
Wayne	3.4	1.0	75.7	20.9	57.6	53.3
Wetzel	3.7	6.5	19.6	15.0	7.7	19.1
Wirt	.1	1.8	34.9	13.5	13.6	27.9
Wood	2.6	1.8	27.7	13.0	13.9	7.3
Brooke/Hancock/Ohio	.3	29.5	5.2	2.4	2.4	2.6
Pleasant/Tyler	3.1	2.9	30.9	22.8	6.8	20.9
Northwestern Unit	40.9	111.3	736.8	323.5	355.7	578.4
Total, all counties	177.9	626.2	1,681.4	1,581.4	1,774.4	1,696.0
SE	6.4	7.3	3.6	3.7	3.7	3.6

Table 113.--continued

(In millions of cubic feet)

Counties	Species				SE
	Basswood	Other hardwoods	Total hardwoods	All species	
Braxton	20.9	14.1	482.2	485.4	8.6
Grant	20.0	8.1	270.7	287.1	9.1
Hampshire	1.9	10.4	342.3	403.0	5.8
Hardy	6.0	15.4	329.6	393.7	6.6
Harrison	.0	22.5	179.1	179.1	10.5
Lewis	.8	5.2	247.9	250.8	7.3
Mineral	12.6	9.6	190.4	201.1	10.6
Morgan	2.5	4.7	128.3	151.6	9.7
Pendleton	16.2	26.5	428.2	519.7	6.4
Pocahontas	34.7	35.6	823.8	974.7	4.6
Preston	15.3	13.1	574.0	583.8	5.6
Randolph	10.2	19.0	871.4	928.5	5.0
Tucker	13.8	9.8	283.3	346.8	6.3
Upshur	7.0	10.4	246.6	252.0	6.8
Webster	21.3	17.0	705.3	727.0	6.5
Barbour/Taylor	1.5	22.9	299.6	300.2	7.5
Berkeley/Jefferson	.3	13.4	166.9	184.6	12.2
Northeastern Unit	185.2	257.8	6,569.7	7,169.0	1.7
Boone	35.8	12.7	455.4	461.4	6.3
Clay	10.6	5.6	372.6	382.8	5.4
Fayette	17.5	22.3	574.4	596.6	5.6
Greenbrier	31.8	27.1	705.9	798.1	4.8
Kanawha	10.6	17.3	767.8	791.5	4.3
Logan	32.7	7.2	350.6	352.6	7.1
McDowell	20.8	17.9	537.3	550.4	5.0
Mercer	12.5	12.5	303.9	331.1	6.0
Mingo	21.7	4.4	357.9	360.7	7.2
Monroe	.0	15.8	231.7	267.1	6.3
Nicholas	18.8	18.6	626.3	651.8	5.5
Raleigh	35.5	27.6	539.8	554.2	6.4
Summers	7.9	17.8	261.5	303.4	8.7
Wyoming	14.9	21.0	472.2	501.3	6.5
Southern Unit	271.1	227.8	6,557.3	6,903.2	1.6
Cabell	1.2	8.5	169.0	185.5	8.0
Calhoun	9.2	13.4	241.9	245.9	10.1
Doddridge	6.3	13.2	289.2	293.5	5.0
Gilmer	1.5	7.6	250.7	253.6	6.8
Jackson	5.1	5.9	264.3	289.2	8.6
Lincoln	2.2	3.3	312.6	331.4	5.0
Marion	4.8	28.9	222.6	223.0	9.7
Marshall	2.8	31.2	183.9	183.9	8.7
Mason	6.0	3.9	181.7	220.7	9.9
Monongalia	1.4	32.3	238.9	238.9	10.2
Putnam	4.2	5.8	222.9	255.1	7.9
Richie	2.6	12.8	375.3	415.1	6.9
Roane	4.1	9.8	341.6	361.8	6.2
Wayne	.6	11.9	369.9	388.4	6.2
Wetzel	15.8	35.0	314.1	314.1	6.4
Wirt	.8	7.7	157.9	170.6	9.0
Wood	.0	19.3	167.0	195.1	8.5
Brooke/Hancock/Ohio	.0	50.5	123.1	123.9	9.3
Pleasant/Tyler	3.0	19.4	268.8	279.4	8.4
Northwestern Unit	71.7	320.4	4,695.4	4,969.0	1.8
Total, all counties	528.0	806.0	17,822.5	19,041.3	1.0
SE	6.9	4.3	1.1	1.0	

Table 114.--Net volume of growing-stock and sawtimber trees on timberland by county and species group, West Virginia, 1989

(In millions of cubic/board feet^a)

Counties	Growing stock					Sawtimber					SE
	Pine	Other softwoods	Soft hardwoods	Hard hardwoods	Total growing stock	Pine	Other softwoods	Soft hardwoods	Hard hardwoods	Total sawtimber	
Braxton	3.2	.0	175.9	306.3	485.4	4.3	.0	620.0	940.5	1,564.8	12.8
Grant	15.0	1.4	72.4	198.3	287.1	20.8	4.9	155.3	492.6	673.6	13.8
Hampshire	60.3	.4	42.3	300.0	403.0	159.5	.0	116.1	893.4	1,169.0	8.9
Hardy	60.4	3.7	50.9	278.7	393.7	171.3	13.1	129.1	605.6	919.1	12.0
Harrison	.0	.0	99.7	79.4	179.1	.0	.0	279.4	221.1	500.5	13.6
Lewis	.6	2.3	119.5	128.3	250.8	2.3	7.4	302.7	358.3	670.8	8.6
Mineral	9.1	1.5	47.4	143.1	201.1	14.4	7.2	151.0	385.0	557.6	17.1
Morgan	23.2	.0	27.1	101.2	151.6	56.0	.0	82.6	257.3	396.0	15.1
Pendleton	65.4	26.1	92.9	335.3	519.7	186.8	90.2	266.5	954.0	1,497.5	8.8
Pocahontas	25.8	125.0	244.0	579.8	974.7	114.3	508.6	816.7	1,758.8	3,198.5	6.2
Preston	4.9	4.9	301.1	273.0	583.8	2.8	19.0	940.1	858.0	1,819.9	8.7
Randolph	.9	56.2	389.5	481.9	928.5	4.1	235.4	1,417.9	1,514.7	3,172.0	6.7
Tucker	12.3	51.2	165.9	117.3	346.8	38.3	203.2	594.6	317.1	1,153.2	9.6
Upshur	.0	5.5	115.5	131.1	252.0	.0	16.6	361.8	378.2	756.6	11.1
Webster	.2	21.4	364.3	341.0	727.0	.6	84.5	1,288.0	1,037.3	2,410.4	8.1
Barbour/Taylor	.4	.2	176.1	123.5	300.2	1.4	.8	521.4	326.5	850.0	11.6
Berkeley/Jefferson	17.1	.6	59.4	107.5	184.6	25.4	.2	195.8	366.8	588.2	17.2
Northeastern Unit	299.0	300.4	2,543.9	4,025.7	7,169.0	802.4	1,191.3	8,239.1	11,665.1	21,897.9	2.5
Boone	4.3	1.8	166.1	289.3	461.4	10.5	5.8	588.9	996.7	1,601.8	7.6
Clay	.4	9.8	140.7	231.9	382.8	1.0	39.4	418.9	728.4	1,187.6	7.7
Fayette	8.1	14.2	239.0	335.4	596.6	12.7	42.8	737.2	1,060.7	1,853.3	7.3
Greenbrier	78.5	13.7	239.9	466.0	798.1	244.9	54.2	687.2	1,275.7	2,262.0	6.6
Kanawha	21.9	1.8	273.7	494.1	791.5	66.3	4.3	826.7	1,569.2	2,466.5	5.9
Logan	.3	1.7	160.3	190.3	352.6	.0	5.7	966.7	681.6	1,254.0	10.1
McDowell	2.0	11.2	217.6	319.7	550.4	6.3	25.1	703.5	922.4	1,657.4	6.5
Mercer	18.0	9.2	108.4	195.6	331.1	47.2	38.8	341.8	467.2	895.1	10.4
Mingo	.7	2.2	153.4	204.5	360.7	2.8	6.3	478.8	636.9	1,124.8	9.7
Monroe	34.9	.5	56.4	175.3	267.1	99.0	.0	127.3	365.4	591.6	12.9
Nicholas	1.4	24.1	267.7	358.6	651.8	3.8	89.1	834.5	1,121.2	2,048.6	8.2
Raleigh	9.2	5.2	267.9	271.9	554.2	43.9	22.6	877.9	912.7	1,857.0	7.8
Summers	38.1	3.8	92.9	168.6	303.4	118.9	13.9	274.5	505.7	912.9	13.3
Wyoming	.8	28.3	213.2	259.0	501.3	.7	85.2	645.0	823.1	1,554.0	9.5
Southern Unit	218.4	127.4	2,597.0	3,960.3	6,903.2	657.9	433.2	8,108.7	12,066.8	21,266.7	2.2

Table 114.-continued

(In millions of cubic/board feet^a)

Counties	Growing stock					Sawtimber					SE
	Pine	Other softwoods	Soft hardwoods	Hard hardwoods	Total growing stock	Pine	Other softwoods	Soft hardwoods	Hard hardwoods	Total sawtimber	
Cabell	16.1	.3	27.0	142.0	185.5	38.4	1.2	71.9	469.2	580.8	11.4
Calhoun	4.0	.0	75.5	166.4	245.9	11.8	.0	235.2	440.6	687.6	15.4
Doddridge	4.3	.0	81.6	207.6	293.5	15.6	.0	234.0	616.9	866.5	7.6
Gilmer	2.9	.0	72.4	178.3	253.6	5.5	.0	170.8	508.3	684.6	10.7
Jackson	24.8	.0	53.9	210.5	289.2	58.1	.0	142.1	619.4	819.6	11.6
Lincoln	17.5	1.3	87.5	225.1	331.4	43.6	5.4	189.4	670.3	908.7	8.3
Marion	.4	.0	110.8	111.7	223.0	1.0	.0	360.4	353.9	715.3	13.0
Marshall	.0	.0	70.1	113.8	183.9	.0	.0	233.3	347.3	580.6	9.7
Mason	38.2	.8	44.0	137.7	220.7	95.4	1.7	128.3	438.0	663.3	11.2
Monongalia	.0	.0	101.8	137.2	238.9	.0	.0	308.9	407.7	716.6	14.1
Putnam	32.0	.2	62.4	160.6	255.1	82.6	.6	219.4	527.2	829.8	9.5
Richie	35.2	4.6	107.8	267.5	415.1	108.3	14.1	258.9	821.9	1,203.2	9.8
Roane	20.2	.0	99.2	242.4	361.8	41.0	.0	288.0	686.4	1,015.5	8.8
Wayne	17.9	.6	91.3	278.6	388.4	51.4	1.8	232.0	775.3	1,060.6	8.8
Wetzel	.0	.0	133.3	180.8	314.1	.0	.0	490.0	598.0	1,088.0	9.3
Wirt	12.7	.0	42.4	115.5	170.6	34.6	.0	111.2	337.1	483.0	11.8
Wood	28.1	.0	69.4	97.6	195.1	74.1	.0	172.7	286.5	533.2	9.9
Brooke/Hancock/Ohio	.8	.0	51.6	71.5	123.9	.0	.0	136.6	188.7	325.3	13.1
Pleasant/Tyler	10.6	.0	105.2	163.5	279.4	30.8	.0	285.9	517.8	834.4	11.5
Northwestern Unit	265.7	7.9	1,487.1	3,208.3	4,969.0	692.0	24.8	4,269.0	9,610.5	14,596.3	2.5
Total, all counties	783.1	435.6	6,628.1	11,194.4	19,041.3	2,152.4	1,649.3	20,616.8	33,342.4	57,760.9	1.4
SE	6.8	11.9	2.2	1.3	1.0	7.8	13.6	2.7	1.8	1.4	

Table 115.--Net volume of sawtimber trees on timberland by county and forest-type group, West Virginia, 1989

(In millions of board feet)^a

Counties	Forest-type group									All groups	SE
	White/ red pine	Spruce/ fir	Loblolly/ shortleaf	Oak/ pine	Oak/ hickory	Oak/gum/ cypress	Elm/ash/ red maple	Northern hardwoods	Aspen/ birch		
Braxton	.0	.0	.0	18.5	1,472.1	.0	28.9	45.2	.0	1,564.8	12.8
Grant	.0	.0	12.4	.0	516.7	.0	.0	144.5	.0	673.6	13.8
Hampshire	32.4	.0	42.9	122.2	960.1	.0	11.4	.0	.0	1,169.0	8.9
Hardy	13.2	.0	34.9	251.5	565.0	.0	.0	54.6	.0	919.1	12.0
Harrison	.0	.0	.0	.0	402.0	.0	59.6	39.0	.0	500.5	13.6
Lewis	.0	.0	.0	.0	670.8	.0	.0	.0	.0	670.8	8.6
Mineral	.0	.0	5.6	.0	450.2	.0	20.9	80.9	.0	557.6	17.1
Morgan	.0	.0	32.4	34.1	291.8	.0	.0	37.7	.0	396.0	15.1
Pendleton	113.1	.0	62.9	57.6	961.3	.0	15.1	287.5	.0	1,497.5	8.8
Pocahontas	13.0	239.7	.0	73.3	1,588.1	.0	.0	1,284.3	.0	3,198.5	6.2
Preston	4.1	.0	.0	.0	1,361.5	.0	.0	454.3	.0	1,819.9	8.7
Randolph	.0	180.4	.0	.0	1,298.3	.0	.0	1,693.3	.0	3,172.0	6.7
Tucker	164.1	5.1	.0	.0	528.1	.0	.0	455.9	.0	1,153.2	9.6
Upshur	.0	.0	.0	.0	542.7	.0	9.5	204.4	.0	756.6	11.1
Webster	.0	.0	.0	.0	1,643.8	.0	.0	766.6	.0	2,410.4	8.1
Barbour/Taylor	.0	.0	.0	.0	736.7	.0	22.1	91.2	.0	850.0	11.6
Berkeley/Jefferson	.0	.0	1.7	17.4	494.2	.0	16.7	58.3	.0	588.2	17.2
Northeastern Unit	339.8	425.2	192.7	574.6	14,483.4	.0	184.3	5,697.9	.0	21,897.9	2.5
Boone	.0	.0	.0	10.0	1,303.6	.0	25.7	262.5	.0	1,601.8	7.6
Clay	.0	.0	.0	.0	954.0	.0	.0	233.6	.0	1,187.6	7.7
Fayette	28.5	.0	.0	.0	1,560.8	.0	32.7	231.3	.0	1,853.3	7.3
Greenbrier	143.6	.0	38.8	168.4	1,363.6	.0	.0	547.6	.0	2,262.0	6.6
Kanawha	.0	.0	42.7	22.2	2,381.5	.0	1.6	18.4	.0	2,466.5	5.9
Logan	.0	.0	.0	.0	1,055.1	.0	.0	199.0	.0	1,254.0	10.1
McDowell	.0	.0	.0	.0	1,564.2	.0	.0	93.2	.0	1,657.4	6.5
Mercer	77.5	.0	4.1	13.4	768.1	.0	.0	31.8	.0	895.1	10.4
Mingo	.0	.0	.0	.0	1,060.0	.0	.0	64.8	.0	1,124.8	9.7
Monroe	8.2	.0	14.5	104.7	418.3	.0	.0	45.9	.0	591.6	12.9
Nicholas	31.9	.0	.0	.0	1,572.6	.0	.0	444.1	.0	2,048.6	8.2

Table 115.--continued

(In millions of board feet)^a

Counties	Forest-type group									All groups	SE
	White/ red pine	Spruce/ fir	Loblolly/ shortleaf	Oak/ pine	Oak/ hickory	Oak/gum/ cypress	Elm/ash/ red maple	Northern hardwoods	Aspen/ birch		
Raleigh	7.7	.0	.0	63.7	1,503.3	.0	21.0	261.3	.0	1,857.0	7.8
Summers	.0	.0	43.0	170.3	567.1	.0	.0	132.5	.0	912.9	13.3
Wyoming	71.8	.0	.0	.0	1,451.0	.0	.0	31.2	.0	1,554.0	9.5
Southern Unit	369.3	.0	143.1	552.8	17,523.2	.0	81.0	2,597.3	.0	21,266.7	2.2
Cabell	.0	.0	18.7	22.4	519.7	.0	20.0	.0	.0	580.8	11.4
Calhoun	.0	.0	.0	.0	596.0	.0	7.5	84.2	.0	687.6	15.4
Doddridge	.0	.0	.0	.0	801.9	.0	.0	64.6	.0	866.5	7.6
Gilmer	.0	.0	.0	.0	682.4	.0	2.2	.0	.0	684.6	10.7
Jackson	.0	.0	36.9	33.3	749.4	.0	.0	.0	.0	819.6	11.6
Lincoln	.0	.0	39.5	10.1	822.5	.0	.0	36.5	.0	908.7	8.3
Marion	.0	.0	.0	.0	557.7	.0	35.4	122.1	.0	715.3	13.0
Marshall	.0	.0	.0	.0	243.2	.0	53.4	283.9	.0	580.6	9.7
Mason	.0	.0	42.6	89.4	488.6	.0	.0	42.8	.0	663.3	11.2
Monongalia	.0	.0	.0	.0	582.1	.0	.0	134.5	.0	716.6	14.1
Putnam	.0	.0	46.8	19.5	759.3	.0	4.2	.0	.0	829.8	9.5
Richie	67.1	.0	22.5	86.7	1,026.9	.0	.0	.0	.0	1,203.2	9.8
Roane	.0	.0	34.7	45.9	933.4	.0	1.4	.0	.0	1,015.5	8.8
Wayne	.0	.0	21.8	35.8	951.8	.0	22.7	28.5	.0	1,060.6	8.8
Wetzel	.0	.0	.0	.0	897.8	.0	7.6	168.1	14.5	1,088.0	9.3
Wirt	.0	.0	3.1	37.4	418.1	.0	24.3	.0	.0	483.0	11.8
Wood	.0	.0	22.6	91.1	408.7	.0	10.8	.0	.0	533.2	9.9
Brooke/Hancock/Ohio	.0	.0	.0	.0	183.2	.0	51.3	90.7	.0	325.3	13.1
Pleasant/Tyler	.0	.0	12.3	44.8	713.1	.0	15.8	48.4	.0	834.4	11.5
Northwestern Unit	67.1	.0	301.5	516.4	12,335.6	.0	256.7	1,104.5	14.5	14,596.3	2.5
Total, all counties	776.3	425.2	637.3	1,643.8	44,342.2	.0	522.0	9,399.7	14.5	57,760.9	1.4
SE	23.2	44.8	18.3	15.6	2.0	.0	20.0	6.5	100.0	1.4	

Table 116.--Net volume of sawtimber trees on timberland by county and stand-size class, West Virginia, 1989

(In millions of board feet)^a

Counties	Stand-size class				All classes	SE
	Sawtimber	Poleclimber	Sapling and seedling	Nonstocked		
Braxton	1,413.2	139.0	12.6	.0	1,564.8	12.8
Grant	575.0	93.9	4.7	.0	673.6	13.8
Hampshire	1,067.2	100.9	.9	.0	1,169.0	8.9
Hardy	769.6	147.2	2.3	.0	919.1	12.0
Harrison	392.3	105.7	2.5	.0	500.5	13.6
Lewis	557.7	113.1	.0	.0	670.8	8.6
Mineral	492.1	50.3	15.3	.0	557.6	17.1
Morgan	338.6	30.0	27.4	.0	396.0	15.1
Pendleton	1,360.0	127.9	9.6	.0	1,497.5	8.8
Pocahontas	2,728.2	439.9	30.3	.0	3,198.5	6.2
Preston	1,624.0	174.9	21.1	.0	1,819.9	8.7
Randolph	2,812.9	238.1	121.0	.0	3,172.0	6.7
Tucker	1,097.0	54.7	1.6	.0	1,153.2	9.6
Upshur	679.8	73.8	3.0	.0	756.6	11.1
Webster	2,347.5	58.6	4.4	.0	2,410.4	8.1
Barbour/Taylor	726.0	122.7	1.4	.0	850.0	11.6
Berkeley/Jefferson	518.6	57.0	12.7	.0	588.2	17.2
Northeastern Unit	19,499.8	2,127.5	270.7	.0	21,897.9	2.5
Boone	1,401.1	127.0	73.8	.0	1,601.8	7.6
Clay	962.1	205.3	20.2	.0	1,187.6	7.7
Fayette	1,648.8	147.0	57.4	.0	1,853.3	7.3
Greenbrier	1,817.1	373.4	71.5	.0	2,262.0	6.6
Kanawha	2,119.0	291.3	56.2	.0	2,466.5	5.9
Logan	1,065.4	155.8	32.9	.0	1,254.0	10.1
McDowell	1,353.8	288.4	15.1	.0	1,657.4	6.5
Mercer	662.0	220.6	12.5	.0	895.1	10.4
Mingo	963.7	140.3	20.8	.0	1,124.8	9.7
Monroe	365.8	185.1	40.6	.0	591.6	12.9
Nicholas	1,858.7	181.3	8.7	.0	2,048.6	8.2
Raleigh	1,716.7	131.7	8.6	.0	1,857.0	7.8
Summers	682.3	223.9	6.7	.0	912.9	13.3
Wyoming	1,377.4	159.6	17.0	.0	1,554.0	9.5
Southern Unit	17,993.8	2,830.8	442.1	.0	21,266.7	2.2
Cabell	496.9	50.9	33.0	.0	580.8	11.4
Calhoun	449.4	231.0	7.2	.0	687.6	15.4
Doddridge	625.8	215.6	25.0	.0	866.5	7.6
Gilmer	521.1	156.7	6.8	.0	684.6	10.7
Jackson	594.2	153.1	72.3	.0	819.6	11.6
Lincoln	550.5	326.9	31.3	.0	908.7	8.3
Marion	655.6	32.8	26.9	.0	715.3	13.0
Marshall	488.1	76.7	15.8	.0	580.6	9.7
Mason	515.8	83.8	63.8	.0	663.3	11.2
Monongalia	612.1	98.9	5.6	.0	716.6	14.1
Putnam	697.7	68.3	63.7	.0	829.8	9.5
Richie	1,035.6	131.8	35.7	.0	1,203.2	9.8
Roane	811.9	140.6	63.0	.0	1,015.5	8.8
Wayne	810.7	215.1	34.8	.0	1,060.6	8.8
Wetzel	944.9	132.7	10.4	.0	1,088.0	9.3
Wirt	417.0	43.6	22.4	.0	483.0	11.8
Wood	435.5	80.7	17.1	.0	533.2	9.9
Brooke/Hancock/Ohio	253.2	72.1	.0	.0	325.3	13.1
Pleasant/Tyler	635.2	157.4	41.8	.0	834.4	11.5
Northwestern Unit	11,551.3	2,468.6	576.5	.0	14,596.3	2.5
Total, all counties	49,044.9	7,426.8	1,289.2	.0	57,760.9	1.4
SE	1.9	4.6	11.8	.0	1.4	

^aInternational 1/4-inch rule.

Table 117.--Net volume of sawtimber trees on timberland by county and species, West Virginia, 1989

(In millions of board feet)^a

Counties	Species					
	Eastern redcedar	Red spruce	White pine	Virginia pine	Other yellow pines	Hemlock
Braxton	.0	.0	.0	4.3	.0	.0
Grant	.3	.0	2.4	8.2	10.3	4.5
Hampshire	.0	.0	36.4	65.8	57.3	.0
Hardy	.0	.0	103.6	29.9	37.8	13.1
Harrison	.0	.0	.0	.0	.0	.0
Lewis	.0	.0	.0	2.3	.0	7.4
Mineral	.0	.0	3.0	8.0	3.4	7.2
Morgan	.0	.0	7.4	44.0	4.6	.0
Pendleton	.0	11.0	100.4	7.1	79.3	79.3
Pocahontas	.0	342.4	91.6	.0	22.7	166.2
Preston	.0	.0	.6	1.2	1.0	19.0
Randolph	.0	195.2	.0	.0	4.1	40.2
Tucker	.0	62.8	38.3	.0	.0	137.4
Upshur	.0	.0	.0	.0	.0	16.6
Webster	.0	16.7	.6	.0	.0	67.9
Barbour/Taylor	.0	.0	.7	.0	.7	.8
Berkeley/Jefferson	.2	.0	.6	15.1	9.7	.0
Northeastern Unit	.5	628.0	385.7	185.9	230.7	559.8
Boone	.0	.0	.0	.0	10.5	5.8
Clay	.0	.0	.0	.0	1.0	39.4
Fayette	.0	.0	.0	12.7	.0	42.8
Greenbrier	.0	6.6	164.6	35.7	44.6	47.6
Kanawha	.0	.0	.0	56.0	10.3	4.3
Logan	.0	.0	.0	.0	.0	5.7
McDowell	.0	.0	.0	3.1	3.2	25.1
Mercer	.0	.0	42.8	2.8	1.7	38.8
Mingo	.0	.0	.0	1.7	1.0	6.3
Monroe	.0	.0	53.8	33.6	11.5	.0
Nicholas	.0	.0	3.8	.0	.0	89.1
Raleigh	.0	.0	43.9	.0	.0	22.6
Summers	.0	.0	75.2	40.1	3.6	13.9
Wyoming	.0	.0	.7	.0	.0	85.2
Southern Unit	.0	6.6	384.9	185.7	87.4	426.7
Cabell	1.2	.0	.0	37.3	1.1	.0
Calhoun	.0	.0	.0	8.4	3.3	.0
Doddridge	.0	.0	8.8	4.5	2.3	.0
Gilmer	.0	.0	.0	1.9	3.6	.0
Jackson	.0	.0	.0	52.0	6.1	.0
Lincoln	.0	.0	.0	24.0	19.6	5.4
Marion	.0	.0	.0	1.0	.0	.0
Marshall	.0	.0	.0	.0	.0	.0
Mason	1.7	.0	.0	86.5	8.9	.0
Monongalia	.0	.0	.0	.0	.0	.0
Putnam	.6	.0	2.7	79.4	.4	.0
Richie	.0	.0	38.7	59.8	9.7	14.1
Roane	.0	.0	5.7	33.4	1.9	.0
Wayne	.0	.0	.0	40.7	10.8	1.8
Wetzel	.0	.0	.0	.0	.0	.0
Wirt	.0	.0	9.6	23.2	1.8	.0
Wood	.0	.0	.0	65.5	8.6	.0
Brooke/Hancock/Ohio	.0	.0	.0	.0	.0	.0
Pleasant/Tyler	.0	.0	.0	30.8	.0	.0
Northwestern Unit	3.4	.0	65.6	548.4	78.1	21.4
Total, all counties	4.0	634.6	836.2	920.0	396.2	1,007.9
SE	54.5	30.2	15.6	9.4	13.8	11.8

Table 117.--continued

(In millions of board feet)^a

Counties	Species					
	Other softwoods	Total softwoods	Red maple	Sugar maple	Yellow birch	Sweet birch
Braxton	.0	4.3	48.0	64.9	.0	9.2
Grant	.0	25.7	12.7	80.8	3.1	4.9
Hampshire	.0	159.5	24.6	14.8	.0	.0
Hardy	.0	184.5	26.5	16.0	.0	6.5
Harrison	.0	.0	25.4	26.8	.0	.0
Lewis	.0	9.8	65.5	21.4	.0	4.6
Mineral	.0	21.6	4.4	21.6	.0	1.1
Morgan	.0	56.0	16.0	3.1	.0	.0
Pendleton	.0	277.0	78.5	47.8	19.8	44.5
Pocahontas	.0	622.9	270.5	220.0	112.4	72.9
Preston	.0	21.8	259.7	99.0	8.0	48.4
Randolph	.0	239.5	445.1	270.6	61.5	86.4
Tucker	2.9	241.5	94.0	55.6	17.1	16.7
Upshur	.0	16.6	76.4	54.7	5.4	25.1
Webster	.0	85.1	215.5	164.1	33.7	87.9
Barbour/Taylor	.0	2.2	63.2	39.8	.8	5.6
Berkeley/Jefferson	.0	25.6	.0	15.3	.0	.0
Northeastern Unit	2.9	1,993.7	1,725.9	1,216.2	261.9	414.1
Boone	.0	16.3	32.1	105.2	.8	26.0
Clay	.0	40.4	38.0	52.2	4.1	19.1
Fayette	.0	55.4	161.6	60.6	3.4	40.1
Greenbrier	.0	299.1	118.2	111.0	22.6	35.9
Kanawha	.0	70.6	56.3	51.4	.9	6.3
Logan	.0	5.7	36.6	32.9	.0	13.1
McDowell	.0	31.5	43.9	53.2	.0	12.0
Mercer	.0	86.0	53.5	15.5	.0	26.0
Mingo	.0	9.1	31.8	44.2	.0	16.2
Monroe	.0	99.0	19.7	35.9	.0	3.0
Nicholas	.0	92.9	219.2	152.7	21.2	26.2
Raleigh	.0	66.5	112.1	104.0	1.5	17.6
Summers	.0	132.8	33.1	27.0	.0	7.2
Wyoming	.0	85.9	57.6	28.0	8.2	22.7
Southern Unit	.0	1,091.2	1,013.8	873.7	62.7	271.5
Cabell	.0	39.6	5.7	26.5	.0	.0
Calhoun	.0	11.8	4.7	34.1	.0	1.1
Doddridge	.0	15.6	28.8	63.9	.0	.0
Gilmer	.0	5.5	16.8	4.3	.0	5.0
Jackson	.0	58.1	9.5	25.3	.0	.0
Lincoln	.0	49.0	26.3	14.6	.0	.0
Marion	.0	1.0	54.5	58.8	.0	2.7
Marshall	.0	.0	35.0	98.6	.0	.0
Mason	.0	97.1	13.1	21.4	.0	.0
Monongalia	.0	.0	46.1	84.7	.0	.0
Putnam	.0	83.2	1.5	6.7	.0	.0
Richie	.0	122.4	42.5	18.9	.0	1.4
Roane	.0	41.0	16.4	23.0	.0	.0
Wayne	.0	53.3	23.5	12.1	.0	1.5
Wetzel	.0	.0	27.9	66.1	.0	.8
Wirt	.0	34.6	1.2	4.2	.0	.0
Wood	.0	74.1	14.3	5.5	.0	.0
Brooke/Hancock/Ohio	.0	.0	11.2	17.9	.0	.6
Pleasant/Tyler	.0	30.8	66.3	63.9	.0	.0
Northwestern Unit	.0	716.9	445.6	650.5	.0	13.1
Total, all counties	2.9	3,801.7	3,185.3	2,740.4	324.6	698.7
SE	100.0	7.2	5.4	6.2	18.8	11.2

Table 117.--continued

(In millions of board feet)^a

Counties	Species					
	Hickory	Beech	Ash	Black walnut	Yellow-poplar	Cucumber-tree
Braxton	117.7	104.2	31.1	15.0	403.5	13.4
Grant	29.2	.9	15.4	2.1	.0	2.2
Hampshire	73.5	.0	19.8	31.3	49.8	1.3
Hardy	16.5	.0	1.9	1.9	43.5	.0
Harrison	35.5	2.5	27.5	4.2	195.8	1.6
Lewis	91.2	16.1	4.3	5.6	213.3	.0
Mineral	20.3	5.5	31.0	2.3	50.8	2.0
Morgan	6.6	.0	6.7	1.9	47.3	3.1
Pendleton	31.6	15.9	39.7	10.1	6.4	1.1
Pocahontas	80.3	242.0	68.3	4.9	18.2	83.3
Preston	59.9	84.7	17.7	.0	416.1	6.8
Randolph	59.9	296.1	43.3	.0	281.8	30.0
Tucker	16.5	19.5	37.0	.0	273.7	5.0
Upshur	20.1	30.0	7.4	.6	215.3	4.3
Webster	40.4	168.2	17.7	.0	632.9	72.5
Barbour/Taylor	60.3	22.2	20.6	1.8	349.1	1.8
Berkeley/Jefferson	55.4	12.9	39.7	22.3	115.1	.0
Northeastern Unit	814.9	1,020.6	429.0	104.1	3,312.7	228.5
Boone	157.2	132.3	20.3	5.0	287.8	58.9
Clay	73.1	131.9	5.4	6.0	277.5	15.9
Fayette	135.9	68.4	17.1	4.3	426.5	22.7
Greenbrier	100.7	211.6	27.8	4.2	271.9	39.3
Kanawha	155.0	73.5	49.1	20.4	620.3	27.5
Logan	182.6	25.9	46.6	.0	297.1	43.5
McDowell	115.1	82.5	27.2	.7	494.0	46.1
Mercer	28.6	21.2	13.8	2.3	186.1	13.7
Mingo	90.9	98.3	18.3	9.0	337.8	26.0
Monroe	66.9	8.7	.0	4.6	92.1	3.6
Nicholas	132.2	212.0	25.3	3.3	411.2	20.3
Raleigh	98.8	95.8	42.2	1.8	434.4	73.3
Summers	44.4	4.2	65.4	1.0	108.6	5.6
Wyoming	146.4	97.4	12.1	3.1	445.7	26.2
Southern Unit	1,527.9	1,263.5	370.7	65.8	4,691.0	422.5
Cabell	33.8	26.5	5.0	6.7	46.8	.0
Calhoun	29.3	5.4	28.4	16.2	162.2	3.3
Doddridge	65.3	65.9	22.1	12.0	125.0	6.5
Gilmer	33.3	23.7	8.4	2.9	115.5	13.4
Jackson	34.9	.0	25.7	11.3	82.3	2.7
Lincoln	40.8	64.5	26.5	2.8	130.5	2.1
Marion	36.4	4.2	20.0	5.8	203.0	.9
Marshall	35.6	34.3	50.0	18.0	80.7	.0
Monongalia	26.9	5.6	11.2	3.1	83.8	.0
Putnam	29.6	1.0	20.5	6.5	165.6	1.6
Richie	41.3	27.4	23.0	11.5	166.2	1.9
Roane	51.5	101.4	6.2	1.6	158.1	4.6
Wayne	78.2	81.6	14.1	4.6	226.8	2.2
Wetzel	59.7	66.9	30.4	1.6	143.9	20.1
Wirt	82.0	104.2	55.4	10.5	270.3	16.4
Wood	19.9	16.5	18.1	2.5	83.4	.8
Brooke/Hancock/Ohio	21.9	8.5	17.8	11.2	113.1	.0
Pleasant/Tyler	6.1	.7	25.5	13.2	2.0	.0
Northwestern Unit	55.5	46.0	48.7	16.8	131.0	.0
Total, all counties	782.2	684.4	457.1	158.8	2,490.2	76.6
SE	3,124.9	2,968.5	1,256.8	328.7	10,493.9	727.6
SE	4.4	6.7	7.2	10.9	4.0	7.8

Table 117.--continued

(In millions of board feet)^a

Counties	Species					
	Blackgum	Black cherry	Select w. oaks	Select r. oaks	Other w. oaks	Other r. oaks
Braxton	4.1	3.0	159.2	141.3	171.2	132.2
Grant	10.8	49.1	41.0	144.0	143.7	30.5
Hampshire	6.2	2.8	274.5	111.6	251.5	115.8
Hardy	23.7	.6	163.0	128.3	147.2	96.9
Harrison	2.1	23.7	29.0	20.5	35.7	13.7
Lewis	4.4	12.6	53.0	21.0	47.6	94.8
Mineral	5.3	10.5	78.0	92.5	64.3	78.8
Morgan	2.3	1.4	99.4	26.7	48.8	54.6
Pendleton	29.0	61.2	79.0	288.8	233.5	112.9
Pocahontas	3.7	229.1	126.1	473.1	195.4	135.4
Preston	6.4	170.8	70.8	323.4	107.9	37.0
Randolph	6.7	532.5	91.3	344.2	203.8	80.5
Tucker	.0	130.4	23.3	102.9	27.7	20.1
Upshur	3.8	18.9	27.2	64.0	80.7	44.2
Webster	8.6	232.5	21.9	363.1	123.3	29.5
Barbour/Taylor	6.3	71.9	58.8	44.9	25.2	15.4
Berkeley/Jefferson	17.1	14.0	84.9	35.2	13.8	96.1
Northeastern Unit	140.3	1,565.1	1,480.5	2,725.5	1,921.4	1,188.4
Boone	28.9	17.2	107.5	109.8	177.9	141.9
Clay	27.4	1.1	93.8	55.4	109.5	171.7
Fayette	24.1	16.5	112.1	193.0	146.4	245.4
Greenbrier	21.3	95.3	201.8	262.8	180.3	106.9
Kanawha	19.0	13.8	294.4	179.0	259.4	489.6
Logan	13.4	4.2	47.9	160.3	115.6	94.6
McDowell	11.2	.0	88.4	138.1	159.5	245.1
Mercer	4.8	17.8	61.8	102.3	91.0	105.6
Mingo	9.4	.0	71.4	78.5	94.0	136.5
Monroe	.0	8.5	49.4	63.7	63.1	38.3
Nicholas	24.3	32.7	92.5	159.8	165.8	151.2
Raleigh	45.5	22.6	48.2	168.4	181.6	151.6
Summers	16.4	11.1	73.2	92.2	141.8	88.1
Wyoming	17.6	21.7	51.0	154.3	99.7	191.9
Southern Unit	263.3	262.4	1,393.4	1,917.6	1,985.6	2,358.2
Cabell	.0	2.9	153.7	50.6	79.5	80.8
Calhoun	1.4	.8	73.9	80.3	46.1	138.7
Doddridge	.0	8.9	118.3	86.3	72.1	123.2
Gilmer	4.1	2.6	104.3	47.1	94.7	188.9
Jackson	4.4	1.3	240.7	71.8	60.1	164.7
Lincoln	.0	.0	196.3	125.7	107.3	116.2
Marion	2.1	44.0	52.3	28.6	29.8	71.3
Marshall	6.2	51.6	24.9	40.5	.0	19.2
Mason	.8	1.4	171.7	67.8	53.2	85.4
Monongalia	1.1	64.7	43.6	75.8	38.8	66.7
Putnam	4.5	4.5	187.0	60.3	33.8	150.2
Richie	13.5	10.1	223.0	100.8	87.9	218.3
Roane	11.6	1.8	174.5	88.3	49.1	172.4
Wayne	5.6	2.6	212.8	63.4	162.9	170.6
Wetzel	11.4	23.2	81.2	70.8	28.9	82.0
Wirt	.0	2.0	98.4	50.7	34.0	87.8
Wood	4.1	3.7	94.3	54.2	39.9	25.7
Brooke/Hancock/Ohio	1.2	81.2	19.4	9.3	10.3	10.3
Pleasant/Tyler	7.7	7.6	97.7	101.1	22.1	78.7
Northwestern Unit	79.7	314.9	2,368.0	1,273.4	1,050.5	2,050.9
Total, all counties	483.3	2,142.3	5,241.8	5,916.4	4,957.5	5,597.5
SE	8.5	8.9	4.1	4.2	4.3	4.1

Table 117.--continued

(In millions of board feet)^a

Counties	Species				SE
	Basswood	Other hardwoods	Total hardwoods	All species	
Braxton	96.9	45.4	1,560.5	1,564.8	12.8
Grant	63.4	14.1	647.9	673.6	13.8
Hampshire	8.4	23.8	1,009.5	1,169.0	8.9
Hardy	32.5	29.6	734.7	919.1	12.0
Harrison	.0	56.6	500.5	500.5	13.6
Lewis	.0	5.7	661.0	670.8	8.6
Mineral	45.7	21.8	536.0	557.6	17.1
Morgan	6.0	16.2	339.9	396.0	15.1
Pendleton	43.7	76.8	1,220.5	1,497.5	8.8
Pocahontas	134.7	104.9	2,575.5	3,198.5	6.2
Preston	48.8	32.7	1,798.1	1,819.9	8.7
Randolph	36.5	62.2	2,932.5	3,172.0	6.7
Tucker	45.5	26.7	911.7	1,153.2	9.6
Upshur	30.8	31.1	740.0	756.6	11.1
Webster	91.2	22.3	2,325.3	2,410.4	8.1
Barbour/Taylor	5.5	54.6	847.8	850.0	11.6
Berkeley/Jefferson	.0	40.8	562.6	588.2	17.2
Northeastern Unit	689.7	665.4	19,904.2	21,897.9	2.5
Boone	131.7	44.9	1,585.5	1,601.8	7.6
Clay	30.2	15.0	1,147.2	1,187.6	7.7
Fayette	62.7	57.2	1,797.9	1,853.3	7.3
Greenbrier	97.2	54.2	1,962.9	2,262.0	6.6
Kanawha	36.2	43.8	2,395.9	2,466.5	5.9
Logan	116.1	17.9	1,248.3	1,254.0	10.1
McDowell	73.9	35.0	1,625.9	1,657.4	6.5
Mercer	48.1	17.1	809.0	895.1	10.4
Mingo	49.7	3.7	1,115.7	1,124.8	9.7
Monroe	.0	35.0	492.7	591.6	12.9
Nicholas	77.9	28.1	1,955.7	2,048.6	8.2
Raleigh	132.8	58.6	1,790.6	1,857.0	7.8
Summers	32.1	28.6	780.1	912.9	13.3
Wyoming	45.0	39.4	1,468.1	1,554.0	9.5
Southern Unit	953.6	478.4	20,175.5	21,266.7	2.2
Cabell	4.9	17.7	541.1	580.8	11.4
Calhoun	27.0	22.7	675.8	687.6	15.4
Doddridge	21.5	31.1	850.9	866.5	7.6
Gilmer	5.5	8.6	679.1	684.6	10.7
Jackson	16.2	10.6	761.5	819.6	11.6
Lincoln	2.8	3.3	859.7	908.7	8.3
Marion	8.9	91.1	714.3	715.3	13.0
Marshall	8.0	77.9	580.6	580.6	9.7
Mason	18.1	2.9	566.3	663.3	11.2
Monongalia	6.6	63.7	716.6	716.6	14.1
Putnam	15.1	11.6	746.6	829.8	9.5
Richie	8.9	32.0	1,080.8	1,203.2	9.8
Roane	12.5	17.2	974.5	1,015.5	8.8
Wayne	2.7	26.9	1,007.3	1,060.6	8.8
Wetzel	59.5	97.4	1,088.0	1,088.0	9.3
Wirt	.9	28.1	448.4	483.0	11.8
Wood	.0	44.9	459.2	533.2	9.9
Brooke/Hancock/Ohio	.0	116.4	325.3	325.3	13.1
Pleasant/Tyler	12.3	48.2	803.6	834.4	11.5
Northwestern Unit	231.3	752.3	13,879.5	14,596.3	2.5
Total, all counties	1,874.6	1,896.0	53,959.2	57,760.9	1.4
SE	7.8	5.9	1.5	1.4	

^aInternational 1/4-inch rule.

Table 118.--Average annual net growth of growing-stock and sawtimber volume on timberland by geographic unit and species group, West Virginia, 1975-89

Geographic unit	Growing stock (In thousands of cubic feet)			Sawtimber (In thousands of board feet) ^a		
	Softwoods	Hardwoods	All groups	Softwoods	Hardwoods	All groups
Northeastern	13,621	159,678	173,299	61,244	634,290	695,533
Southern	10,221	184,974	195,195	44,888	724,533	769,422
Northwestern	3,335	131,158	134,492	15,130	497,971	513,101
All classes	27,177	475,809	502,986	121,262	1,856,794	1,978,056

^aInternational 1/4-inch rule.

Table 119.--Average annual removals of growing-stock and sawtimber volume on timberland by geographic unit and species group, West Virginia, 1975-89

Geographic unit	Growing stock (In thousands of cubic feet)			Sawtimber (In thousands of board feet) ^a		
	Softwoods	Hardwoods	All groups	Softwoods	Hardwoods	All groups
Northeastern	-6,718	-50,116	-56,834	-19,896	-158,616	-178,512
Southern	-1,426	-45,848	-47,273	-5,157	-155,874	-161,031
Northwestern	-3,343	-29,867	-33,210	-7,560	-96,923	-104,483
All classes	-11,486	-125,831	-137,318	-32,613	-411,413	-444,025

^aInternational 1/4-inch rule.

DiGiovanni, Dawn M. 1990. **Forest statistics for West Virginia--1975 and 1989**. Resour. Bull. NE-114. Radnor, PA: U.S. Department of Agriculture, Forest Service, Northeastern Forest Experiment Station. 172 p.

A statistical report on the fourth forest survey of West Virginia (1989). Findings are displayed in 119 tables containing estimates of forest area, number of trees, timber volume, tree biomass, and timber products output. Data are presented at three levels: state, geographic unit, and county.

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

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